APPENDIX B

CT DEEP Natural Diversity Data Base Response

Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

April 23, 2018

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NDDB DETERMINATION NUMBER.: 201804649
Project: Remediation of tidal flats by dredging and transfer of property for redevelopment under Stewardship Permit for Stratford Army Engine Plant (SAEP), 550 Main Street in Stratford

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding this project. I do not anticipate negative impacts to State-listed species (RCSA Sec. 26-306) resulting from your proposed activity at the site. This determination is good for 2 years. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by April 23, 2020.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at shannon.kearney@ct.gov . Thank you for consulting the Natural Diversity Data Base.

Sincerely,

/s/ Shannon B. Kearney
Wildlife Biologist

CC: Peter Sysmanski (United States Army)

APPENDIX C

Treatability Testing Evaluation

Appendix C

Treatability Testing Summary Report

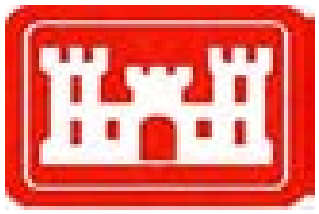
for

Stratford Army Engine Plant
Stratford, Connecticut

Contract No.: W912WJ-15-D-003
Task Order No.: 002

June 2018

Prepared for:



New England District
U.S. Army Corps of Engineers
696 Virginia Road
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Prepared by:



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1.0 SEDIMENT AND SURFACE WATER SAMPLING FOR TREATABILITY TESTING AND ENGINEERING PARAMETERS

Sediment sample collection was completed for purposes of evaluating the required treatment for sediment for on-site consolidation, off-site disposal, and for dewatering fluids generated during sediment processing. Sediment samples were collected from areas with historically higher concentrations of PCBs, metals, and mercury, and from hydrodynamically diverse areas of the site (shallow vs. deep water, near shore vs. near river, near outfalls, and opposites sides of the causeway) to ensure collection of sediments from potentially differing depositional environments (e.g., representation of variability in sediment grain size and contaminant distribution). These areas were selected to ensure that sediments that are potentially more difficult to dewater were tested, so that dewatering and water treatment performance would be adequately assessed. In addition, areas were selected to provide vertical representation of sediment characteristics for the proposed dredge prism.

Samples were collected from 4 areas. **Table C-1** summarizes the sampling locations, rationale, and analyses run on the samples.

1.1 Surface Water Sample Collection

Surface water samples were collected prior to any sediment disturbance. A total of five surface water samples were collected according to the following:

- **Area 1.** 55 gallons collected for treatability study makeup water (SW-01-001-0001) and 10 gallons collected for modified elutriate study makeup water (SW-01-002-0001);
- **Area 6.** Ten gallons collected for modified elutriate study makeup water (SW-06-001-0001); and
- **Area 8.** Ten gallons collected for modified elutriate study makeup water (SW-08-001-0001).

1.2 Modified Elutriate, Geotechnical, Waste Characterization, and Treatability Testing

Figure C-1 presents the locations of sediment samples collected for treatability studies and other engineering evaluations. Two sampling events were conducted: the first in early August 2017 and the second in October 2017. The first event was conducted per the FSP sampling rationale. The second event in October 2017 was conducted to provide additional geotechnical data from across the entire site. The locations for the October 2017 event are labeled in a light green with the series SDT-501 through SDT 510.

The treatability and engineering parameter sample locations are shown in purple as Areas 1, 4, 6, and 8 on **Figure C-1** (August 2017 sampling event). Generally, the cores were all collected within pre-selected areas identified by the purple areas. For each Area, each core collected is identified in green with an exploration ID (e.g., SDT-01-008, “sediment”, “Area 01”, “location 008”). In addition, for each area, there is a callout box that identifies the full sample code with the

parameters selected for analyses. These parameters include: modified elutriate (noted as "elutriate," total PCBs/Metals, geotechnical (parameters include bulk and dry density, specific gravity, Atterberg limits, and moisture content), TOC and grain size/hydrometer, SPLP PCBs/Metals, hazardous waste parameters, TPH, treatability testing, and percent solids). The depth of each core is indicated per the color coding:

- Area 1, 4 ft;
- Area 4, 2 ft;
- Area 6, 4 ft; and
- Area 8, 2 ft.

A sample collection matrix for August 2017 sampling event is presented in **Table C-1** (same as Table 4-3 from the FSP). The actual sampling included the collection of 74 sediment cores and five gallons of sediments by hand shovel according to the following:

- **Area 1**. Nineteen cores advanced to four feet below sediment surface (bss) from Area 1- SDT-01-001 through SDT-01-019 designated for analysis as follows:
  - SDT-01-001 through SDT-01-017 comprising the composites for Area 1 treatability testing and modified elutriate analysis;
  - SDT-01-018 for SPLP PCBs and Metals for the intervals 0 to 2 ft and 2 to 4 ft; and
  - SDT-01-019 for geotechnical and TOC/grain size for the 0 to 1ft, 1 to 2 ft and 2 to 4 ft intervals.
- **Area 4.** 24 sediment cores advanced to two feet bss from Area 4 – SDT-04-020 through SDT-04-041 and SDT-04-050,051 designated for analyses as follows:
  - SDT-04-020 through SDT-04-041 and five gallons of sediment collected from 0 to 2 ft bss using a hand shovel, comprising the composite for Area 4 treatability testing; and
  - SDT-04-050 for SPLP PCBs and metals for the interval 0 to 2 ft bss; and
  - SDT-04-051 for geotechnical, TOC, and grain size for the 0 to 1 ft and 1 to 2 ft intervals.
- **Area 6.** Four sediment cores advanced to four ft bss from Area 6 – SDT-06-052 through SDT-06-055, designated for analyses as follows:
  - SDT-06-052 and SDT-06-053 comprising the composites for Area 6 modified elutriate analysis;
  - SDT-06-054 for SPLP PCBs and metals for the interval 0-4 ft bss; and
  - SDT-06-055 for geotechnical, TOC, and grain size for the 0 to 1 ft, 1 to 2 ft, and 2 to 4 ft intervals.

- **Area 8.** 26 sediment cores advanced to two feet bss from Area 8 – SDT-08-056 through SDT-08-081, designated for analyses as follows:
  - SDT-08-056 through -079 comprising the composites for Area 8 modified elutriate analysis and treatability testing;
  - SDT-08-080 for SPLP PCBs and metals for the interval 0-2 ft bss; and
  - SDT-08-081 for geotechnical, TOC, and grain size for the 0 to 1 ft, and 1 to 2 ft bss intervals.

Table C-1 also notes where there were slight differences between the analyses run compared with the analyses planned in the FSP.

During the October 2017 event, ten cores were collected, composited over the entirely interval collected, and submitted for geotechnical parameters (grain size/hydrometer, bulk and dry density, Atterberg limits, moisture content, and specific gravity). The borings and intervals sampled included the following:

- SDT-501, 0 to 3 ft bss;
- SDT-502, 0 to 1 ft bss;
- SDT-503, 0 to 2 ft bss;
- SDT-504, 0 to 1 ft bss;
- SDT-505, 0 to 2 ft bss;
- SDT-506, 0 to 1 ft bss;
- SDT-507, 0 to 4 ft bss;
- SDT-508, 0 to 1 ft bss;
- SDT-509, 0 to 2 ft bss; and
- SDT-510, 0 to 1 ft bss;

All cores were collected using Piston-Vibracore® drilling/sampling methods.

Table C-2 summarizes the analyses performed on all of the sample IDs. Attachment A includes the field data collection form for the sediment and surface water sampling events.

2.0 ELUTRIATE RESULTS

Modified elutriate analyses were run on 3 samples collected from Areas 1, 6, and 8. These areas were selected for elutriates because they represented relatively high concentrations of site contaminants, particularly PCBs and were considered representative of a variety of hydrodynamic conditions across the site. The modified elutriate analysis, as described in the Inland Testing Manual (USACE 2003), was selected because it is designed to simulate water quality when hydraulically dredged materials are placed in a CDF, allowed to settled, and decant water flows over a weir for further treatment or return to the water body. This is a reasonable representation of water quality generated from dewatering of dredged sediments.

Tables C-3 through **C-5** summarize the modified elutriate analyses, including the parent surface water and sediment used to make the elutriates. **Attachment C** includes the lab data reports for all analyses run.

2.1 Area 1 Elutriate Results

Area 1. At Area 1, which is just off the tip of the causeway, copper exceed the state acute water quality criterion of 4.8 µg/L, at concentrations ranging from 12.8 to 13.3 µg/L in the three unfiltered replicates. Copper did not exceed the SB criterion in the filtered samples. All other metals did not exceed their respective criteria.

For PCBs, a number of exceedances of the state criterion of 0.03 µg/L PCBs in both the total and centrifuged samples were detected. In uncentrifuged samples, tri-, tetra-, penta-, and hexa-chlorobiphenyl exceeded the criterion in all three replicates, ranging in concentration from 0.038 to 0.51 µg/L, while heptachlorobiphenyl exceeded the criterion in only one replicate at 0.037 µg/L. Total PCBs exceeded the criterion at concentrations ranging from 0.82 to 0.95 µg/L.

Centrate analyzed for PCBs also exceeded the SB criterion of 0.03 for all congeners quantitated except for chlorobiphenyl and decachlorobiphenyl. Concentrations ranged from 0.094 to 6.5 µg/L for the exceedances in di- through decachlorobiphenyl congeners. Total PCBs ranges from 0.15 to 12 µg/L

2.2 Area 6 Elutriate Results

Area 6. At Area 6, which is nearshore east of the causeway, copper in the unfiltered elutriate exceeded State saltwater acute water quality standard of 4.8 µg/L (Class SB) with results of the three replicates ranging from 34.4 to 37.1 µg/L. All filtered results for metals passed the Class SB standards. However, it is important to note that the surface water collected from the site also exceeds the state SB standard at a concentration of 5.2 µg/L.

PCB analysis shows exceedance of the state acute value of 0.03 µg/L for tetrachlorobiphenyl at 0.04 to 0.046 in uncentrifuged samples. No individual PCB congeners exceed the state SB criterion in the centrifuged samples. However, all total PCB results are noted as undetected at 0.11U, which is above the criterion.

2.3 Area 8 Elutriate Results

Area 8. At Area 8, which is a relatively nearshore area west of the causeway and near Outfalls 002, 003, 004, and 007, there were no metals exceedances in either the total of filtered elutriate water samples. Copper in surface water collected as makeup water for the elutriates exceeded the standard of 4.8 µg/L at a concentration of 18.8 µg/L.

PCBs in the uncentrifuged samples exceeded the standard of 0.03 µg/L only slightly for one congener, tetrachlorobiphenyl, at concentrations of 0.033 µg/L in two out of three replicates. There were no detections in centrate exceeding the standard; however, total PCBs had an elevated detection limit of 0.11 µg/L in all replicates including the raw makeup surface water sample.

2.4 Conclusions

Comparison to water quality standards (State Acute SB) for the elutriate samples analyzed from the three areas of the site shows the following:

- Area 1 - PCBs in both total and dissolved fractions and copper only in the total fraction exceeded water quality standards;
- Area 6 - Both PCBs and copper exceeded water quality standards in the total fraction; however, neither exceeded in the dissolved fraction; and
- Area 8 – Only PCBs exceeded water quality standards in the total fraction.

In conclusion, to ensure that the water treatment system can treat all site contaminants and meet likely water quality standards, both particle filtration and carbon adsorption may be needed to treat dewatering fluids generated from sediments dredged from the site. Additional dewatering technology specific evaluations were conducted to further evaluate these concerns.

3.0 GEOTECHNICAL ANALYSES

Geotechnical analysis was completed on 15 samples collected in the August 2017 event, of which 5 were composites (from 4 areas of the site and the master treatability composite sample) and 10 were from discrete intervals collected from cores advanced at four areas of the site. The analyses included bulk and dry density, moisture content, specific gravity, Atterberg limits, grains size/hydrometer, TOC, and % solids.

In a second mobilization in October 2017, ten additional samples were collected from locations across the entire site. These samples were collected each from an individual borings advanced to the proposed depth of dredging (either 1, 2, 3, or 4 ft bss) and composite from zero to the depth of the recovered core. These samples were analyzed for the same geotechnical parameters as the samples collected in August 2017.

The purpose of these samples was to support the dredge feasibility analysis and determine variability across the site and with depth.

Table C-6 summarizes the geotechnical results and **Table C-7** summarizes organic carbon results and additional percent solids results.

3.1 Area 1 Geotechnical

Discrete samples from Area 1 range in silt content from 55% to 78%, while clay ranges from 16.7% to 22.6%. Sand ranges from 5.2 to 21.8%. Samples are classified as silt with sand or silt (all MH). Liquid limits (LL) ranged from 73 to 113, plastic limit (PL) ranged from 36 to 46, and the plasticity index (PI) ranged from 37 to 42 (**Table C-6**). In situ percent solids range from 41.9% to 49.4% (see **Table C-7**). Organic carbon ranges from 1.9 to 3.5%. Percent solids range from 41.9 to 49.4%.

3.2 Area 4 Geotechnical

Discrete samples from Area 4 range in silt content from 56 to 71.7% silt and 14.5 to 18.6% clay. Sand ranges from 9.7 to 29.5%. Descriptions include silt with sand and silt (all MH). LL ranged from 54 to 90, PL ranged from 35 to 48, and the PI ranged from 19 to 42 (**Table C-6**). Organic carbon ranges from 2.0 to 2.3%. Percent solids range from 52.3 to 56.2% (**Table C-7**).

3.3 Area 6 Geotechnical

For Area 6, discrete samples range in silt content from 29.1 to 67.7%, with clay ranging from 7.5 to 27.8%, and sand ranging from 4.5 to 62.8%. Descriptions include silt with sand, sand/sandy silt, clay with sand, and silt (MH, SM/ML, and CH). This area shows considerable variability in the sand and clay contents. LL ranged from 42 to 102, PL ranged from 30 to 45, and the PI ranged from 12 to 57 (**Table C-6**). Percent solids range from 46.5 to 65.6% and organic carbon ranges from 1.3 to 3.7% (**Table C-7**).

3.4 Area 8 Geotechnical

At Area 8, discrete samples range in silt content from 59.9% to 71.2% and clay content ranges from 17.6 to 21.8%. Sand content ranges from 11.2 to 18.3% and descriptions include silt with sand, silt, and sandy silt (all MH). LL ranged from 64 to 68, PL ranged from 34 to 43, and the PI ranged from 29 to 30 (**Table C-6**). Percent solids range from 52.4 to 58.3% and organic carbon ranges from 1.7 to 2.4% (**Table C-7**).

3.5 Site Wide Geotechnical

For the site wide samples collected from a range of areas and depths across the entire site (the "500 series of samples), silt content ranges from 17 to 66% and clay content ranges from 4 to 20%. Sand content ranges from 16.5 to 71.9% and descriptions include silt, silt with sand, sandy silt, and silty sand (MH, SM, and SM/ML). One sample was non-plastic. For plastic samples, LL ranged from 36 to 82, PL ranged from 33 to 41, and the PI ranged from 3 to 41 (**Table C-6**). Percent solids range from 50.4 to 75.9% and organic carbon ranges from 0.3 to 1.98% (**Table C-7**).

Bulk (wet) densities range from 81.5 to 112.5 pounds per cubic foot (pcg) and dry density ranges from 34.8 to 85.4 pcf. Specific gravity ranges from 2.5 to 2.68 (**Table C-6**).

3.6 Treatability Composite Geotechnical

For the master composite sample used for treatability testing, 59.9% was silt and clay, with 38.4% sand, and 1.7% gravel, with a description of sandy silt (MH). The LL was 72 (site range 36 to 113, average 71), PL was 43 (site range 30 to 46, average 39), and the PI was 29 (site range 3 to 67, average 33). Bulk (wet) density was 90.3 pcf (site average 95 pcf) and dry density was 50.1 pcf (site average 54.3). Specific gravity was 2.61 (site average 2.61). Percent solids was 55.5% (55.4% site wide average).

Results for the master composite sample (SDT-XX-COMP-001), blended together from the three composite samples collected from Areas 1, 4, and 8, show that it is a good average representation of overall geotechnical conditions at the site when compared against recent data collected across the site.

4.0 RAW SEDIMENT SPLP

A total of 5 discrete samples (composited over specific depth intervals) from 4 different areas of the site were collected and analyzed for SPLP metals and PCBs (see **Table C-8**). In addition, 4 composite samples were analyzed for SPLP metals and PCBs (one from each of three areas and the fourth being a composite of the first three). In addition, one of the samples, SDT-04-050-0002 was analyzed for total and SPLP VOCs due to the suspected presence of VOCs in this sample.

The purpose of these samples was to compare raw sediment SPLP results against state of CT GWB standards to assess potential for leaching to groundwater, to determine if sediment can be placed on-site for re-use as fill. In addition, the discrete and composite samples provide both a worst case and typical blended cases of dredged sediment.

The results show no exceedances of either metals or PCBs (individual congeners or total PCBs) of the GW B standards. Only mercury, in one sample (SDT-06-054-0004), was at the state limit of 20 µg/L.

These results show that untreated sediment meet state GW B standards for leachability to groundwater and can be placed on the site and re-used beneficially as fill material for future development needs.

5.0 WASTE CHARACTERIZATION ANALYSIS

Table C-9 presents the results of waste characterization analyses and **Table C-10** presents the SPLP VOC results. Hazardous waste parameters were analyzed for the three composite samples of sediments used for treatability testing. Each of these samples were analyzed for total VOCs, PCBs, TAL metals, ignitability, corrosivity, reactivity, and TCLP VOCs and metals. In addition, these samples were also analyzed for TPH due to the suspected presence of petroleum in the samples based on odor and sheen observed. The purpose of these samples was to determine whether or not dredged material would be characterized as hazardous waste for off-site disposal purposes.

Additionally, the treatability master composite sample, blended from the three individual composites, was analyzed for PCBs, metals, and TCLP metals to verify RCRA status and concentrations of site contaminants for purposes of treatability testing.

Results show that the samples are not considered hazardous waste by any of the characteristics (ignitability, corrosivity, reactivity, and toxicity [TCLP metals and VOCs]). PCB results show low levels less than one mg/kg, verifying that the material can be placed on site and beneficially reused based on PCB concentration.

TPH concentrations present in the Area 1 composite may be a concern for on-site placement due to the result of 3,560 mg/kg slightly exceeding the state industrial/commercial direct exposure standard of 2,500 mg/kg. Additional characterization and/or development of alternative direct exposure criteria in accordance with CT RSRS 22a-133k-2 (a) may be needed to determine the applicability of placement of this limited volume of sediments on-site for beneficial re-use.

All total metals concentrations are well below applicable industrial/commercial direct exposure criteria with the exception arsenic, which ranged in concentration from approximately 5 to 8 mg/kg as compared with the standard of 10 mg/kg.

6.0 TREATABILITY SAMPLES

A total of 40 gallons of sediment were collected August 2-3, 2017 from areas 1, 4 and 8 of the site and placed in 5 gallon buckets. A total of 15 gallons from Area 1, 15 gallons from Area 4, and 10 gallons from Area 8 were collected. At Area 1, all samples were collected via coring to a depth of 4 ft. Recovered sediment was placed in five gallon pails. Similarly, at Area 4, 10 gallons of sediment were collected via coring to a depth of 2 feet, and an additional 5 gallons were collected using a shovel. This volume was added at the end of the field program to ensure sufficient volume was collected for the planned treatability testing. At Area 8, samples were collected via coring to a depth of 2 ft. These samples were labeled SDT-01-COMP-001, SDT-04-COMP-001, and SDT-08-COMP-001. Each of these samples were analyzed for PCB congeners, site metals, geotechnical parameters, TOC, grain size/hydrometer, SPLP PCBs and metals, hazardous waste characteristics, and percent solids. Additionally TPH was analyzed on the samples collected from Areas 1, 4, and 8 due to the suspected presence of weather fuel. **Table C-11** summarizes the results for each of these samples.

In addition, 55 gallons of surface water were collected prior to any sediment disturbance at Area 1 and placed in 5-gallon buckets. This sample was labeled SW-01-001-0001. The surface water was collected for use in generating sediment slurries to simulate dredged material to undergo various dewatering and subsequent solidification and water treatment tests.

The samples were delivered via truck to Mineral Processing Services (MPS), a treatability testing laboratory in South Portland, ME on August 6, 2017. The samples were stored in a warehouse at ambient conditions. On August 21, 2017, an Amec Foster Wheeler technician went to MPS to work with MPS staff to thoroughly composite each bucket set and subsample the well mixed composite. **Table C-1** lists the parameters analyzed. Following compositing and sampling, the entire 40 gallons of sediment was composited into a single sample, which was then also sub sampled for analysis as indicated in **Tables C-1** and **C-2** (sample ID: SDT-XX-COMP-001). This fully mixed composite sample was then analyzed for various treatability tests.

A single 5-gallon bucket of this fully mixed composite was shipped to Weeks Geotechnical Laboratory at Rutgers University in Piscataway, NJ on August 23, 2017. This sample underwent solidification testing simulating the process of pneumatic flow tube mixing (PFTM) that is being evaluated as part of the remedial alternative for conveyance, solidification, and placement of processed sediments. This process is also known as “Tipping Point.”

For the remainder of the treatability tests, the initial plan was to perform the testing at MPS’s laboratory. However, due to scheduling issues, Amec Foster Wheeler procured a replacement lab to perform the work. Kemron of Atlanta, GA was selected to do the work. The samples were picked up from MPS in South Portland and driven to Kemron’s lab in Atlanta, arriving on 6 October 2017.

7.0 KEMRON DEWATERING, SOLIDIFICATION, AND WATER TREATMENT TREATABILITY STUDY

Kemron began the treatability work on October 6, 2017. A detailed treatability report by Kemron is included in **Attachment C.** This section includes a summary of the work and relevant conclusions with respect to assumptions used in the FFS.

Treatability Testing was performed to accomplish the following:

- Characterize raw waste physical characteristics
- Determine effective polymers needed for dewatering
- Assess dewatering behavior for the following technologies
  - Gravity dewatering
  - Mechanical Dewatering
    - Belt Filter Press
    - Recessed Chamber Filter Press
    - Centrifuge
    - Hi-G screening
  - Geotube filter bag dewatering
- Assess Solidification Additives
  - Portland Cement and Calciment to be evaluated
  - Evaluate performance for gravity dewatered sediments and mechanically dewatered sediments
  - Assess performance for on-site reuse and off-site disposal options (strength and no free liquids
- Assess water treatment technologies to meet discharge standards

Kemron outsourced polymer testing (see Appendix C to Attachment C) to determine the effectiveness of several polymers at forming floc to aid in the dewatering of sediments and performed the remainder of the tests in their laboratory. Where chemistry was required, samples were shipped to Envirosystems, Inc. of Hampton, NH for analysis.

7.1 Dewatering Tests

Several dewatering tests were completed including gravity dewatering, mechanical dewatering (belt press, recessed chamber, and centrifugation), and Geotube dewatering. The Derrick Hi-G mechanical dewatering tests that were planned could not proceed because Derrick declined to accept material from the site based on the PCB concentrations. This portion of the treatability study was not performed. Treatability samples were then tested for the other dewatering methods.

7.1.1 Mechanical Dewatering

All three mechanical dewatering technologies produced acceptable dewatered sediment cake that passed the paint filter test. Based on initial test runs using polymer treated water ("Solve 137" by WaterSolve, an organic, cationic flocculant), the belt filter performed best, producing cake percent solids of 53%, as compared with 43% for the filter press and 42% for the centrifuge. For this reason, the belt filter was selected as a representative technology for use in the FFS as an appropriate dewatering technology. Filter cake generated from the belt press testing was analyzed for SPLP PCBs and metals and dewatering fluids were analyzed for PCBs and metals. Furthermore, this technology was used for subsequent evaluations involving water treatment and solidification testing. **Table C-12** presents the analytical results of the dewatering tests for the belt press.

However, it is important to note that additional follow-up tests were run for the recessed chamber filter press using non-polymer treated water at 100 psi and 125 psi and polymer treated water at 125 psi. The initial test was performed on polymer treated water at 100 psi. Results show that non-polymer treated water performed better, producing cake solids of approximately 66% for both pressures.

7.1.2 Geotube Dewatering

Geotube dewatering yielded a percent solids of 49%, passing paint filter after 24 hours of draining. This technology was considered as viable for further evaluation in the treatability testing and FFS. Dewatering fluids were from the Geotube testing were evaluated pre- and post-filtration for metals and PCBs. Filter cake generated from the Geotube testing was analyzed for SPLP PCBs and metals and dewatering fluids were analyzed for PCBs and metals. **Table C-12** presents the analytical results of the dewatering tests for the Geotube fabric.

7.1.3 Water Treatment

Based on results of filtered and unfiltered samples from the belt press and Geotube simulations, both filtered (0.45 µ) and unfiltered results show exceedance for copper (4.8 µg/L State Acute SB standard) for both technologies. Zinc exceeded the state criterion of 90 µg/L at a concentration of 107 µg/L in only the belt filter filtered sampled. In both simulations, a modest decrease in copper occurred when comparing unfiltered to filtered.

Regarding PCBs results, no exceedances were detected in fluids generated from Geotube dewatering. However, for the belt press, both the filtered and unfiltered samples exceeded the PCB criterion of 0.03 µg/L for tri-, tetra-, and pentachlorobiphenyl, and total PCBs. The filtered samples showed a slight reduction in PCBs concentrations relative the unfiltered results.

These results suggest that both particulate filtration and carbon adsorption will be required for PCB and metals treatment for water generated from the belt press. Based on these results, additional water treatment tests were performed using dewatering fluids generated from the belt press simulations to determine if a finer filter size and carbon adsorption would further reduce PCBs and copper in water to be discharged.

Two additional series of tests were performed. The first test involved filtering the water at the 0.1 µ size. This was performed to determine if filtration alone would be sufficient.

In addition, carbon adsorption tests were performed on the 0.1 µ filtered water using four additive ratios of carbon to water (10g, 20g, 40g, and 80 g activated carbon per liter of water). A Calgon carbon product known as F-400 was selected for the treatability tests based upon its very high volume of micropores and ability to treat metallic ions (Hanzlik 2004). Each of these test runs was analyzed for PCBs and metals. The results are summarized in **Table C-13.**

Results show only copper exceeded CT SB surface water standards in the control sample (0.1 µ filtered and run through the same test procedure as filtered water mixed with carbon) and the baseline sample (filtered from belt press, but not run through control procedures). There were no exceedances for either PCBs or site metals in any of the other samples.

These results suggest that filtration at the 0.1 µ size is sufficient to remove particulate adsorbed PCBs, given that 0.45 µ filtration shows PCBs present in the filtered and unfiltered samples. Regarding copper, which was present in control samples at concentrations exceeding SB standards, carbon treated water reduced copper concentrations to undetectable levels (below SB standards). Filtration alone was not sufficient to reduce copper concentrations.

The second series of tests involved the same carbon addition rates; however, these tests were performed on unfiltered water to determine if PCBs could be treated without the additional filtration step at 0.1 µ. Metals were not analyzed for these tests. The results are summarized in **Table C-14.** There were no detections of PCBs in the carbon treated water or in the control samples, suggesting that filtration is not necessary to treat PCBs.

Therefore, to ensure both PCBs and copper are treated, it is recommended that water treatment include both carbon adsorption and filtration. Furthermore, a carbon product known to treat metallic ions may be effective for treatment of copper at the SAEP. Additionally, it is recommended that discussions with CT DEEP and other appropriate agencies be conducted to establish appropriate discharge criteria for discharge back to the Housatonic River, accounting for possible dilution. This may reduce the scope of treatment required.

7.2 Gravity Dewatering

For gravity dewatering, to simulate water added during mechanical dredging, approximately 15% by wet weight water was added to the sediment and mixed prior to gravity dewatering. The gravity test was run for 72 hrs at which time it was determined that the material would not pass the paint filter test. An additional test was run allowing the material to drain for 5 days. The material did not pass at 5 days. Therefore, it was concluded that the material is unlikely to drain freely in a reasonable period of time.

7.3 Solidification

To assess the potential for sediment re-use on-site and sediment solidification required for off-site disposal, a series of solidification tests were performed. Gravity dewatered sediments and filter cake from the belt press evaluations were used in these tests. Two additives were selected

for use: Portland cement and Calciment, which is a commercially available conditioning product that includes both Portland cement and lime as ingredients. It has been assumed that sediment beneficially reused onsite will likely require a minimum compressive strength; therefore, tests including the addition of Portland cement are intended to assess strength development. Solidified dewatered sediments were subjected to physical (strength) and chemical (TCLP and SPLP) testing.

7.3.1 Strength Testing

Belt press filter cakes were mixed with 3%, 6%, and 8% PC. Results after 28 days of curing showed strength development of 8.8, 108.3, and 91.3 psi, respectively, as measured using the UCS test. The results show that both the 6% and 8% mixtures will likely be sufficient for on-site beneficial re-use of sediments, given that typical specifications for strength are typically within the 25 to 100 psi for on-site use of materials, depending on the intended use, which is currently unknown.

Similarly, gravity drained sediments were tested with PC at 2%, 4%, and 5%. Results after 28 days show strength development of 5.5, 61.0, and 90.0 psi as measured using the UCS test. The results show that both the 4% and 5% mixtures will likely be sufficient for on-site use.

Although paint filter tests were not performed on the samples, solidified samples treated with PC were observed to not release any free liquids and are considered passing results.

In summary, a PC addition rate of 4% or greater will likely meet on-site reuse strength requirements. Therefore, as an assumption for this FFS given the uncertainty in the future use requirements of the site, a percentage addition rate of 6% has been selected and used for cost estimating purposes when evaluating sediments to be strengthened.

Calciment was also evaluated for off-site disposal or on-site reuse not requiring more than minimal strength. Calciment is considered generally less expensive that PC. Belt press filter cakes were mixed with 3%, 6%, and 8% Calciment. At 3%, the material does not stand up on its own and a UCS could not be performed at 8 or 28 days. For the 6% and 8% mixtures, UCS results at 28 days were 31.5 and 33.8 psi, respectively, indicating minimal strength gain, and likely acceptable for off-site disposal requirements (no free liquids).

Similarly, Calciment was added to gravity-drained sediments at ratios of 2%, 4%, and 5%. At 2%, the material does not stand up on its own and a UCS could not be performed at 8 or 28 days. In addition, the material exhibited the tendency to release free liquids, and would likely fail the paint filter. For the 4% and 5% mixtures, UCS results at 28 days were 11.5 and 18.5 psi, respectively, indicating minimal strength gain, and likely acceptable for off-site disposal requirements (no free liquids).

In summary, a minimum percentage of 4% Calciment addition is likely sufficient to condition gravity-dewatered sediments to meet paint filter requirements for off-site disposal or on-site reuse with minimal strength.

7.3.2 Leachability Testing

All solidified sediment samples were tested via the SPLP method for PCBs and site metals and via the TCLP for metals. Results are summarized in **Tables C-15** and **C-16** and show all samples passed on-site beneficial reuse criteria (**Table C-15**, SPLP results, comparison to CT pollutant mobility criteria, industrial GB criteria) and off-site RCRA characteristic testing (**Table C-16**, TCLP metals toxicity criteria). Therefore, all ratios of both additives tested would be acceptable for on-site beneficial re-use or off-site disposal. Finally, because raw sediment also passed the TCLP and SPLP standards, additives are not necessary strictly for purposed of chemical disposal criteria.

8.0 TIPPING POINT TREATABILITY STUDY

Tipping Point Resources Group, LLC has developed a proprietary mixing technology known as pneumatic flow tube mixing (PFTM) to provide an innovative technique for conveying, mixing, and placing on land solidified dredged sediments. Sediments are dredged mechanically and placed in a hopper. The material is then fed into a pneumatic conveyance pipeline and conveyed via the injection of air. The sediments moves in "plugs" with air between the plugs reducing friction, allowing efficient movement of the material. Portland cement (or other additives) can be introduced into the flow to produce a processed sediment that can be placed directly on land or into transport containers such as hopper barges. The cement is introduced as a slurry and is well mixed due to the turbulence caused by the pneumatic pumping.

This process has been used extensively in Japan to create entire new islands of high strength material for development purposes. Its use in the U.S. has been limited but is currently in the permitting process (e.g., New Haven terminal).

TPRG using a specific proprietary mixing process in bench-scale tests to assess the potential applicability of the technology and its effectiveness. The process could potentially be used to mechanical dredge sediments, convey them and simultaneously mix Portland cement into the sediments, and then place treated sediments on land as fill for beneficial reuse by the future developer.

A five-gallon bucket of sediment (an aliquot of sample SDT-XX-COMP-01) was sent to Rutgers and the material was initially characterized for physical properties (Attachment D). A range of Portland cement addition rates was then used to test the TPRG process. Cement addition rates of 6%, 8%, 12%, and 14% were tested. The purpose of these varying percentages was to develop a strength curve over a wide range of percentages given the concern over the required strength (as measured by unconfined compressive strength [UCS]) for future development activities. Results are presented in **Attachment D**.

In summary, results show excellent strength development even at the lowest cement addition ratio. The UCS results ranged from 81 to 170 psi after 28 days of curing, which is the same curing time used for the solidified samples developed by Kemron to simulate "traditional" solidification techniques. This compares favorably to typical strengths required of in situ stabilized soils or sediments that range anywhere from 25 to 100 psi as measured using the UCS test. However, even though the ultimate future use of the site is unknown, these results show that site sediments can be adequately strengthened.

To determine the leachability characteristics, both SPLP PCBs and site metals and TCLP metals were analyzed for each of the mixtures following 28 days of curing. The results were compared to state GWB leachability criteria (as measured by the SPLP) and RCRA toxicity characteristics values for metals. The results are presented in **Table C-17** for TCLP and **Table C-18** for SPLP and show acceptable leachability of the treated material, confirming that the material is suitable for on-site reuse as fill material or off-site disposal as non-RCRA waste at all of the tested percentages. The SPLP results were compared against CT RSRs Pollutant Mobility Criteria, which specify numerical concentration criteria as measured by the SPLP test for soils placed on land. The numerical values are less stringent (in general) for industrial zoned areas (GWB) such

as the Site (see https://eregulations.ct.gov/eRegsPortal/Browse/RCSA/%7BEAD3787B-7651-4803-8239-CCD2B569E8A0%7D).

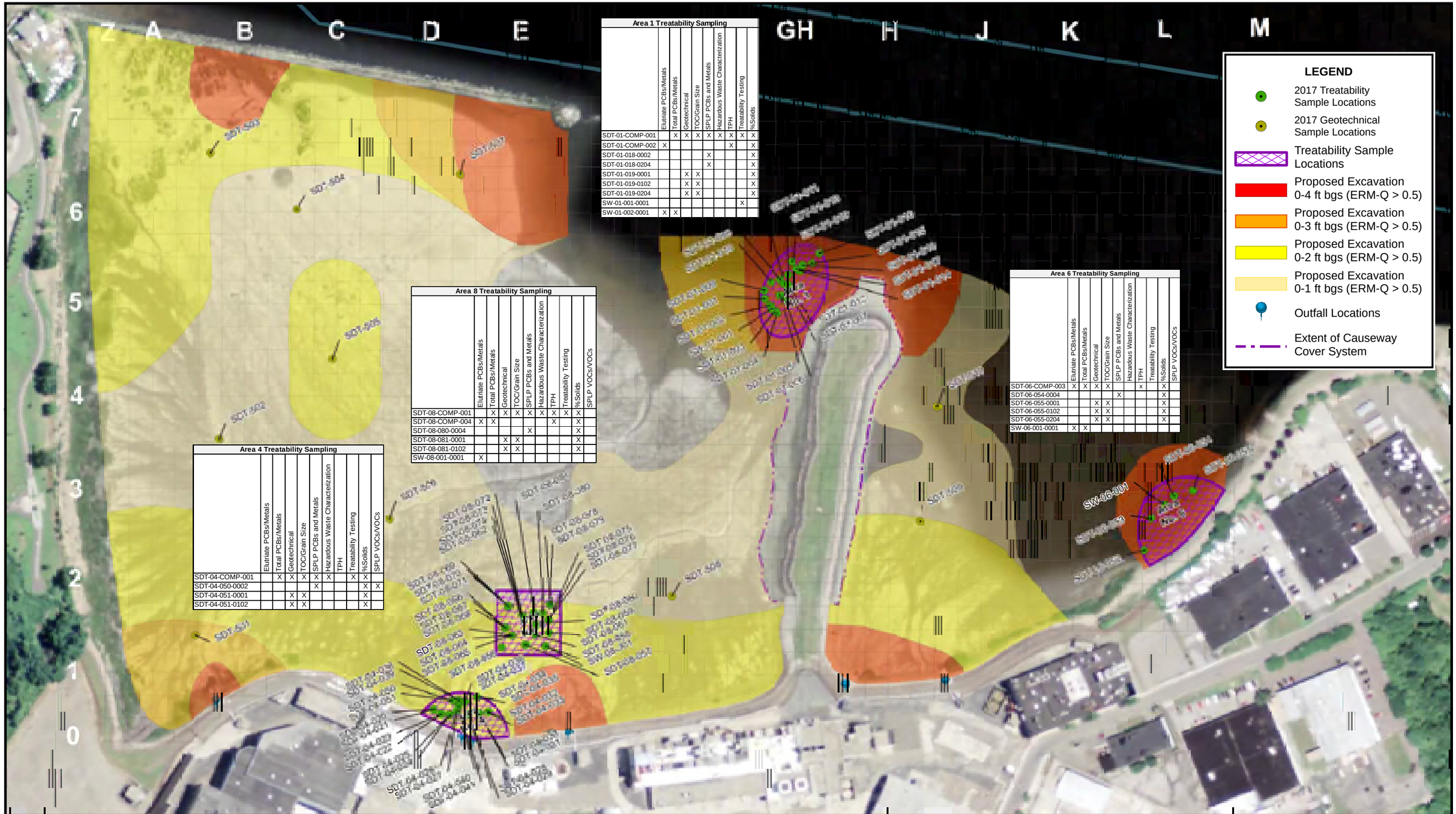
In addition, the UCS results also show that acceptable results (71 psi) can be achieved at 6% Portland cement addition, and that therefore, a possibly lower percentage of Portland cement may be sufficient for future site use. Additional assessment of this percentage would need to be done during the design phase.

9.0 REFERENCES

Hanzlik 2004. P. Hanzlik, J. Jehlicka, Z. Weishauptova, and O. Sebek, Adsorption of Copper, Cadmium, and Silver from Aqueous Solutiosn onto Natural Carbonaceous Materials, Plant, Soil, and Environment, 50, 2004 (6): 257-264.

USACE 2003. Evaluation of Dredged Material Proposed for Disposal at Island, Nearshore, or Upland Confined Disposal Facilities – Testing Manual. ERDC/EL TR-03-1. January 2003.

FIGURES



Area 1 Treatability Sampling

	Eluriate PCBs/Metals	Total PCBs/Metals	Geotechnical	TOC/Grain Size	SPLP PCBs and Metals	Hazardous Waste Characterization	TPH	Treatability Testing	%Solids
SDT-01-COMP-001		X	X	X	X	X	X	X	X
SDT-01-COMP-002	X						X		X
SDT-01-018-0002					X				X
SDT-01-018-0204					X				X
SDT-01-019-0001			X	X					X
SDT-01-019-0102			X	X					X
SDT-01-019-0204			X	X					X
SW-01-001-0001								X	
SW-01-002-0001	X	X							

Area 8 Treatability Sampling

	Eluriate PCBs/Metals	Total PCBs/Metals	Geotechnical	TOC/Grain Size	SPLP PCBs and Metals	Hazardous Waste Characterization	TPH	Treatability Testing	%Solids	SPLP VOCs/VOCs
SDT-08-COMP-001		X	X	X	X	X	X	X	X	
SDT-08-COMP-004	X	X					X		X	
SDT-08-080-0004					X				X	
SDT-08-081-0001			X	X					X	
SDT-08-081-0102			X	X					X	
SW-08-001-0001	X								X	

Area 6 Treatability Sampling

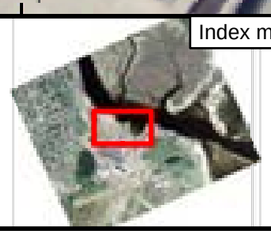
	Eluriate PCBs/Metals	Total PCBs/Metals	Geotechnical	TOC/Grain Size	SPLP PCBs and Metals	Hazardous Waste Characterization	TPH	Treatability Testing	%Solids	SPLP VOCs/VOCs
SDT-06-COMP-003	X	X	X	X			x		X	
SDT-06-054-0004					X				X	
SDT-06-055-0001			X	X					X	
SDT-06-055-0102			X	X					X	
SDT-06-055-0204			X	X					X	
SW-06-001-0001	X	X								

Area 4 Treatability Sampling

	Eluriate PCBs/Metals	Total PCBs/Metals	Geotechnical	TOC/Grain Size	SPLP PCBs and Metals	Hazardous Waste Characterization	TPH	Treatability Testing	%Solids	SPLP VOCs/VOCs
SDT-04-COMP-001		X	X	X	X	X		X	X	
SDT-04-050-0002					X				X	X
SDT-04-051-0001			X	X					X	
SDT-04-051-0102			X	X					X	

LEGEND

- 2017 Treatability Sample Locations
- 2017 Geotechnical Sample Locations
- Treatability Sample Locations
- Proposed Excavation 0-4 ft bgs (ERM-Q > 0.5)
- Proposed Excavation 0-3 ft bgs (ERM-Q > 0.5)
- Proposed Excavation 0-2 ft bgs (ERM-Q > 0.5)
- Proposed Excavation 0-1 ft bgs (ERM-Q > 0.5)
- Outfall Locations
- Extent of Causeway Cover System



amec foster wheeler

2014 Aerial Imagery
USDA National Agriculture Imagery Program

N

0 100 200 Feet

Prepared/Date: BRP 07/18/17 | Checked/Date: TD 07/18/17

Figure C-1
Locations of 2017 Treatability and Geotechnical Samples
Tidal Flats

Stratford Army Engine Plant
Stratford, Connecticut

TABLES

TABLE C-1
Sediment Treatibility Sample Matrix
Draft Focused Feasibility Study
Stratford Army Engine Plan

Area	Proposed Location ID	Proposed Sample ID	Discrete/ Composite	Number of Cores to Composite	Core Number	Depth Interval (ft)	Notes	Number of Samples Per Analysis							Rationale for Selection of Sampling Location			
								Treat-ability[2]	Off-Site Waste Disposal[7]	PCBs/ Metals/Hg	Elutriate[4]	% Solids	SPLP[3]	Geo-technical[5]	Elevated PCB Conc.	Elevated Metals Conc.	Elevated Hg Conc.	Representative Area/Hydrodynamic Conditions
01	SDT-01-001 through SDT-01-015	SDT01COMP001	Treatability Composite[1]	15	1 through 15	0-4	15 gal of 45 gal total. Surface water to be collected. See Note 7.		1					1	X	X	X	West side of Causeway; deeper water
	SDT-01-016,017	SDT01COMP002	Composite	2	16 and 17	0-4	3-gallon sediment volume needed, 10 gal SW needed			1	1							
	SDT-01-018	SDT010180002	Discrete	NA	18	0-2						1	1					
		SDT010180204	Discrete	NA		2-4						1	1					
	SDT-01-019	SDT010190001	Discrete	NA	19	0-1								1				
		SDT010190102	Discrete	NA		1-2								1				
		SDT010190204	Discrete	NA		2-4								1				
04	SDT-04-020 through SDT-04-041	SDT04COMP001	Treatability Composite[1]	30	20-41	0-2	10 gal of 45 gal total		1	1				1	X	X		Near outfalls; shallow water
	SDT-04-050	SDT040500002	Discrete	NA	50	0-2						1	1					
	SDT-04-051	SDT040510001	Discrete	NA	51	0-1								1				
		SDT040510102	Discrete	NA		1-2								1				
06	SDT-06-052,053	SDT06COMP003	Composite	2	52-53	0-4	3-gallon sediment volume needed, 10 gal SW needed			1	1			1		X		East side of Causeway, shallow water
	SDT-06-054	SDT060540004	Discrete	NA	54	0-4						1	1					
	SDT-06-055	SDT060550001	Discrete	NA	55	0-1								1				
		SDT060550102	Discrete	NA		1-2								1				
		SDT060550204	Discrete	NA		2-4								1				
08	SDT-08-056 through SDT-08-075	SDT08COMP001	Treatability Composite[1]	20	56-75	0-2	10 gal of 45 gal total		1					1	X	X		Near outfalls; shallow water
	SDT-08-076 through SDT-08-079	SDT08COMP004	Composite	4	76-79	0-2	3-gallon sediment volume needed, 10 gal SW needed			1	1							
	SDT-08-80	SDT080800004	Discrete	NA	80	0-2						1	1					
	SDT-08-081	SDT080810001	Discrete	NA	81	0-1								1				
		SDT080810102	Discrete	NA		1-2								1				
01, 04, 08	SDT-06-044 thru SDT-06-049	SDT-XX-COMP-001	Treatability Composite[1]	40 gallons	NA	NA	Composite Area 1, Area 4, and Area 8 into one composite	1	1	1		1		1	X	X	X	All the Above
							Total Samples:	1	4	5	3	6	5	15				

Notes:

Refer to Figure 4-3 for treatability testing areas 1, 4, 6, and 8.

1. All treatability cores were composited together initially for each area and then together to create a single sample volume of 40 gallons to be submitted for treatability analyses and off-site waste disposal characterization parameters. Prior to combining cores from different areas, samples from each area's subcomposite were collected for geotechnical and waste characterization analysis to assess variability across the site. Five gallons of sediment were collected at Area 4 in addition to the 10 gallons collected via coring.
2. Analyses specified in text and FSP. Analytical procedures are specified in the project QAPP.
3. Synthetic Precipitation Leaching Procedure parametes include PCBs (homologs) and metals (arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), silver (Ag), zinc (Zn), mercury (Hg) only)
4. Elutriate analysis is aqueous and includes PCBs (Homologs) and metals (As, Cd, Cr, Cu, Pb, Ni, Ag, Zn, Hg only). In addition, analysis was performed on sediment and surface water pre-elutriate prep.
5. Geotechnical parameters include Atterberg limits, TOC, grain size, percent solids/moisture content, water content, bulk and dry density, specific gravity of solids.
6. 55 gallons of surface water collected at this location prior to coring, to be used for performing bench tests. Expressed water from dewatering tests used for water treatment tests.
7. Off-site waste parameters include total PCBs, TAL metals, ignitability, corrosivity, reactivity, total petroleum hydrocarbons, VOCs and TCLP metals. Four analyses run vs. one in the FSP.
8. Total petroleum hydrocarbons were added to SDT-01-COMP-001, SDT-06-COMP-003, SDT-08-COMP-001, and SDT-08-COMP-001 due to the suspected presence of fuel related contamination based on visual and olfactory evidence. In addition, SPLP VOCs and total VOCs were added to sample SDT-04-050-0002 based upon olfactory evidence.

Prepared By: TD 08/03/17
Checked By: BB 08/04/17

TABLE C-2
Treatability Study Sampling
Stratford Army Engine Plant

Sample Name	Date Sampled	Matrix	Elutriate PCBs/Metals	Total PCBs/Metals	Geotechnical	TOC/Grain Size	SPLP PCBs and Metals	Hazardous Waste Characterizatio	TPH	Treatability Testing	%Solids	SPLP VOCs/VOCs
SDT-01-COMP-001	8/22/2017	SED		X	X	X	X	X	X	X	X	
SDT-01-COMP-002	8/3/2017	SED	X						X		X	
SDT-01-018-0002	8/3/2017	SED					X				X	
SDT-01-018-0204	8/3/2017	SED					X				X	
SDT-01-019-0001	8/3/2017	SED			X	X					X	
SDT-01-019-0102	8/3/2017	SED			X	X					X	
SDT-01-019-0204	8/3/2017	SED			X	X					X	
SDT-04-COMP-001	8/22/2017	SED		X	X	X	X	X		X	X	
SDT-04-050-0002	8/3/2017	SED					X				X	X
SDT-04-051-0001	8/3/2017	SED			X	X					X	
SDT-04-051-0102	8/3/2017	SED			X	X					X	
SDT-06-COMP-003	8/4/2017	SED	X	X	X	X			X		X	
SDT-06-054-0004	8/4/2017	SED					X				X	
SDT-06-055-0001	8/4/2017	SED			X	X					X	
SDT-06-055-0102	8/4/2017	SED			X	X					X	
SDT-06-055-0204	8/4/2017	SED			X	X					X	
SDT-08-COMP-001	8/22/2017	SED		X	X	X	X	X	X	X	X	
SDT-08-COMP-004	8/3/2017	SED	X	X					X		X	
SDT-08-080-0004	8/3/2017	SED					X				X	
SDT-08-081-0001	8/3/2017	SED			X	X					X	
SDT-08-081-0102	8/3/2017	SED			X	X					X	
SDT-XX-COMP-001	8/22/2017	SED		X	X	X	X	X		X	X	
SDT-501-0003	10/19/2017	SED			X	X					X	
SDT-502-0001	10/19/2017	SED			X	X					X	
SDT-503-0002	10/19/2017	SED			X	X					X	
SDT-504-0001	10/19/2017	SED			X	X					X	
SDT-505-0002	10/19/2017	SED			X	X					X	
SDT-506-0001	10/19/2017	SED			X	X					X	
SDT-507-0004	10/19/2017	SED			X	X					X	
SDT-508-0001	10/19/2017	SED			X	X					X	
SDT-509-0002	10/19/2017	SED			X	X					X	
SDT-510-0001	10/19/2017	SED			X	X					X	
SW-08-001-0001	8/3/2017	SW	X	X								
SW-06-001-0001	8/2/2017	SW	X	X								
SW-01-001-0001	8/2/2017	SW								X		
SW-01-002-0001	8/2/2017	SW	X	X								

Notes:

1. Hazardous waste parameters include TCLP metals, ignitability, corrosivity, reactivity, TAL metals, PCBs.
2. Geotechnical parameters include moisture content, bulk and dry density, specific gravity, and atterberg limits
3. Elutriate analysis is the modified elutriate. Analysis include total site metals and PCBs, filtered metals, and PCBs centrate.
4. Grain size includes hydrometer analysis.
5. Treatability testing is described in the text of Appendix A and in the report from Kemron in Attachment B.
6. TPH and SPLP/Total VOCs were run on selected samples based on the presence of odors detected during sampling and lab preparations.
7. SDT-XX-COMP-001 was composited from 3 samples (SDT-01-COMP-001, SDT-04-COMP-001, and SDT-08-COMP-001) to create a single composite (45 gallons) for treatability testing.

TCLP = Toxicity Characteristic Leaching Procedure
TAL = Target Analyte List
PCB = polychlorinated biphenyls
TPH = total petroleum hydrocarbons
SPLP = synthetic precipitation leaching procedure

Prepared By: TD
Checked By: AA 2/6/2018

TABLE C-3
Preliminary - Comparison of Elutriate Results to Connecticut Surface Water Standards
Modified Elutriate Analyses - AREA 1
Stratford Army Engine Plant

AREA 1																					
Method Group	Parameter	Units	State Chronic SB	SDT-01-COMP-002 Matrix: ELT 8/11/2017												SW-01-002-0001 Matrix: WATER 8/2/2017		Units	SDT-01-COMP-002 Matrix: SED 8/11/2017	
				Elutriate Dissolved						Elutriate											
				Rep 1		Rep 2		Rep 3		Rep 1		Rep 2		Rep 3							
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL		RESULT	QUAL
Metals	Arsenic, total	ug/L	36	2		1.9		1.9		2.3		2.2		2.3		1.4		ug/Kg dry wt	10500	
	Cadmium, total		8.8	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		5570	
	Chromium, total		50	1.5		1.4		1.5		8		7.9		8		1	U		722000	
	Copper, total		3.1	0.6		0.5	U	0.5	U	13		12.8		13.3		3.3			1230000	
	Lead, total		8.1	0.2	U	0.2	U	0.2	U	1.6		1.6		1.6		0.4			144000	J5
	Mercury, total		0.94	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		1330	
	Nickel, total		8.2	7.6		7.2		7.3		8.2		8.3		8.4		1	U		135000	J5
	Silver, total		1.9*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		13500	
	Zinc, total		81	7.9		3.9		7.1		7.8		7.4		7.5		5.9			622000	
	Petroleum Hydrocarbons		--	500	U	500	U	840	O	500	U	500	U	500	U	--	--		--	--
PCBs	chlorobiphenyl	ug/L	0.03	0.003	U	0.003	U	0.003	U	0.0032	U	0.0032	U	0.0032	U	0.003	U	ug/Kg	7.6	U
	decachlorobiphenyl		0.03	0.001	U	0.001		0.006		0.0011	U	0.0011	U	0.0011	U	0.001	U		5.0	
	dichlorobiphenyl		0.03	0.005	U	0.001		0.001	U	0.019		0.014		0.014		0.014	U		95	
	heptachlorobiphenyl		0.03	0.008	U	0.01		0.003	U	0.025		0.023		0.037		0.028	U		610	
	hexachlorobiphenyl		0.03	0.009	U	0.001	U	0.04		0.038		0.04		0.055		0.048	U		790	
	nonachlorobiphenyl		0.03	0.003	U	0.012		0.008		0.0035		0.0032	U	0.0052		0.003	U		61	
	octachlorobiphenyl		0.03	0.005	U	0.046		0.003	U	0.0061		0.01		0.011		0.014	U		230	
	pentachlorobiphenyl		0.03	0.025		0.04		0.18		0.12		0.12		0.15		0.053	U		1800	
	tetrachlorobiphenyl		0.03	0.094		0.01		0.044		0.51		0.41		0.48		0.048	U		6400	
	trichlorobiphenyl		0.03	0.026		0.014		0.011		0.2		0.19		0.2		0.028	U		2100	
	Total PCBs		0.03	0.15		0.14		0.299		0.92		0.82		0.95		0.11	U		12000	
Solids	Total Solids	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	%	46.1	
	Silt	SDT-01-019-0001																8/3/2017	%	55.0	
	Clay																		%	22.6	
	Silt	SDT-01-019-0102																	%	64.9	
	Clay																		%	19.0	
	Silt	SDT-01-019-0204																	%	78.1	
	Clay																		%	16.7	
	Silt and Clay	SDT-01-COMP-001														8/22/2017			%	58.9	

Notes:

Samples Analyzed by EnviroSystems, Inc. Report Number 29543

Indicates exceedance of State Chronic SB

* = State Acute SB

ug/L = micrograms per liter

ug/kg (dry wt) = micrograms per kilogram (dry weight), 1000 Kg Water = 1 Liter

U = Undetected

O = Estimated, chromatogram was not typical of commercial petroleum products. Value reported may be considered a maximum.

J5 = MS %R below limit

State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB

Percent Solids Method: 160.3 EPA 600/4/79/020

Water Matrix Metals Method: EPA 200.8 or 245.7

SED Metals Method: SW846 3rd Ed. 6020 or EPA 245.7

PCBs = polychlorinated biphenyls

PCB in Water Method: 846 8082/EPA 680 Modified; PCB in SED Method: EPA 8270 SIM modified

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-4
Preliminary - Comparison of Elutriate Results to Connecticut Surface Water Standards
Modified Elutriate Analyses - AREA 6
Stratford Army Engine Plant

AREA 6																				
Method Group	Parameter	Units	State Chronic SB	SDT-06-COMP-003 Matrix: ELT 8/11/2017												SW-06-001-0001 Matrix: WATER 8/2/2017		Units	SDT-06-COMP-003 Matrix: SED 8/11/2017	
				Elutriate Dissolved						Elutriate										
				Rep 1		Rep 2		Rep 3		Rep 1		Rep 2		Rep 3						
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL		RESULT	QUAL
Metals	Arsenic, total	ug/L	36	4		4.1		4.2		4.7		4.8		4.7		1.5		ug/Kg dry wt	9670	
	Cadmium, total		8.8	0.2	U	0.2	U	0.2	U	0.2		0.3		0.3		0.2	U		5530	
	Chromium, total		50	2.2		2.2		2.2		44.3		47.2		45.3		2.1			1050000	
	Copper, total		3.1	0.5		0.5	U	0.5	U	34.4		37.1		35.2		5.2			1140000	
	Lead, total		8.1	0.2	U	0.2	U	0.2	U	3.2		3.4		3.2		1.3			124000	
	Mercury, total		0.94	0.01	U	0.01	U	0.01	U	0.011		0.009	J	0.009	J	0.01	U		1490	
	Nickel, total		8.2	12.2		12.1		12.5		15.4		15.5		15.5		2.2			90000	
	Silver, total		1.9*	0.2	U	0.2	U	0.2	U	0.3		0.4		0.3		0.2	U		9980	
	Zinc, total		81	7.2		19.7		3.6		15.8		16.4		16.7		8.2			653000	
	Petroleum Hydrocarbons		--	1700	O	540	O,J17	2100	O	500	U	500	U	500	U	--	--		--	--
PCBs	chlorobiphenyl	ug/L	0.03	0.0033	U	0.0033	U	0.0033	U	0.0032	U	0.0032	U	0.0032	U	0.004	U	ug/Kg	0.1	U
	decachlorobiphenyl		0.03	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.001	U		0.05	U
	dichlorobiphenyl		0.03	0.0079	U	0.0078	U	0.0078	U	0.0077	U	0.0077	U	0.0077	U	0.014	U		0.36	U
	heptachlorobiphenyl		0.03	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.028	U		2.5	
	hexachlorobiphenyl		0.03	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.014	U	0.049	U		4.2	
	nonachlorobiphenyl		0.03	0.0033	U	0.0033	U	0.0033	U	0.0032	U	0.0032	U	0.0032	U	0.004	U		0.1	U
	octachlorobiphenyl		0.03	0.0053	U	0.0052	U	0.0052	U	0.0052	U	0.0051	U	0.0052	U	0.014	U		1.7	
	pentachlorobiphenyl		0.03	0.015	U	0.015	U	0.015	U	0.021		0.018		0.019		0.054	U		7	
	tetrachlorobiphenyl		0.03	0.014	U	0.0079		0.015		0.046		0.046		0.04		0.049	U		15	
	trichlorobiphenyl		0.03	0.0079	U	0.0029		0.0045		0.016		0.015		0.013		0.028	U		5.2	
	Total PCBs		0.03	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U		36	
Carbon	Organic Carbon Rep 1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	%	2.7	J5
	Organic Carbon Rep 2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		2.6	
Solids	Solids	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	%	52.2	
	Silt	SDT-06-055-0001																%	29.1	
	Clay																	%	7.5	
	Silt	SDT-06-055-0102																%	57.0	
	Clay																	%	19.7	
	Silt	SDT-06-055-0204																%	67.7	
	Clay																	%	27.8	

																8/4/2017				

Notes:

Indicates exceedance of State Chronic SB

* = State Acute SB

Samples Analyzed by EnviroSystems, Inc. Report Number 29543

ug/L = micrograms per liter

ug/kg (dry wt) = micrograms per kilogram (dry weight), 1000 Kg Water = 1 Liter

U = Undetected

J = Sample value greater than limit of detection but less than limit of quantitation

O = Estimated, chromatogram was not typical of commercial petroleum products. Value reported may be considered a maximum.

J5 = MS %R below limit

J17 = SUR %R below limit

State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB

Percent Solids Method: 160.3 EPA 600/4/79/020

Organic Carbon Rep 1 &2 Method: SW846 9060

Water Matrix Metals Method: EPA 200.8 or 245.7

SED Metals Method: SW846 3rd Ed. 6020 or EPA 245.7

PCBs = polychlorinated biphenyls

PCB in Water Method: 846 8082/EPA 680 Modified; PCB in SED Method: EPA 8270 SIM modified

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-5
Preliminary - Comparison of Elutriate Results to Connecticut Surface Water Standards
Modified Elutriate Analyses - AREA 8
Stratford Army Engine Plant

AREA 8																					
Method Group	Parameter	Units	State Chronic SB	SDT-08-COMP-004 Matrix: ELT 8/3/2017												SW-08-001-0001 Matrix: WATER 8/3/2017		Units	SDT-08-COMP-004 Matrix: SED 8/3/2017	
				Elutriate Dissolved						Elutriate											
				Rep 1		Rep 2		Rep 3		Rep 1		Rep 2		Rep 3							
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL		RESULT	QUAL
Metals	Arsenic, total	ug/L	36	7.3		7.6		7.3		8.4		8.3		8.4		1.9		ug/Kg dry wt	4410	
	Cadmium, total		8.8	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		240	
	Chromium, total		50	1	U	1	U	1	U	2.1		2		1.8		9.3			26400	
	Copper, total		3.1	0.5	U	0.5	U	0.5	U	3.4		3.3		3.2		18.8			20600	
	Lead, total		8.1	0.2	U	0.2		0.2	U	1.1		1.1		1.1		4.7			8530	
	Mercury, total		0.94	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.014			36	R1
	Nickel, total		8.2	1	U	1	U	1	U	1		1	U	1	U	4.4			19600	
	Silver, total		1.9*	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U		460	
	Zinc, total		81	13.4		12.7		10.1		7.6		7.2		7.3		16.6			60900	
	Petroleum Hydrocarbons		--	500	U	500	U	500	U	500	U	500	U	500	U	--	--		--	--
PCBs	chlorobiphenyl	ug/L	0.03	0.0032	U	0.0032	U	0.0033	U	0.0034	U	0.0033	U	0.0033	U	0.0033	U	ug/Kg	0.1	U
	decachlorobiphenyl		0.03	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.001	U		0.05	U
	dichlorobiphenyl		0.03	0.0077	U	0.0077	U	0.0078	U	0.0081	U	0.008	U	0.0078	U	0.0079	U		0.36	U
	heptachlorobiphenyl		0.03	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U	0.013	U		3.8	
	hexachlorobiphenyl		0.03	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U	0.014	U		4.9	
	nonachlorobiphenyl		0.03	0.0032	U	0.0032	U	0.0033	U	0.0034	U	0.0033	U	0.0033	U	0.0033	U		0.1	U
	octachlorobiphenyl		0.03	0.0052	U	0.0052	U	0.0052	U	0.0054	U	0.0053	U	0.0052	U	0.0053	U		1.7	
	pentachlorobiphenyl		0.03	0.014		0.0025	U	0.0025	U	0.016	U	0.015	U	0.015	U	0.003	U		8	
	tetrachlorobiphenyl		0.03	0.029		0.012		0.011		0.018		0.033		0.033		0.0023	U		17	
	trichlorobiphenyl		0.03	0.0077	U	0.0077	U	0.0078	U	0.0081	U	0.008	U	0.0081		0.0079	U		5.3	
	Total PCBs		0.03	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U		41	
Solids	Solids	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	%	56.3	
	Silt	SDT-08-081-0001														8/3/2017		%	59.9	
	Clay																	%	21.8	
	Silt	SDT-08-081-0102																%	71.2	
	Clay																	%	17.6	
	Silt and Clay	SDT-08-COMP-001																%	65.0	

Notes:
Indicates exceedance of State Chronic SB
* = State Acute SB
Samples Analyzed by EnviroSystems, Inc. Report Number 29543
ug/L = micrograms per liter
ug/kg (dry wt) = micrograms per kilogram (dry weight), 1000 Kg Water = 1 Liter
U = Undetected
R1 = Sample over recommended holding time.
State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB
GW GB = CT Groundwater Quality Class GB Protection Standards
Percent Solids Method: 160.3 EPA 600/4/79/020
Water Matrix Metals Method: EPA 200.8 or 245.7
SED Metals Method: SW846 3rd Ed. 6020 or EPA 245.7
PCBs = polychlorinated biphenyls
PCB in Water Method: 846 8082/EPA 680 Modified
PCB in SED Method: EPA 8270 SIM modified

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-6
Preliminary - Summary of Geotechnical Laboaratory Testing Data
Stratford Army Engine Plant

Lab SDG	Lab Sample ID	Date Collected	Sample Name	D 2487 / D 2488		D 2216	D 7263	D 7263	D 854	D 422				D 4318			
				United Soil Classification System Description	USCS Symbol	Moisture Content (%)	Total Unit Weight (Yt) (pcf)	Dry Unit Weight (Yd) (pcf)	Specific Gravity	Particle-Size Analysis				Atterberg Limits			
										Gravel (%)	Sand (%)	Silt (%)	Clay (%)	LL Wet Prep.	PL	PI	LI
29543	013	8/4/2017	SDT-06-COMP-003	Dark gray silt with sand	MH	120.8	82.3	37.3	-	0.0	21.8	61.2	17.0	90	42	48	1.6
	014			Black silt	-	-	-	-	2.60	-	-	-	-	-	-	-	-
	026	8/3/2017	SDT-01-019-0001	Dark gray silt with sand	MH	124.1	85.9	38.3	-	0.6	21.8	55.0	22.6	83	41	42	2.0
	027			Black silt	-	-	-	-	2.56	-	-	-	-	-	-	-	-
	028		SDT-01-019-0102	Dark gray silt with sand	MH	134.2	81.5	34.8	-	0.0	16.1	64.9	19.0	105	43	62	1.5
	029			Black silt	-	-	-	-	2.55	-	-	-	-	-	-	-	-
	030		SDT-01-019-0204	Dark gray silt	MH	125.9	84.2	37.3	-	0.0	5.2	78.1	16.7	113	46	67	1.2
	031			Black silt	-	-	-	-	2.50	-	-	-	-	-	-	-	-
	032		SDT-04-051-0001	Brown silt with sand	MH	75.2	94.7	54.1	-	0.0	29.5	56.0	14.5	54	35	19	2.1
	033			Dark gray silt	-	-	-	-	2.63	-	-	-	-	-	-	-	-
	034		SDT-04-051-0102	Brown silt	MH	83.4	92.2	50.3	-	0.0	9.7	71.7	18.6	90	48	42	0.8
	035			Dark gray sandy silt	-	-	-	-	2.61	-	-	-	-	-	-	-	-
	036	8/4/2017	SDT-06-055-0001	Dark gray silty fine to medium sand / sandy silt	SM/ML	48.0	106.3	71.9	-	0.6	62.8	29.1	7.5	42	30	12	1.5
	037			Dark gray sandy silt	-	-	-	-	2.62	-	-	-	-	-	-	-	-
	038		SDT-06-055-0102	Dark gray clay with sand	CH	76.5	93.8	53.1	-	0.0	23.3	57.0	19.7	71	31	40	1.1
	039			Black silt	-	-	-	-	2.61	-	-	-	-	-	-	-	-
	040		SDT-06-055-0204	Brown silt	MH	115.7	86.0	39.9	-	0.0	4.5	67.7	27.8	102	45	57	1.2
	041			Black silt	-	-	-	-	2.52	-	-	-	-	-	-	-	-
	042	8/3/2017	SDT-08-081-0001	Brown silt with sand	MH	79.0	93.7	52.3	-	0.0	18.3	59.9	21.8	64	34	30	1.5
	043			Dark gray silt	-	-	-	-	2.63	-	-	-	-	-	-	-	-
	044		SDT-08-081-0102	Brown silt	MH	77.1	91.1	51.5	-	0.0	11.2	71.2	17.6	72	43	29	1.2
	045			Dark gray sandy silt	-	-	-	-	2.63	-	-	-	-	-	-	-	-
29607	011	8/22/2017	SDT-01-COMP-001	Wet, very dark gray sandy silt	MH	88.24	88.5	47.0	-	0.0	35.3	46.7	18.0	73	36	37	1.4
	014			Moist, very dark gray silt	-	-	-	-	2.58	-	-	-	-	-	-	-	-
	012		SDT-04-COMP-001	wet, dark brown silt with sand	MH	75.65	95.5	54.4	-	0.0	31.9	50.6	17.5	70	39	31	1.2
	015			Moist, grayish brown silt	-	-	-	-	2.61	-	-	-	-	-	-	-	-
	013		SDT-08-COMP-001	Moist, brown sandy silt	MH	66.42	97.6	58.7	-	0.0	24.2	58.8	17.0	68	39	29	0.9
	016			Moist, brown silt	-	-	-	-	2.62	-	-	-	-	-	-	-	-
	017		SDT-XX-COMP-001	wet, dark brown sandy silt	MH	80.32	90.3	50.1	-	0.0	33.1	46.9	20.0	72	43	29	1.3
	018			Moist, grayish brown silt	-	-	-	-	2.61	-	-	-	-	-	-	-	-
29882	001	10/19/2017	SDT-501-0003	Dark gray silt with sand	MH	98.4	92.6	46.7	2.62	0.0	16.5	66	18	82	41	41	1.4
	002		SDT-502-0001	Dark gray silt with sand	MH	89.5	92.0	48.6	2.62	0.0	23.1	57	20	78	39	39	1.3
	003		SDT-503-0002	Dark gray sandy silt	MH	72.8	96.7	56.0	2.67	0.0	38.4	47	15	60	33	27	1.5
	004		SDT-504-0001	Dark gray sandy silt	MH	61.8	100.8	62.3	2.64	0.0	43.3	44	13	51	35	16	1.7
	005		SDT-505-0002	Dark gray silt with sand	MH	59.9	101.4	63.4	2.63	0.0	28.6	58	13	54	36	18	1.3
	006		SDT-506-0001	Dark gray silt with sand	MH	71.0	96.4	56.4	2.65	0.0	26.1	60	14	64	37	27	1.3
	007		SDT-507-0004	Dark gray silty sand	SM	31.8	112.5	85.4	2.63	6.7	71.9	17	4	Non-Plastic			
	008		SDT-508-0001	Dark gray silt with sand	MH	66.3	101.8	61.2	2.64	1.2	29.5	58	11	59	39	20	1.4
	009		SDT-509-0002	Dark gray silt with sand	MH	53.9	104.8	68.1	2.68	0.0	25.7	62	12	55	39	16	0.9
	010		SDT-510-0001	Dark gray silty sand / sandy silt	SM/ML	40.4	111.6	79.5	2.68	1.2	53.0	40	6	36	33	3	2.5

Note: For samples collected on 8/22/17 and 10/19/17, results are incomplete. Hydrometer results have not yet been provided by the laboratory.
Samples were analyzed by GeoTesting: Projects 29543, 29607, and 29882
Clay and Silt results were interpolated from lab data. ASTM clay size particles are 0.005 mm or smaller and silt sized particles are 0.075 mm to 0.005 mm.
pcf = pounds per cubic foot
LL = liquid Limit; PL = plastic limit; PI = plasticity index; LI = liquidity index
USCS = United Soil Classification System; MH = silt of high plasticity; elastic silt; CH = clay of high plasticity; fat clay; SM = silty sand; ML = silt.

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-7
Preliminary - Summary of Percent Solids and Organic Carbon
Discrete and Composite Sediment Samples
Stratford Army Engine Plant

Media	Lab SDG	Sample Name	Sample Date	Percent Solids (%)		Organic Carbon Rep 1 (%)		Organic Carbon Rep 2 (%)	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
SED	29543	SDT-01-018-0002	8/3/2017	49.4		NA		NA	
		SDT-01-018-0204		45.3		NA		NA	
		SDT-01-019-0001		43.1		1.9		1.7	J2,J4
		SDT-01-019-0102		45.9		3.5		3.5	J2,J4
		SDT-01-019-0204		41.9		2		2	J2,J4
		SDT-01-COMP-002		46.1		NA		NA	
		SDT-04-050-0002		54.3		NA		NA	
		SDT-04-051-0001		56.2		2.0		2.3	J2,J4
		SDT-04-051-0102		52.3		2.3		2.3	J2,J4
		SDT-06-054-0004	8/4/2017	46.8		NA		NA	
		SDT-06-055-0001		65.6		1.4		1.3	J2,J4
		SDT-06-055-0102		53.5		2.5		2.3	J2,J4
		SDT-06-055-0204		46.5		3.7	J5	3.7	J5,J8
		SDT-06-COMP-003	8/4/2017	52.2		2.7	J5	2.6	J5,J2,J4
		SDT-08-080-0002	8/3/2017	54.4		NA		NA	
		SDT-08-081-0001		52.4		2		2.4	
		SDT-08-081-0102		58.3		1.7		1.7	
		SDT-08-COMP-004		56.3		NA		NA	
SED	29882	SDT-501-0003	10/19/2017	50.4		1.93	J5,J7	1.68	J5,J7
		SDT-502-0001		52.8		1.98		1.59	
		SDT-503-0002		57.9		1.68		1.6	
		SDT-504-0001		61.8		1.33		0.78	
		SDT-505-0002		62.5		1.36		1.35	
		SDT-506-0001		58.5		0.73		1.48	
		SDT-507-0004		75.9		0.94		1.27	
		SDT-508-0001		60.1		1.55	J5,J7	1.15	J5, J7
		SDT-509-0002		65.0		0.89		0.75	
		SDT-510-0001		71.3		0.52		0.3	U
SED	29607	SDT-01-COMP-001	8/22/2017	52.4		3.2	J5	3.3	J5
		SDT-04-COMP-001		58.5		1.8		2.6	
		SDT-08-COMP-001		56.2		2.1		2	
		SDT-XX-COMP-001		55.9		2.8		2.6	

Notes:

Samples were analyzed by EnviroSystems, Inc., Report Numbers 29543 and 29882

U = Undetected

J2 = LCS %R below limit

J4 = LCS/LCSD %RPD above limit

J5 = MS %R below limit

J7 = Estimate. MSD %RPD above limit

J8 = Duplicate RPD above limit

Percent Solids Analytical Method (29543): 160.3 EPA 600/4/79/020

Percent Solids Analytical Method (29882): ASTM D2216 (Moisture Content) converted to Percent Solids with the equation %Solids = Dry Density (pcf) / Bulk Density (pcf)

Organic Carbon Rep 1 & 2 Analytical Method: SW846 9060

Prepared By: KS, TD 1/12/2018
Checked By: EP 1/12/2018, AA 1/30/2018

TABLE C-8
Preliminary - Comparison of SPLP Results to Connecticut Groundwater Standards
Stratford Army Engine Plant

Method Group	Parameter	GW GB SPLP	Unit	Matrix: SPLP									
				SDT-01-018-0002		SDT-01-018-0204		SDT-04-050-0002		SDT-06-054-0004		SDT-08-080-0002	
				8/3/2017		8/3/2017		8/3/2017		8/3/2017		8/3/2017	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	500	ug/L	4.9		1.9		1.2		3.2		1.2	
	Cadmium, total	50		0.4		0.3		1		0.5		0.2	U
	Chromium, total	500		136	J8,J7	73		29		219		3.1	
	Copper, total	13000		61	J8	73		44		58		4.1	
	Lead, total	150		9.3	J8	3.9		2.9		5.6		1	
	Mercury, total	20		9.6		16		4.6		20		2.3	
	Nickel, total	1000		0.5		0.6		0.2	U	0.6		0.2	U
	Silver, total	360		54	J8	35		48		28		13	
	Zinc, total	50000		38		29		48		31		10	U
PCBs	chlorobiphenyl	5	ug/L	0.006	U	0.006	U	0.006	U	0.006	U	0.006	U
	decachlorobiphenyl	5		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
	dichlorobiphenyl	5		0.015	U	0.015	U	0.021		0.015	U	0.015	U
	heptachlorobiphenyl	5		0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
	hexachlorobiphenyl	5		0.017	U	0.017	U	0.017	U	0.017	U	0.017	U
	nonachlorobiphenyl	5		0.006	U	0.006	U	0.006	U	0.006	U	0.006	U
	octachlorobiphenyl	5		0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
	pentachlorobiphenyl	5		0.045		0.047		0.03		0.016		0.014	U
	tetrachlorobiphenyl	5		0.13		0.13		0.14		0.045		0.032	
	trichlorobiphenyl	5		0.11		0.073		0.13		0.051		0.017	
	Total PCBs	5		0.31		0.28		0.34		0.21	U	0.2	U

Notes:

Samples were analyzed by EnviroSystems, Inc. Report. No 29543

GW GB = CT Groundwater Quality GB Protection Standards, No exceedances

ug/L = micrograms per liter

SPLP = synthtetic precipitation leaching procedure

U = Undetected

J7 = MSD %RR above limit

J8 = Duplicate %RR above limit

PCBs = polychlorinated biphenyls

Prepared By: BJS/TD 1/12/2018
Checked By: MRF 1/12/2018 AA 1/30/2018

TABLE C-8
Preliminary - Comparison of SPLP Results to Connecticut Groundwater Standards
Stratford Army Engine Plant

Method Group	Parameter	GW GB SPLP	Unit	Matrix: SPLP							
				SDT-01-COMP-001		SDT-04-COMP-001		SDT-08-COMP-001		SDT-XX-COMP-001	
				8/22/2017		8/22/2017		8/22/2017		8/22/2017	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	500	ug/L	4.6		1.7		2		2.8	
	Cadmium, total	50		0.3	U	0.3		0.3	U	0.4	
	Chromium, total	500		55		19		14		49	
	Copper, total	13000		120		31		29		120	
	Lead, total	150		9.8		1.9		1.8		6.3	
	Mercury, total	20		0.049		0.032		0.021		0.048	
	Nickel, total	1000		2.9		2.2		1.8		3.8	
	Silver, total	360		0.4		0.3	U	0.3	U	0.6	
	Zinc, total	50000		42		22		17		34	
PCBs	chlorobiphenyl	5	ug/L	0.002	U	0.0020	U	0.002	U	0.002	U
	decachlorobiphenyl	5		0.007	U	0.0330	U	0.007	U	0.018	
	dichlorobiphenyl	5		0.01	U	0.2100	U	0.01	U	0.600	
	heptachlorobiphenyl	5		0.02		0.3400		0.02		1.100	
	hexachlorobiphenyl	5		0.03	U	0.0960	U	0.03	U	0.360	
	nonachlorobiphenyl	5		0.0047		0.0940		0.0012		0.100	
	octachlorobiphenyl	5		0.0017		0.0780		0.0011		0.062	
	pentachlorobiphenyl	5		0.007	U	0.0036	U	0.007	U	0.034	
	tetrachlorobiphenyl	5		0.002	U	0.0022	U	0.002	U	0.012	
	trichlorobiphenyl	5		0.0013		0.0009		0.00057		0.002	
	Total PCBs	5		0.008		0.86		0.003		2.3	

Notes:
Samples were analyzed by EnviroSystems, Inc. Report. No 29543
GW GB = CT Groundwater Quality GB Protection Standards, No exceedances
ug/L = micrograms per liter
SPLP = synthtetic precipitation leaching procedure
U = Undetected
J7 = MSD %RR above limit
J8 = Duplicate %RR above limit
PCBs = polychlorinated biphenyls

Prepared By: BJS/TD 1/12/2018
Checked By: MRF 1/12/2018 AA 1/30/2018

TABLE C-9
Preliminary - Composite Sediment Sample Waste Characterization Results
Stratford Army Engine Plant

Method Group	Chemical Name	Unit	Matrix: SED							
			SDT-01-COMP-001		SDT-04-COMP-001		SDT-08-COMP-001		SDT-XX-COMP-001	
			8/22/2017		8/22/2017		8/22/2017		8/22/2017	
			RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
VOCs	1,1,1,2-tetrachloroethane	ug/L	3.2	U	3	U	2.8	U	NA	
	1,1,1-trichloroethane		3.2	U	3	U	2.8	U	NA	
	1,1,2,2-tetrachloroethane		3.2	U	3	U	2.8	U	NA	
	1,1,2-trichloroethane		3.2	U	3	U	2.8	U	NA	
	1,1-dichloroethane		3.2	U	3	U	2.8	U	NA	
	1,1-dichloroethene		3.2	U	3	U	2.8	U	NA	
	1,1-dichloropropene		3.2	U	3	U	2.8	U	NA	
	1,2,3-trichlorobenzene		3.2	U	3	U	2.8	U	NA	
	1,2,3-trichloropropane		3.2	U	3	U	2.8	U	NA	
	1,2,4-trichlorobenzene		3.2	U	3	U	2.8	U	NA	
	1,2,4-trimethylbenzene		3.2	U	3	U	2.8	U	NA	
	1,2-dibromo-3-chloropropane		3.2	U	3	U	2.8	U	NA	
	1,2-dibromoethane		3.2	U	3	U	2.8	U	NA	
	1,2-dichlorobenzene		3.2	U	3	U	2.8	U	NA	
	1,2-dichloroethane		3.2	U	3	U	2.8	U	NA	
	1,2-dichloropropane		3.2	U	3	U	2.8	U	NA	
	1,3,5-trimethylbenzene		3.2	U	3	U	2.8	U	NA	
	1,3-dichlorobenzene		3.2	U	3	U	2.8	U	NA	
	1,3-dichloropropane		3.2	U	3	U	2.8	U	NA	
	1,4-dichlorobenzene		3.2	U	3	U	2.8	U	NA	
	2,2-dichloropropane		3.2	U	3	U	2.8	U	NA	
	2-chlorotoluene		3.2	U	3	U	2.8	U	NA	
	4-chlorotoluene		3.2	U	3	U	2.8	U	NA	
	4-isopropyltoluene		3.2	U	3	U	2.8	U	NA	
	benzene		3.2	U	3	U	2.8	U	NA	
	bromobenzene		3.2	U	3	U	2.8	U	NA	
	bromochloromethane		3.2	U	3	U	2.8	U	NA	
	bromodichloromethane		3.2	U	3	U	2.8	U	NA	
	bromoform		3.2	U	3	U	2.8	U	NA	
	bromomethane		3.2	U	3	U	2.8	U	NA	
	carbon tetrachloride		3.2	U	3	U	2.8	U	NA	
	chlorobenzene		3.2	U	3	U	2.8	U	NA	
	chloroethane		3.2	U	3	U	2.8	U	NA	
	chloroform		3.2	U	3	U	2.8	U	NA	
	chloromethane		3.2	U	3	U	2.8	U	NA	
	cis-1,2-dichloroethene		3.2	U	3	U	2.8	U	NA	
	cis-1,3-dichloropropene		3.2	U	3	U	2.8	U	NA	
	dibromochloromethane		3.2	U	3	U	2.8	U	NA	
	dibromomethane		3.2	U	3	U	2.8	U	NA	
	dichlorodifluoromethane		3.2	U	3	U	2.8	U	NA	
	ethylbenzene		3.2	U	3	U	2.8	U	NA	
	hexachlorobutadiene		6.4	U	5.9	U	5.7	U	NA	
	isopropylbenzene		3.2	U	3	U	2.8	U	NA	
	m- and p-xylene		3.2	U	3	U	2.8	U	NA	
	methyl-t-butyl ether		6.4	U	5.9	U	5.7	U	NA	
	methylene chloride		3.2	U	3	U	2.8	U	NA	
	n-butylbenzene		3.2	U	3	U	2.8	U	NA	
	n-propylbenzene		3.2	U	3	U	2.8	U	NA	
	naphthalene		3.2	U	3	U	2.8	U	NA	
	o-xylene		3.2	U	3	U	2.8	U	NA	
	sec-butylbenzene		3.2	U	3	U	2.8	U	NA	
	styrene		3.2	U	3	U	2.8	U	NA	
	tert-butylbenzene		3.2	U	3	U	2.8	U	NA	
	tetrachloroethene		3.2	U	3	U	2.8	U	NA	
	toluene		3.2	U	3	U	2.8	U	NA	
	trans-1,2-dichloroethene		3.2	U	3	U	2.8	U	NA	
	trans-1,3-dichloropropene		3.2	U	3	U	2.8	U	NA	
	trichloroethene		3.2	U	3	U	2.8	U	NA	
	trichlorofluoromethane		3.2	U	3	U	2.8	U	NA	

Prepared By: EP 1/12/2018
Checked By: AA 2/5/2018

TABLE C-9
Preliminary - Composite Sediment Sample Waste Characterization Results
Stratford Army Engine Plant

Method Group	Chemical Name	Unit	Matrix: SED							
			SDT-01-COMP-001		SDT-04-COMP-001		SDT-08-COMP-001		SDT-XX-COMP-001	
			8/22/2017		8/22/2017		8/22/2017		8/22/2017	
			RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
PCBs	chlorobiphenyl	ug/kg	0.3	U	0.3	U	0.3	U	0.3	U
	decachlorobiphenyl		1.0	U	1	U	1	U	1	U
	dichlorobiphenyl		2.0	U	2	U	2	U	2	U
	heptachlorobiphenyl		16.0		20.0		15		29	
	hexachlorobiphenyl		5.0	U	5.0	U	5	U	5	U
	nonachlorobiphenyl		15.0		3.7		2.1		7.7	
	octachlorobiphenyl		7.9		5.2		2.8		11	
	pentachlorobiphenyl		1.0	U	1.0	U	1	U	1	U
	tetrachlorobiphenyl		0.3	U	0.3	U	0.3	U	0.3	U
	trichlorobiphenyl		8.7		1.2		0.42		1.7	
	Total PCBs		47		31		21		49	
Metals	Arsenic, total	mg/kg	7.7		5.65		4.79		6.99	
	Cadmium, total		3.52		2.95		1.27		4.07	
	Chromium, total		425		155		104		409	
	Copper, total		1110		172		192		835	
	Lead, total		108	J6,J7	48.9		22.5		98.7	
	Mercury, total		1.39		0.23		0.26		1.07	
	Nickel, total		64.4		118		22.1		95.1	
	Silver, total		6.19		1.04		0.48		6.12	
	Zinc, total		591		159		134		525	
TCLP VOCs[1]	1,2-dichloroethane	mg/L	0.16	U	0.15	U	0.14	U	NA	
	1,1-dichloroethene		0.16	U	0.15	U	0.14	U	NA	
	1,4-dichlorobenzene		0.16	U	0.15	U	0.14	U	NA	
	benzene		0.16	U	0.15	U	0.14	U	NA	
	carbon tetrachloride		0.16	U	0.15	U	0.14	U	NA	
	chlorobenzene		0.16	U	0.15	U	0.14	U	NA	
	chloroform		0.16	U	0.15	U	0.14	U	NA	
	methyl ethyl ketone		0.32	U	0.3	U	0.29	U	NA	
	tetrachloroethene		0.16	U	0.15	U	0.14	U	NA	
	trichloroethene		0.16	U	0.15	U	0.14	U	NA	
	vinyl chloride		0.16	U	0.15	U	0.14	U	NA	
TCLP Metals	Arsenic, total	mg/L	0.039		0.0083		0.01		0.041	
	Barium, total		0.087		0.063		0.046		0.089	
	Cadmium, total		0.004		0.059		0.028		0.0013	
	Chromium, total		0.045		0.025		0.012		0.059	
	Lead, total		0.037		0.039		0.032		0.024	
	Mercury, total		0.00001	U	0.00001	U	0.000011		0.00001	U
	Selenium, total		0.004	U	0.004	U	0.004	U	0.004	U
	Silver, total		0.001	U	0.001	U	0.001	U	0.001	U
General Chemistry	TPH	mg/kg	3560		1260		1060		NA	
	Ignitability		NI		NI		NI		NA	
	reactive cyanide	mg/kg	10	U	10	U	10	U	NA	
	reactive sulfide	mg/kg	10	U	10	U	10	U	NA	
	% Solids	%	53.1		57.3		58.2		58.2	
	% Solids (2)	%	54.7		58.0		61.9		NA	
	% Solids (3)	%	57.5		61.9		57		NA	
	pH	SU	7.2		6.0		6.7		NA	

Notes:

1. Total analysis performed and maximum value for TCLP leachate was reported using the 20x rule as per Federal Register, Vol 55, No 61, June 29,1990 extraction was not necessary. No exceedances of regulatory limits

All samples Analyzed by EnviroSystems, Inc. Report Numb TPH = Total Petroleum Hydrocarbons

ug/L = micrograms per liter
mg/L = milligrams per liter
mg/Kg= milligrams per kilogram
SPLP = synthtetic precipitate leaching procedures
U = Undetected
NI = Not Ignitable
SU = Standard Units
TCLP = Toxicity Characteristic Leaching Procedure
VOCs = Volatile Organic Compounds
J6 = MS %R above limit
J7 = MSD %RR above limit
NA = Not Analyzed

Prepared By: EP 1/12/2018
Checked By: AA 2/5/2018

Table C-10
Preliminary - SPLP VOC Results
Stratford Army Engine Plant

Class	Parameter	Unit	Matrix: SPLP	
			SDT-04-050-0002 (SPLP)	
			8/3/2017	
			RESULT	QUAL
VOCs	1,1,1,2-tetrachloroethane	ug/L	2	U
	1,1,1-trichloroethane		2	U
	1,1,2,2-tetrachloroethane		2	U
	1,1,2-trichloroethane		2	U
	1,1-dichloroethane		2	U
	1,1-dichloroethene		2	U
	1,1-dichloropropene		2	U
	1,2,3-trichlorobenzene		2	U
	1,2,3-trichloropropane		2	U
	1,2,4-trichlorobenzene		2	U
	1,2,4-trimethylbenzene		2	U
	1,2-dibromo-3-chloropropane		2	U
	1,2-dibromoethane		2	U
	1,2-dichlorobenzene		2	U
	1,2-dichloroethane		2	U
	1,2-dichloropropane		2	U
	1,3,5-trimethylbenzene		2	U
	1,3-dichlorobenzene		2	U
	1,3-dichloropropane		2	U
	1,4-dichlorobenzene		2	U
	2,2-dichloropropane		2	U
	2-chlorotoluene		2	U
	4-chlorotoluene		2	U
	4-isopropyltoluene		2	U
	benzene		2	U
	bromobenzene		2	U
	bromochloromethane		2	U
	bromodichloromethane		2	U
	bromoform		2	U
	bromomethane		2	U
	carbon tetrachloride		2	U
	chlorobenzene		2	U
	chloroethane		2	U
	chloroform		2	U
	chloromethane		2	U
	cis-1,2-dichloroethene		2	U
	cis-1,3-dichloropropene		2	U
	dibromochloromethane		2	U
	dibromomethane		2	U
	dichlorodifluoromethane		2	U
	ethylbenzene		2	U
	hexachlorobutadiene		4	U
	isopropylbenzene		2	U
	m- and p-xylene		2	U
	methyl-t-butyl ether		4	U
	methylene chloride		2	U
	n-butylbenzene		2	U
	n-propylbenzene		2	U
	naphthalene		2	U
	o-xylene		2	U
	sec-butylbenzene		2	U
	styrene		2	U
	tert-butylbenzene		2	U
	tetrachloroethene		2	U
	toluene		2	U
	trans-1,2-dichloroethene		2	U
	trans-1,3-dichloropropene		2	U
	trichloroethene		2	U
	trichlorofluoromethane		2	U

Notes:

Samples were analyzed by EnviroSystems, Inc. Report. No 29543

ug/L = micrograms per liter

SPLP = synthtetic precipitation leaching procedure

U = Undetected

VOCs = Volatile Organic Compounds

Prepared By: BJS/TD 1/12/2018
Checked By: MRF 1/12/2018, AA 1/30/2018

TABLE C-11
Summary of Composite Sediment Treatability Results
Stratford Army Engine Plant

Method Group	Chemical Name	Unit	SDT-XX-COMP-001		SDT-01-COMP-001		SDT-04-COMP-001		SDT-08-COMP-001	
			8/22/2017		8/22/2017		8/22/2017		8/22/2017	
			RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
General Chemistry	TPH	mg/kg	NA		3560		1260		1060	
	Ignitability		NA		NI		NI		NI	
	reactive cyanide	mg/kg	NA		10	U	10	U	10	U
	reactive sulfide	mg/kg	NA		10	U	10	U	10	U
	% Solids	%	NA		53.1		57.3		58.2	
	pH	SU	NA		7.2		6		6.7	
Geotechnical	Moisture Content	%	80.32		88.24		75.65		66.42	
	Total Unit Weight (Yt)	pcf	90.25		88.5		95.5		97.6	
	Dry Unit Weight (Yd)	pcf	50.05		47.0		54.4		58.7	
	Specific Gravity	---	2.61		2.58		2.61		2.62	
	Gravel	%	1.7		0.3		0.6		0.2	
	Sand	%	38.4		40.8		29.0		34.8	
	Silt and Clay	%	59.9		58.9		70.4		65.0	
	Liquid Limit Wet Prep.	---	72		73		70		68	
	Plastic Limit	---	43		36		39		39	
	Plasticity Index	---	29		37		31		29	
	Liquidity Index	---	1.3		1.4		1.2		0.9	

Notes:

Samples were analyzed by GeoTesting and EnviroSystems: Projects 29543, 29607, and 29882

Geotechnical results are incomplete. Hydrometer results have not yet been provided by the laboratory.

pcf = pounds per cubic foot

ug/L = micrograms per liter

mg/L = milligrams per liter

mg/kg= milligrams per kilogram

SPLP = synthtetic precipitation leaching procedure

U = Undetected

NI = Not Ignitable

VOCs = volatile organic compounds

NA = Not Analyzed

SU = standard units

TPH = total petroleum hydrocarbons

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-12
Comparison of Belt Press and Geotube Filtrates and Sediment Cakes to Connecticut Surface Water and Groundwater Standards
Dewatering Treatability Testing
Stratford Army Engine Plant

Method Group	Parameter	Units	State Chronic SB	Matrix: WATER								GW GB	SPLP Extract					
				Belt Filter Total		Belt Filter Filtered		Geotube Total		Geotube Filtered			Belt Filter Cake		Geotube Solids		SPLP Blank	
				SDT-DF-BFT-0001		SDT-DF-BFF-0002		SDT-DF-GTT-0001		SDT-DF-GTF-0002			SDT-BF-COMP-001		SDT-GT-COMP-001			
				11/21/2017		11/22/2017		11/23/2017		11/24/2017			11/21/2017		11/21/2017		11/21/2017	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL		RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	ug/L	36	2.4		2.9		4.5		4.1		500	1	U	2	U	1	U
	Cadmium, total		8.8	0.4		0.3		2		1.9		50	6.7		0.6		0.2	U
	Chromium, total		50	8.6		0.4		0.4	U	0.4	U	500	2.3		3.6		1	U
	Copper, total		3.1	25.3		18.3		28.8		27.9		13000	22		8.8		0.5	U
	Lead, total		8.1	3.6		0.6		0.2	U	0.2	U	150	0.3		0.5	U	0.2	U
	Mercury, total		0.94	0.008	J	0.010		0.01	U	0.01	U	20	0.05	U	0.05	U	0.05	U
	Nickel, total		8.2	11.8		12		5.3		4.6		1000	21.0		3.3		1	U
	Silver, total		1.9*	0.2	U	0.2	U	0.2	U	0.2	U	360	0.2	U	0.5	U	0.2	U
	Zinc, total		81	89		107		86.2		82.5		50000	450		40.0		2	U
PCBs	chlorobiphenyl	ug/L	0.03	0.0020		0.0020		0.0020		0.002		5	0.002	U	0.002	U	0.0020	U
	decachlorobiphenyl		0.03	0.0005	U	0.0005	U	0.0005	U	0.0005	U	5	0.0005	U	0.0079	U	0.0005	U
	dichlorobiphenyl		0.03	0.0120		0.0095		0.0060		0.006		5	0.0060	U	0.0060	U	0.0060	U
	heptachlorobiphenyl		0.03	0.0037		0.0027	U	0.0100		0.01		5	0.0200	U	0.0200	U	0.0200	U
	hexachlorobiphenyl		0.03	0.0050		0.0003	U	0.0003	U	0.02		5	0.0200	U	0.0200	U	0.0200	U
	nonachlorobiphenyl		0.03	0.0004	U	0.0072		0.0020		0.002		5	0.0020	U	0.0360	U	0.0004	U
	octachlorobiphenyl		0.03	0.0060		0.0007	U	0.0060		0.006		5	0.0100	U	0.0025	U	0.0100	U
	pentachlorobiphenyl		0.03	0.0680		0.0430		0.0016	U	0.0005	U	5	0.0200	U	0.0170	U	0.0200	U
	tetrachlorobiphenyl		0.03	0.3600		0.2900		0.0110		0.0042	U	5	0.0200	U	0.0170	U	0.0200	U
	trichlorobiphenyl		0.03	0.3000		0.2300		0.0078		0.0032		5	0.0100	U	0.0100	U	0.0100	U
	Total PCBs		0.03	0.7500		0.5800		0.0200		0.008		5	0.0480	U	4.3000	U	0.0850	U

Notes:

Indicates exceedance of State Chronic SB

* = State Acute SB

All samples were generated by Kemron in Atlanta, GA and shipped to EnviroSystems, Inc. in Hampton, NH for chemical analyses: Report Number 30025

ug/L = micrograms per liter

U = Undetected

J = Sample value greater than limit of detection but less than limit of quantitation

State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB, http://www.ct.gov/deep/lib/deep/water/water_quality_standards/wqs_final_adopted_2_25_11.pdf
http://cteco.uconn.edu/maps/town/wtrqualcl/WtrQualCl_Stratford.pdf

GW GB = CT Groundwater Quality Class GB Protection Standards; https://eregulations.ct.gov/eRegsPortal/Browse/RCSA/%7BEAD3787B-7651-4803-8239-CCD2B569E8A0%7D June 27, 2013.

Filtered samples were generated by pumping dewatering fluids through a 0.45 micron filter.

SPLP = synthtetic precipitation leaching procedure

PCBs = polychlorinated biphenyls

DF = dewatering fluid

BFT = belt filter total

BFF = felt filter total

GTT = geotube total

GTF = geotube filtered

Prepared By: TD
Checked By: AA 1/30/2018

TABLE C-13
Water Treatment - Belt Press 0.1µ Filtered and Carbon Adsorption
Stratford Army Engine Plant

Method Group	Parameter	Units	State Chronic SB	SW-01-001 SW-DF-BFF-0.1UM 03/08/18		SW-01-001 SW-DF-BFF-0.1UM CTR 03/07/18		SW-01-001 SW-DF-BFF-0.1UM 10C 03/07/18		SW-01-001 SW-DF-BFF-0.1UM 20C 03/07/18		SW-01-001 SW-DF-BFF-0.1UM 40C 03/07/18		SW-01-001 SW-DF-BFF-0.1UM 80C 03/07/18	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	Result	Qual
Metals	Arsenic, total	ug/L	36	1.83	J	1.69	J	6.16		9.94		5.95		1.21	J
	Cadmium, total		8.8	0.29	U	0.29	U	0.29	U	0.29	U	0.29	U	1	U
	Chromium, total		50	1.23	J	2.74		1.71	J	3.96		1.65	J	1.72	J
	Copper, total		3.1	9.97		15.2		1.92	U	1.92	U	1.92	U	5	U
	Lead, total		8.1	1.72	U	1.72	U	1.72	U	1.72	U	1.72	U	5	U
	Mercury, total		0.94	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.2	U
	Nickel, total		8.2	2.78	U	4.04	J	4.17	J	4.61	J	2.78	U	10	U
	Silver, total		1.9*	0.98	U	0.81	U	0.81	U	0.81	U	0.98	J	2	U
	Zinc, total		81	17.0	U	17.0	U	17.0	U	17.0	U	17.0	U	50.0	U
PCBs	Decachlorobiphenyl	ug/L	0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Dichlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Heptachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Hexachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Monochlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Nonachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Octachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Pentachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Tetrachlorobiphenyl		0.03	0.000515	U	0.00061	U	0.000633	U	0.000633	U	0.000676	U	0.000667	U
	Trichlorobiphenyl		0.03	0.0014	B	0.00061	U	0.000633	U	0.000633	U	0.00127	B	0.00192	B
	Total PCBs		0.03	0.0014	B	0.00061	U	0.000633	U	0.000633	U	0.00127	B	0.00192	B

Notes:

Indicates exceedance of State Acute SB

* = State Acute SB

Samples analyzed by Alpha Analytical Lab Number L1808172

ug/L = micrograms per liter

U = Undetected

J = Sample value greater than limit of detection but less than limit of quantitation

State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB,
http://www.ct.gov/deep/lib/deep/water/water_quality_standards/wqs_final_adopted_2_25_11.pdf
http://cteco.uconn.edu/maps/town/wtrqualcl/WtrQualCl_Stratford.pdf

B = The analyte was detected above the reporting limit in the associated method blank

PCBs = polychlorinated biphenyls

µ = micron

BFF = belt filter filtered

DF = dewatering fluid

20 C = carbon ratio of 20 g carbon to 1 liter water

CTR = control

Prepared by: TD
Checked By: AA 3/21/18

TABLE C-14
Water Treatment - Unfiltered Belt Press and Carbon Adsorption
Stratford Army Engine Plant

Method Group	Parameter	Units	State Chronic SB	SW-01-001		SW-01-001		SW-01-001		SW-01-001		SW-01-001	
				SW-DF-BFT-CTR		SW-DF-BFT-10C		SW-DF-BFT-20C		SW-DF-BFT-40C		SW-DF-BFT-80C	
				03/08/18		03/08/18		03/08/18		03/08/18		03/08/18	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
PCBs	Decachlorobiphenyl	ug/L	0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Dichlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Heptachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Hexachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Monochlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Nonachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Octachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Pentachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Tetrachlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Trichlorobiphenyl		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U
	Total PCBs		0.03	0.000521	U	0.00052	U	0.000521	U	0.000532	U	0.000562	U

Notes:

Indicates exceedance of State Acute SB

Samples analyzed by Alpha Analytical Lab Number L1808172

ug/L = micrograms per liter

U = Undetected

J = Sample value greater than limit of detection but less than limit of quantitation

State Chronic SB = State of CT Water Quality Criteria for Aquatic Life, Saltwater Chronic Values, Class SB,

B = The analyte was detected above the reporting limit in the associated method blank

SPLP = synthtetic precipitation leaching procedure

NA = Not Analyzed

PCBs = polychlorinated biphenyls

BFT = belt filter total

20 C = carbon ratio of 20 g carbon to 1 liter water

CTR = control

Prepared by: TD
Checked By: AA 3/21/18

TABLE C-15
Solidfied Belt Press and Gravity Drained Sediments - SPLP Results
Stratford Army Engine Plant

Method Group	Parameter	Units	GW GB	SPLP Extract											
				DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press	
				SDT-DS-BFT-PC03		SDT-DS-BFT-PC06		SDT-DS-BFT-PC08		SDT-DS-BFT-CC03		SDT-DS-BFT-CC06		SDT-DS-BFT-CC08	
				2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	mg/L	0.5	0.0090		0.0046	J	0.003	J	0.011		0.006		0.006	
	Cadmium, total		0.05	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
	Chromium, total		0.5	0.020		0.046		0.086		0.021		0.054		0.053	
	Copper, total		13	0.460		0.432		0.638		0.175		0.860		0.824	
	Lead, total		0.15	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
	Mercury, total		0.02	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
	Nickel, total		1	0.018	J	0.028		0.053		0.011	J	0.039		0.043	
	Silver, total		0.36	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
	Zinc, total		50	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U	0.034	U
PCBs	Decachlorobiphenyl	ug/L	5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Dichlorobiphenyl		5	0.0166		0.0259		0.0278		0.022		0.0233		0.0249	
	Heptachlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.00262		0.0005	U	0.0005	U
	Hexachlorobiphenyl		5	0.0005	U	0.0005	U	0.00191		0.00538		0.0015		0.00129	
	Monochlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Nonachlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Octachlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Pentachlorobiphenyl		5	0.0005	U	0.00729		0.00821		0.0153		0.00724		0.00744	
	Tetrachlorobiphenyl		5	0.0444		0.0982		0.0948		0.120		0.0812		0.0787	
	Trichlorobiphenyl		5	0.0354		0.0992		0.104		0.0839		0.0928		0.0843	
	Total PCBs		5	0.0964		0.231		0.237		0.249		0.206		0.197	

Notes:
Samples analyzed by Alpha Analytical Lab Number L1806872
J = Sample value greater than limit of detection but less than limit of quantitation
U = Undetected
mg/L = milligrams per liter
ug/L = micrograms per liter
GW GB = CT Groundwater Quality GB Protection Standards, No exceedances.
PCBs = polychlorinated biphenyls
DS = dewatered sediment
BFT = belt filter
PC03 = Portland cement 3%
CC03 = calciment 3%
SPLP = synthetic precipitation leaching procedure
GVT = gravity drained

Prepared by: TD
Checked By: AA 3/21/18

TABLE C-15
Solidfied Belt Press and Gravity Drained Sediments - SPLP Results
Stratford Army Engine Plant

Method Group	Parameter	Units	GW GB	SPLP Extract											
				DEW-SED-Gravity		DEW-SED-Gravity		DEW-SED-Gravity		DEW-SED-Gravity		DEW-SED-Gravity		DEW-SED-Gravity	
				SDT-DS-GVT-PC02		SDT-DS-GVT-PC04		SDT-DS-GVT-PC05		SDT-DS-GVT-CC02		SDT-DS-GVT-CC04		SDT-DS-GVT-CC05	
				2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	mg/L	0.5	0.013		0.005		0.003	J	0.016		0.011		0.0090	
	Cadmium, total		0.05	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
	Chromium, total		0.5	0.011		0.029		0.058		0.018		0.022		0.026	
	Copper, total		13	0.159		0.277		0.357		0.087		0.258		0.345	
	Lead, total		0.15	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
	Mercury, total		0.02	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
	Nickel, total		1	0.006	U	0.015	J	0.031		0.006	U	0.010	J	0.015	J
	Silver, total		0.36	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
	Zinc, total		50	0.034	U	0.034	U	0.034	U	0.034	U	0.185		0.034	U
PCBs	Decachlorobiphenyl	ug/L	5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Dichlorobiphenyl		5	0.0270		0.0252		0.0285		0.0239		0.0240		0.0272	
	Heptachlorobiphenyl		5	0.00148		0.0005	U	0.0005	U	0.00317		0.00176		0.00103	
	Hexachlorobiphenyl		5	0.00442		0.00151		0.00198		0.00568		0.00292		0.00275	
	Monochlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Nonachlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
	Octachlorobiphenyl		5	0.0005	U	0.0005	U	0.0005	U	0.00371		0.0005	U	0.0005	U
	Pentachlorobiphenyl		5	0.0158		0.00890		0.0119		0.0233		0.0138		0.0114	
	Tetrachlorobiphenyl		5	0.118		0.0844		0.108		0.159		0.115		0.118	
	Trichlorobiphenyl		5	0.166		0.123		0.144		0.102		0.103		0.102	
	Total PCBs		5	0.333		0.243		0.294		0.321		0.260		0.262	

Notes:

Samples analyzed by Alpha Analytical Lab Number L1806872

J = Sample value greater than limit of detection but less than limit of quantitation

U = Undetected

mg/L = milligrams per liter

ug/L = micrograms per liter

GW GB = CT Groundwater Quality GB Protection Standards, No exceedances.

PCBs = polychlorinated biphenyls

DS = dewatered sediment

BFT = belt filter

PC03 = Portland cement 3%

CC03 = calciment 3%

SPLP = synthetic precipitation leaching procedure

GVT = gravity drained

Prepared by: TD
Checked By: AA 3/21/18

TABLE C-16
Solidfied Belt Press and Gravity Drained Sediments - TCLP Results
Stratford Army Engine Plant

Parameter	Units	TCLP	TCLP Extract											
			DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press		DEW-SED-Belt Press	
			SDT-DS-BFT-PC03		SDT-DS-BFT-PC06		SDT-DS-BFT-PC08		SDT-DS-BFT-CC03		SDT-DS-BFT-CC06		SDT-DS-BFT-CC08	
			2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018	
			RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Arsenic, total	mg/L	5	0.019	U	0.042	J	0.045	J	0.019	U	0.019	U	0.019	U
Barium, total		100	0.178	J	0.139	J	0.116	J	0.089	J	0.115	J	0.092	J
Cadmium, total		1	0.054	J	0.010	U	0.010	U	0.043	J	0.010	U	0.010	U
Chromium, total		5	0.147	J	0.021	U	0.024	J	0.073	J	0.04	J	0.033	J
Lead, total		5	0.027	U	0.027	U	0.027	U	0.027	U	0.027	U	0.027	U
Mercury, total		0.2	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Selenium, total		1	0.035	U	0.035	J	0.037	J	0.035	U	0.035	U	0.035	U
Silver, total		5	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U

Parameter	Units	TCLP	TCLP Extract											
			DEW-SED-Gravity Drain		DEW-SED-Gravity Drain		DEW-SED-Gravity Drain		DEW-SED-Gravity Drain		DEW-SED-Gravity Drain		DEW-SED-Gravity Drain	
			SDT-DS-GVT-PC02		SDT-DS-GVT-PC04		SDT-DS-GVT-PC05		SDT-DS-GVT-CC02		SDT-DS-GVT-CC04		SDT-DS-GVT-CC05	
			2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018		2/27/2018	
			RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Arsenic, total	mg/L	5	0.019	U	0.033	J	0.019	U	0.022	J	0.019	U	0.019	U
Barium, total		100	0.146	J	0.157	J	0.134	J	0.080	J	0.093	J	0.105	J
Cadmium, total		1	0.042	J	0.010	U	0.010	U	0.026	J	0.026	J	0.019	J
Chromium, total		5	0.144	J	0.111	J	0.021	U	0.068	J	0.103	J	0.139	J
Lead, total		5	0.045	J	0.027	U	0.027	U	0.027	U	0.028	J	0.053	J
Mercury, total		0.2	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Selenium, total		1	0.035	U	0.035	U	0.035	U	0.035	U	0.035	U	0.035	U
Silver, total		5	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U

Notes:

Samples analyzed by Alpha Analytical Lab Number L1806872
mg/L = milligrams per liter
TCLP = toxicity characteristic leaching procedure, EPA Method 1311/RCRA Toxicity Characteristic Standards
J = Sample value greater than limit of detection but less than limit of quantitation
U = Undetected
BFT = belt filter
PC03 = Portland cement 3%
CC03 = calciment 3%
GVT = gravity drained

Prepared by: TD
Checked By: AA 3/21/18

TABLE C-17
Comparison of TCLP Results to Connecticut Goundwater Standards
Stabilized Samples - Tipping Point Process
Stratford Army Engine Plant

Parameter	Units	TCLP	GW GB	TCLP Extract									
				SDT-XX-COMP-PC06		SDT-XX-COMP-PC08		SDT-XX-COMP-PC12		SDT-XX-COMP-PC14		TCLP Blank M-2038	
				9/29/2017		9/29/2017		9/29/2017		9/29/2017		9/29/2017	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Arsenic, total	mg/L	5	0.5	0.014		0.0054		0.0029		0.0022		0.002	U
Barium, total		100	10	0.097		0.086		0.111		0.147		0.0054	
Cadmium, total		1	0.05	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Chromium, total		5	0.5	0.0093		0.021		0.034		0.038		0.002	U
Lead, total		5	0.15	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0006	
Mercury, total		0.2	0.02	0.00005	R1 U	0.00005	R1 U	0.00005	R1 U	0.00005	R1 U	0.00005	R1 U
Selenium, total		1	0.5	0.002	U	0.002	U	0.0023		0.002	U	0.002	U
Silver, total		5	0.36	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U

Notes:

Samples analyzed by EnviroSystems, Inc., Report Number 29852

PC06 = 6% Portland cement addition; PC08 = 8%; PC12 = 12%; PC14 = 14%

mg/L = milligrams per liter

TCLP = toxicity characteristic leaching procedure, EPA Method 1311/RCRA Toxicity Characteristic Standards, No exceedances.

GW GB = CT Groundwater Quality GB Protection Standards, No exceedances

R1 = Sample extracted out of hold time

U = Undetected

Prepared By: TD
Checked By: AA 1/29/2018

TABLE C-18
Comparison of SPLP Results to Connecticut Groundwater Standards
Stabilized Samples - Tipping Point Process
Stratford Army Engine Plant

Method Group	Parameter	Units	GW GB	SPLP Extract									
				SDT-XX-COMP-PC06		SDT-XX-COMP-PC08		SDT-XX-COMP-PC12		SDT-XX-COMP-PC14		SPLP Blank M-2037	
				9/29/2017		9/29/2017		9/29/2017		9/29/2017		9/29/2017	
				RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL	RESULT	QUAL
Metals	Arsenic, total	mg/L	0.5	0.0022		0.0016		0.0013		0.0013		0.001	U
	Cadmium, total		0.05	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
	Chromium, total		0.5	0.0053		0.015		0.0013		0.031	J8	0.001	U
	Copper, total		13	0.087		0.118		0.105		0.319	J8	0.0009	
	Lead, total		0.15	0.0002	U	0.0002	U	0.0002	U	0.0005		0.0002	U
	Mercury, total		0.02	0.00005	R1 U	0.00005	R1 U	0.00005	R1 U	0.00005	R1 U	0.00005	U
	Nickel, total		1	0.056		0.076		0.082		0.091		0.0016	
	Silver, total		0.36	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
	Zinc, total		50	0.012		0.0053		0.0036		0.0042		0.0071	
PCBs	chlorobiphenyl	ug/L	5	0.001	U	0.001	U	0.001	U	0.001	U	0.0009	U
	decachlorobiphenyl		5	0.001	U	0.001	U	0.001	U	0.001	U	0.0005	U
	dichlorobiphenyl		5	0.007		0.007		0.007		0.005		0.0024	U
	heptachlorobiphenyl		5	0.004	U	0.004	U	0.004	U	0.004	U	0.0036	U
	hexachlorobiphenyl		5	0.004	U	0.004	U	0.004	U	0.004	U	0.0042	U
	nonachlorobiphenyl		5	0.001	U	0.001	U	0.001	U	0.001	U	0.0009	U
	octachlorobiphenyl		5	0.002	U	0.002	U	0.002	U	0.002	U	0.0024	U
	pentachlorobiphenyl		5	0.005	U	0.005	U	0.005	U	0.005	U	0.0046	U
	tetrachlorobiphenyl		5	0.024		0.023		0.021		0.017		0.0042	U
	trichlorobiphenyl		5	0.042		0.031		0.042		0.033		0.0024	U
	Total PCBs		5	0.077		0.061		0.070		0.056		0.03	U

Notes:
Samples analyzed by EnviroSystems, Inc., Report Number 29852
U = Undetected
R1 = Sample extracted out of hold time
J8 = Duplicate %RR above limit
PC06 = 6% Portland cement addition; PC08 = 8%; PC12 = 12%; PC14 = 14%
mg/L = milligrams per liter
ug/L = micrograms per liter
SPLP = synthetic precipitation leaching procedure, EPA Method 1312
GW GB = CT Groundwater Quality Class GB Protection Standards, No exceedances.
PCBs = polychlorinated biphenyls

Prepared By: TD
Checked By: AA 2/1/2018

ATTACHMENT A
Field Data Reports

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG + B | WO: — | Crew: Mark Audibert
Date: 8/2/17 | Time: 1300 | Vessel: Coring Cowling
Coordinates: Easting | Northing
Sampling Station: SDT-01-001
Weather/Conditions: mostly cloudy, breeze. 75°F | Traffic: light | Water Temp:
Measured Water Depth (ft): 3.90'
Core Liner tube length (ft): 4.5'
Core Penetration (ft): 4.5' | Core Recovery (ft): 4.5'
Calculated Percent Recovery: 4.5/4.5 100
Coring Notes: w/ bucket

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-comp-001	0-2.5' black silty clay w/ some shells. Organic odor	
1-2'		2.5-2.7' dark gray silt, misc.	
2-3'		2.7-4.5' black silty clay w/ some shells. organic odor.	
4-5'			
4.5		bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	0	0	0	3	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: ponar
				5 gal bucket	Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 1-5

Comments: Composite samples, 5 gal / bucket

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: TG+B | WO: – | Crew: Mark Parker
Date: 8/2/17 | Time: 1420 | Vessel: Coring Caution

Coordinates: Easting | Northing

Sampling Station: SDT-01-002

Weather/Conditions: Cloudy | Traffic: none | Water Temp:

Measured Water Depth (ft): 2.6'
Core Liner tube length (ft): 5.0
Core Penetration (ft): 4.0 | Core Recovery (ft): 4.0
Calculated Percent Recovery: 100%

Coring Notes: vibracore

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-coma-dup	0-1.9' black marine silt w/ few small shells. Organic odor	
1-2'			
2-3'		19-24 dk gray laminated silts & clays	
3-4'		24-4 black marine silts, woody debris	
4-5'		4' - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	–	–	–	3	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Packet
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N - ors
Debris Present	Y (N)

Photo Numbers: 6-10

Comments

arnet
fowler
whipple

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A.Ck/L

Sub: TG+D **WO:** — **Crew:** Mark Anderson

Date: 8/2/17 **Time:** 1435 **Vessel:** Coring Location

Coordinates: **Easting** **Northing**

Sampling Station: SDT-01-003

Weather/Conditions: cloudy, 80°F **Traffic:** light **Water Temp:**

Measured Water Depth (ft): 2.3'

Core Liner tube length (ft): 5.0

Core Penetration (ft): 4.0 **Core Recovery (ft):** 4.0

Calculated Percent Recovery: 100%

Coring Notes: Vibracore

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-Comp-001	0-1.7' black marine silt w/ woody debris + oily sheen	
1-2'		organic odor	
2-3'		1.7-2.9 dk gray silt w/ mica rich layer @ 2.3' mud	
3-4'		2.9-4.0': black marine silts	
4-5'		w/ large woody debris	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: — Capacity:

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y/N

Photo Numbers

11-15

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG+B | WO: | Crew: Mark Rusk
Date: 8/2/17 | Time: 1440 | Vessel: Coring Crane
Coordinates: Easting | Northing
Sampling Station: SDT-01-004
Weather/Conditions: cloudy, 80°F | Traffic: light | Water Temp:
Measured Water Depth (ft): 2.3'
Core Liner tube length (ft): 5'
Core Penetration (ft): 4.5' | Core Recovery (ft): 4.5'
Calculated Percent Recovery: 100%
Coring Notes: vibracore

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-(comp #1)	0-2.3' dk brown/blk medium silt/sand oily sheen.	
1-2'		2.3-2.8' dk gray mica rich silts-peat	
3-4'		2.8-4 - black silty fine sand w/ some woody debris.	
4-5'		4.0 - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	1	1	1	5 gal	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type / Capacity

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers: IMG-20

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 36161 76064 **Logger:** A Clerk

Sub: TG+B **WO:** **Crew:** Mark Prokisch

Date: 8/2/17 **Time:** 1450 **Vessel:** Corning Cascadia

Coordinates: **Easting** **Northing**

Sampling Station: SDT-01-005

Weather/Conditions: cloudy, 78°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.5

Core Liner tube length (ft): 5.0'

Core Penetration (ft): 4.0' **Core Recovery (ft):** 4.0'

Calculated Percent Recovery: 100%

Coring Notes:

Vibracore.

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-comp-001	0-2.5 dk brown/blk marine silt w/ some oily sheen, many shells	
1-2'			
2-3'		2.5-2.9 dk gray micaceous silts, uniform + laminated	
3-4'		2.9-4.0 black marine silts w/ some woody debris	
4-5'		4.0 - bottom of core.	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

21-25

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** B Clark

Sub: TG + B **WO:** **Crew:** Mark Hudson

Date: 8/2/17 **Time:** 1500 **Vessel:** Cox #5 Gondola

Coordinates: **Easting** **Northing**

Sampling Station: SDT-01-0001

Weather/Conditions: cloudy, 70s°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.7'

Core Liner tube length (ft): 5.0'

Core Penetration (ft): 4.0' **Core Recovery (ft):** 4.0

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-0001	0-2.4' black marine silts w/ oily sheen throughout.	
1-2'		Coarse sand lense w/ shells @ 0.6-0.7.	@
3-4'		2.4-2.9: dk gray mica rich silts no O	
4-5'		2.9-4.0: black marine silts. Few shells.	
5-6'		4.0: bottom of core	
6-7'			
7-8'			

Number of containers:		—	—	5 gal	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: — Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

24-30

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: TG1B | WO: | Crew: Mark Ashkar
Date: 8/2/17 | Time: 1513 | Vessel: Coring Carolina
Coordinates: Easting | Northing
Sampling Station: SDT-01-002
Weather/Conditions: Cloudy, 76°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 2.3
Core Liner tube length (ft): 5.0
Core Penetration (ft): 4.0 | Core Recovery (ft): 4.0
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-core-001	0-4': black marine silts w/ few shells throughout.	
1-2'		Oily sheen @ 1.0', 2.0', 2.2'.	
2-3'		4.0 bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5-gal	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: —
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers
30-35

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3516176064 | Logger: A. Clark
Sub: TG-13 | WO: – | Crew: Mark A.
Date: 8/2/17 | Time: 1530 | Vessel: Caring Caroline
Coordinates: Easting | Northing
Sampling Station: SDT-01-0084
Weather/Conditions: rain, 76°F | Traffic: none | Water Temp:
Measured Water Depth (ft): ~~2.5~~ 2.5'
Core Liner tube length (ft): 5.0'
Core Penetration (ft): 4.0' | Core Recovery (ft): 4.0'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-(comp 0-4')	~~0-2'~~	
		0-1.1' black marine silts w/ some shells + slight oily sheen odor	
1-2'		1.1-1.2: dk gray silts	
3-4'		1.2-2.6: black marine silts w/ more prominent oily sheen throughout, odor	
4-5'		2.6-3.0 - dk brownish/gray silty sandy layer w/	
5-6'		3.0-4.0 - black marine silts no oily sheen or shells	
6-7'			
7-8'			

Number of containers:	–	–	–	5gal	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: d. Driscoll Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers
36-40

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: TC1B | WO: - | Crew: Mark A.
Date: 8/2/17 | Time: 1540 | Vessel: Coring Gadget
Coordinates: Easting | Northing
Sampling Station: SDT-01-009
Weather/Conditions: Rain, 74°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 2.9 TBE'
Core Liner tube length (ft): 5.0
Core Penetration (ft): 4.0' | Core Recovery (ft): 4.0
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-Comp-001	0-4' black silty w/ oily sheen throughout. odor. woody debris at 1.1-1.3'	
1-2'			
2-3'			
3-4'		4.0' end of boring	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:					Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	5 gal bucket	Sampler Type
				other	Capacity

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

41-45

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: R. Cicci
Sub: TG+B | WO: — | Crew: Mark A
Date: 8/3/12 | Time: 1307 | Vessel: coring coublinE
Coordinates: Easting | Northing
Sampling Station: ~~SDT-01-010~~ SDT-01-010
Weather/Conditions: sunny, 76°F | Traffic: light | Water Temp:
Measured Water Depth (ft): 20
Core Liner tube length (ft): 5
Core Penetration (ft): 4' | Core Recovery (ft): 4'
Calculated Percent Recovery: 100 %
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-2.1': black silt and some vegetation, slight fowl odor	
1-2'		Oily sheen	
3-4'		2.1-2.3: med grey fine sands, uniform	
4-5'		2.3-3.7: black silt w some shells.	
5-6'		3.7-4.0: quartz-rich grey med-grained sands	
6-7'		4: bottom of core	
7-8'			

Number of containers:	—	—	—	5gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VibraCore
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
143-146

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG+B | WO: | Crew: Mark A.
Date: 8/3/17 | Time: 1511 | Vessel: Coring crediner

Coordinates: Easting | Northing

Sampling Station: ~~SDI-08-47~~ SDT-01-011

Weather/Conditions: sunny, 76°F | Traffic: light | Water Temp:

Measured Water Depth (ft): 2.9'
Core Liner tube length (ft): 5'
Core Penetration (ft): 4' | Core Recovery (ft): 4'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-0000-00	0-4' blackish brown marine silts w few vegitation + small shells. Oily sheen from 0-1.5'. Faint odor. wire @ 4'. grey sand lensing @ 3.5'. 4 - bottom of core	
1-2'			
2-3'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Ekman; Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
147-150

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: H. Clark

Sub: T6+B | WO: - | Crew: Mark H.

Date: 6/3/17 | Time: 1515 | Vessel: Spring Carolina

Coordinates: Easting | Northing

Sampling Station: ~~SDT-01-0460~~ SDT-01-012

Weather/Conditions: Sunny, 76°F | Traffic: Light | Water Temp:

Measured Water Depth (ft): 29'

Core Liner tube length (ft): 5'

Core Penetration (ft): 4' | Core Recovery (ft): 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-0.7- black marine silts, org odor	
1-2'		0.7-10- sandy gray micaceous sand	
3-4'		1.0-4.0 black/tan brown silts w/ few shells.	
4-5'	1 of comp. 6	gray med-grained sand	
5-6'		Herbary @ 2.3', 2.6', +3.1'	
6-7'		4.0 bottom of core	
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: vibra Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers: 151 - 154

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: TG+B **WO:** — **Crew:** Mack A

Date: 8/3/17 **Time:** 1518 **Vessel:** coring crane

Coordinates: **Easting** **Northing**

Sampling Station: ~~SDT-01-014~~ SDT-01-013

Weather/Conditions: Sunny, 76°F **Traffic:** Light **Water Temp:**

Measured Water Depth (ft): 3.0'

Core Liner tube length (ft): 5'

Core Penetration (ft): 4' **Core Recovery (ft):** 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-013 0'-4'	0-4': black marine silts w/ few shells throughout. Oily sheen from 0-1'. Grey sand lenses @ 2.5'. 4' - bottom of core.	
1-2'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—			Soil Material	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: SS Bucket
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

155-158

Comments

SDT-01-014 + SDT-01-015 will not be completed

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wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG + B | WO: | Crew: Mark A
Date: 5/3/17 | Time: 1310 | Vessel: towing coreline
Coordinates: Easting | Northing
Sampling Station: SDT-01-016
Weather/Conditions: Sunny, 76°F | Traffic: light | Water Temp:
Measured Water Depth (ft): 2.8
Core Liner tube length (ft): 5'
Core Penetration (ft): 4.5 | Core Recovery (ft): 4.5
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-COMP-0000	0-4.5': black marine silt w/ fine veg. + shells throughout. Odor + oily sheen prominent through 0-3.5' of boring	
1-2'			
3-4'			
4-5'		4.5': bottom of core	
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	1	1	1	5 gal bucket	Sampler Type: vibracore
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity:

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
159-162

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: R. Clark
Sub: T6rB | WO: | Crew: Mick A
Date: 8/3/17 | Time: 1548 | Vessel: coring coreline

Coordinates: Easting | Northing

Sampling Station: SDT-01-017

Weather/Conditions: Sunny, 76°F | Traffic: light | Water Temp:

Measured Water Depth (ft): 2.8

Core Liner tube length (ft): 5'

Core Penetration (ft): 4' | Core Recovery (ft): 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-CORE-002	0-4': black marine silt w/ few wood + shells. Oily sheen + odor from 0-2.5'. Coarse sand layer from 3.3-3.5	
1-2'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	—	—	—	5 gal bucket	Sampler Type: VC liner
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

163-166

Comments

arcadis
foster
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3615176064 | Logger: A. Sisk

Sub: TG+D | WO: | Crew: Mark A

Date: 8/3/17 | Time: 1352 | Vessel: coring rocking

Coordinates: Easting | Northing

Sampling Station: SDT-01-018

Weather/Conditions: sunny, 77°F | Traffic: light | Water Temp:

Measured Water Depth (ft): 3.2

Core Liner tube length (ft): 5'

Core Penetration (ft): 4' | Core Recovery (ft): 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	*	0-4' black marine silts w/ oily sheen + odor	
1-2'		As 0-2', wood fragments @ 3.3'	
3-4'		4. bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	2	—	—	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibracore
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

167 - 170

Comments

* SDT-01-018-0002 for SPLP MCL/PCBs

SDT-01-018-0204 for SPLP MCL/PCBs

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176084 | Logger: A. Clark
Sub: T6+B | WO: - | Crew: Mark A.
Date: 8/3/17 | Time: 1603 | Vessel: coring caddie

Coordinates: Easting | Northing

Sampling Station: SDT-01-019

Weather/Conditions: sunny, 76°F | Traffic: light | Water Temp:

Measured Water Depth (ft): 3.0'
Core Liner tube length (ft): 5'
Core Penetration (ft): 4' | Core Recovery (ft): 4'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	✓	0-4' marine black silts w/ few shells. Oily sheen 0-2.5' + odor. Few shell throughout. 4 - bottom of core.	
1-2'			
2-3'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	-	10	-	-	Sampler Type: Vibra
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

171 - 174

Comments

SDT-01-019-0001 for TOC, Geo, Sp G 1603
" -0102 " 1610
" -0204 " 1615

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A CLARK

Sub: TG 2, 15 | WO: | Crew: MARK D

Date: 8/03/17 | Time: 1030 | Vessel: CORMAR CARACHA

Coordinates: Easting | Northing

Sampling Station: SPT-04-R20

Weather/Conditions: SUNNY, 78°F | Traffic: NONE | Water Temp:

Measured Water Depth (ft): 3.5

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SPT-04-R20-001	0-0.2 - black silts	
1-2'		0.2-0.4 grey med grained sands - quartz rich - strong odor	
2-3'		0.4-0.6 - black silts	
3-4'		0.6-1.0 - med grey fgm. sands uniform	
4-5'		1.0-1.5 black silts uniform	
5-6'		1.5-2.0 med brown silts, some bioturbation	
6-7'		2. bottom of core	
7-8'			

Number of containers:				5 Gal Bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 95 + 96

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | **Project No.:** 3616176064 | **Logger:** H CKS

Sub: T & D | **WO:** — | **Crew:** MKK A

Date: 08/03/17 | **Time:** 1057 | **Vessel:** CAROLINA CAROLINA

Coordinates: Easting | Northing

Sampling Station: SDT-04-C21

Weather/Conditions: SUNNY 73°F | **Traffic:** NONE | **Water Temp:** —

Measured Water Depth (ft): 3.5'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-COMP-01	0-0.4 - black marine silts, some roots (foul) odor	
1-2'		0.4-0.6 grey coarse with fine sands	
3-4'		0.6-1.1 grey fine sands, layered	
4-5'		1.1-1.6 - black silts, some clay	
5-6'		1.6-2 - brown silts, some clay	
6-7'		2.0 - bottom of core	
7-8'			

Number of containers:	1	—	1	5 GAL BUCKET	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

97 + 98

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A CLARK

Sub: T4&5 **WO:** — **Crew:** MARK A

Date: 05/05/17 **Time:** 1102 **Vessel:** DESIRE CAROLINA

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04 .02

Weather/Conditions: SUNNY & 73°F **Traffic:** NONE **Water Temp:** —

Measured Water Depth (ft): 39'

Core Liner tube length (ft): 7'

Core Penetration (ft): 2' **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-COMP-001	0-2': black silty w/ fuel odor. wet to	
1-2'		fine mica-rich gray	
3-4'		sand lenses @ 0.7', 1.1-1.3'	
4-5'		2 - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 AM Spoon	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: SUBCA
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

99 + 100

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A CLARK

Sub: T6&8 | WO: — | Crew: MARK A

Date: 08/03/17 | Time: 1105 | Vessel: LOCHNA (AEGEAN)

Coordinates: Easting | Northing

Sampling Station: SDF-01-023

Weather/Conditions: SUNNY 78°F | Traffic: None | Water Temp: —

Measured Water Depth (ft): 3.9'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDF-01-023-SD-0000	0-0.5 - black silts w/ fuel odor & shells.	
1-2'		0.5 - 0.9 brown silts, uniform	
2-3'		0.9 - 1.0 gray-med sands	
3-4'		1.0 - 1.3 brown silts, uniform	
4-5'		1.3 - 2.0 black silts, some shells,	
5-6'		2 - bottom of core.	
6-7'			
7-8'			

Number of containers:	—	—	—	5 Encore BUCKET	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

101 + 102

Comments

arcadis
foster
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant
Sub: TG+B
Project No.: 3616176064
WO: —
Logger: A Clark
Crew: Mark A
Date: 8/3/17
Time: 1109
Vessel: Caring Caroline

Coordinates: Easting
Northing

Sampling Station: SDT-04-024

Weather/Conditions: Sunny, 75° F
Traffic: none
Water Temp:

Measured Water Depth (ft): 39
Core Liner tube length (ft): 3'
Core Penetration (ft): 2'
Core Recovery (ft): 2'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-024-001	0-0.6: black silts w/ vegetation, fuel odor - oily sheen @ 0.4-0.6'	
1-2'		0.6-0.7 - gray fine sands	
3-4'		0.7-1.0: brn silts, some vegetation	
4-5'		1.0-1.8' black silts w/ some shells	
5-6'		1.8' 2.0: brn silty, some veg.	
6-7'		2.0' bottom of core	
7-8'			

Number of containers:	—	—		SS-1	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
~~102~~ 90 103, 104

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant Project No.: 3616176064 Logger: A Check

Sub: TG + B WO: – Crew: Mark A

Date: 8/5/17 Time: Vessel: Coring Cochin

Coordinates: Easting Northing

Sampling Station: SDT-04-05

Weather/Conditions: Sunny, 75°F Traffic: none Water Temp:

Measured Water Depth (ft): 3.9'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-0.0' (comp 0.0'-2.0')	0-0.9 black silts, some vegetation, odor	
1-2'		0.9-1.0 - silty fine sands	
3-4'		1.0-1.9 - black silts, some shells + veg.	
4-5'		1.9-2.0 - brown silts w/ bioturb	
5-6'		2.0 - bottom of core	
6-7'			
7-8'			

Number of containers:	–	–	–	Spoon sample	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: K. Box
					Capacity:

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

105 + 106

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: T6 + B | WO: | Crew: Mark A
Date: 8/31/17 | Time: 1120 | Vessel: Coring raft/Jon
Coordinates: Easting | Northing
Sampling Station: SDT-04-0824
Weather/Conditions: sunny, 75°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 3.1
Core Liner tube length (ft): 3'
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-1.0 - mud brn silts w/ vegetation & fg grained sand lensing throughout	
1-2'			
2-3'	SDT-04-1024-GRAB	1.0-1.6 - black massive silts w/ some vegetation & odor	
3-4'			
4-5'		1.6-2.0 mud brn silts w/ bio turb	
5-6'		2.0 bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	3	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibracore
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 107 + 108

Comments

arcadis
louis
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark

Sub: T C + B | WO: — | Crew: Mark A.

Date: 8/3/17 | Time: 1125 | Vessel: Coring Cradle

Coordinates: Easting | Northing

Sampling Station: SST-04027

Weather/Conditions: Sunny, 34°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 3.7

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 102.7%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SST-04027-0-2'	0-1.0 - brown silts w/ course sand leaving through out field ctr.	
1-2'			
2-3'		1.0-1.6 - black organic silts w/ oily sheen, odor.	
3-4'		1.6-2.0 - brown silts, uniform	
4-5'		2.0 - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	2 (jar bucket)	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibracore
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

109+110

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: TG-8 **WO:** — **Crew:** Mark A

Date: 8/3/17 **Time:** 1130 **Vessel:** Coring catamaran

Coordinates: **Easting** **Northing**

Sampling Station: SDT-01-028

Weather/Conditions: Sunny, 73°F **Traffic:** None **Water Temp:**

Measured Water Depth (ft): 3.3'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100 %

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-composite 001	0-0.9 - med brn silts, org odor	
1-2'		0.9-1.0 - gray med grained sands w/ many shells	
3-4'		1-1.8 - black silts SI oily sheen, odor.	
4-5'		1.8-2.0 - med brn silts, some veg.	
5-6'		2.0 - bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	5 Soil Vials	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

111 + 112

Comments

anec
fuller
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3516179064 **Logger:** A Clark

Sub: T6+B **WO:** — **Crew:** Mark A

Date: 3/31/17 **Time:** 1135 **Vessel:** Coring Coordinator

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-029

Weather/Conditions: sunny, 33°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 5.3'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-(comp)-001	0-1.1' med brn silts w/ org odor, grey sand lensing @ 0.8-0.9'	
1-2'		1.1-2.0 - blackish brown silts, some veg	
3-4'		2.0 - bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5gl bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: V.C.O. Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

113+114

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TM 3 | WO: | Crew: Mark A
Date: 6/3/17 | Time: 1136 | Vessel: Quinn Caroline
Coordinates: Easting | Northing
Sampling Station: SDT-04-030
Weather/Conditions: Sunny, 73°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 3.2
Core Liner tube length (ft): 3'
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-030	0-0.9: brown silts w/ shells + vegetation.	
1-2'		grey sand lenses @ 0.7-0.8'	
3-4'		0.9-1.4: black marine silts, some vegetation	
4-5'		1.4-2.0: brown silts, lots of vegetation.	
5-6'		2.0 - bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	5gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibracore Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers
115 + 116

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** D. Clark

Sub: TG+B **WO:** — **Crew:** Mark A.

Date: 8/3/17 **Time:** 1140 **Vessel:** Coring Caroline

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-081

Weather/Conditions: Sunny, 73°F	Traffic: none	Water Temp:

Measured Water Depth (ft): 3.7	Coring Notes:
Core Liner tube length (ft): 3	
Core Penetration (ft): 2' Core Recovery (ft): 2'	
Calculated Percent Recovery: 100%	

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-0081	0-0.7: black marine silts, org odor	
1-2'		0.7-0.9: gray fine sands, layer!	
2-3'		0.9-1.5: black silts, some veg.	
3-4'		1.5-2.0: brn silts w/ some veg + shells	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	3 Soil jars	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

117 + 118

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: N. Clark
Sub: T6+B | WO: — | Crew: Mark A.
Date: 8/3/17 | Time: 1150 | Vessel: Coring vessel
Coordinates: Easting | Northing
Sampling Station: SDT-04-052
Weather/Conditions: sunny, 75°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 3.0'
Core Liner tube length (ft): 3'
Core Penetration (ft): 2' | Core Recovery (ft): 3'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-052-(composited)	0-0.4 dk brn silty clay, no odor, shells	
1-2'		0.4-0.5 med grained sands	
3-4'		0.5-2.0 dk brn silty clay some small shells + veg.	
4-5'		2.0 bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	1	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VC Decon
					Capacity: —

Live Organisms present	Y / N
Oil-Like Present	Y / N
Odor Present	Y / N
Debris Present	Y / N

Photo Numbers: 119+120

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: T6+B **WO:** **Crew:** Mark A.

Date: 8/31/17 **Time:** 1215 **Vessel:** coring, crabtrap

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-033

Weather/Conditions: sunny, 73°F **Traffic:** none **Water Temp.**

Measured Water Depth (ft): 3.0

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-comp-OA	0-0.4 - brn silts, some veg. org. odor	
1-2'		0.4-0.6 - shell-rich gray coarse sand	
3-4'		0.6-2.0' dark brown/black silts, some vegitation	
4-5'		2 - buttons of core	
5-6'			
6-7'			
7-8'			

Number of containers:	-	-	-	5 per set	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: vibra Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

121 + 122

Comments

arcadis
Fuller
Wagoner

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: T6+8 **WO:** **Crew:** Mark A

Date: 8/3/17 **Time:** 1212 **Vessel:** carry overboard

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-64

Weather/Conditions: ~~SDT-04-64~~ Sunny, 73°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.8'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-0001	0-2' interlayed black & dark brown silts w/ vegetation in bottom 0.7'.	
1-2'			
3-4'		gray sand lensing @ 2.5'.	
4-5'		2- bottom of core.	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VibraCore Capacity: —

Live Organisms present	Y	N
Oil-Like Present	Y	N
Odor Present	Y	N
Debris Present	Y	N

Photo Numbers

123 + 124

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark

Sub: T&I B | WO: | Crew: M. L. A.

Date: 8/13/17 | Time: 1220 | Vessel: Coring Gradient

Coordinates: Easting | Northing

Sampling Station: SDT-01-055

Weather/Conditions: ~~SDT-04-3850~~ Sunny, 74°F | Traffic: None | Water Temp:

Measured Water Depth (ft): 2.8'

Core Liner tube length (ft): 7'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-Comp 001	0-2': blackish brown marine silts w/ some shells + vegetation throughout, gray sand lensing @ 0.6'	
1-2'			
2-3'			
3-4'		2. bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:		—	—	3 Sm Jars	Sampler Type: Vibra.
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y N

Photo Numbers

125 + 126

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark

Sub: T6 + B | WO: – | Crew: Mark A

Date: 8/3/12 | Time: 1225 | Vessel: coring location

Coordinates: Easting | Northing

Sampling Station: SDT-04-036

Weather/Conditions: ~~201 Clear~~ Sunny, 74°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 8'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-036-COMP-00	0-0.5 black silts w/ oily sheen. odor.	
1-2'		0.5-0.6 - mud gray sand loose.	
3-4'		0.6-1.3 black silts w/ some vegetation.	
4-5'		1.3-2.0 - mud brn silts w/ some shells	
5-6'		2.0 bottom of core	
6-7'			
7-8'			

Number of containers:	–	–	–	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

127 + 128

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3615176064 **Logger:** A. Clark

Sub: TG + B **WO:** – **Crew:** MVL A

Date: 8/3/17 **Time:** 1226 **Vessel:** Loring Gordon

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-037

Weather/Conditions: Sunny, 74°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.6'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-0002-0	0-1.0 - black organic silt w/ oily sheen, odor, some vegetation	
1-2'			
2-3'	SDT-04-0002-1	1.0-2.0 - brown silts, uniform, some vegetation	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	–	–	–	5 5oz Jarred	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

129, 130

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark

Sub: TG-3 | WO: | Crew: Nick A.

Date: 8/3/17 | Time: 1230 | Vessel: Boring coaching

Coordinates: Easting | Northing

Sampling Station: STR-OH-038

Weather/Conditions: Sunny, 93°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 2.6'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	STR-OH-038-1001 composite	0-0.7 black silts w/ shells, org odor.	
1-2'		0.7-0.9 gray fine sands, uniform.	
3-4'		0.9-1.3 - black silts w/ some veg.	
4-5'		1.3-2.0 - brn silts w/ some shells.	
5-6'		2 - bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: vibracore
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 131-132

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176004 | Logger: M. Clark

Sub: T6+B | WO: – | Crew: Mark A

Date: 8/3/17 | Time: 1231 | Vessel: coring vessel

Coordinates: Easting | Northing

Sampling Station: SDT-04-039

Weather/Conditions: Sunny, 74°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 2.6'

Core Liner tube length (ft): 3'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-04-comp-001	0-1.2' blackish brown silts w/ oily sheen & some veg.	
1-2'		1.2-2.0' brown silts w/ some veg.	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:			–	5 SOC kept	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Wildco; Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

133 + 134

Comments

anec
foster
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 361617664 | Logger: A Clark
Sub: TG+B | WO: | Crew: Mack D.
Date: 8/3/17 | Time: 1234 | Vessel: coring location
Coordinates: Easting | Northing
Sampling Station: SDT-04-010
Weather/Conditions: sunny, 77°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 3.10'
Core Liner tube length (ft):
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-1.0 gray-silty sands w/some coarse sand.	
1-2'		strong inorg. odor	
2-3'	comp-sed-04-010	1.0-2.0 blackish brown silts w/some veg.	
3-4'		- 2. bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	—	—	—	5gal bucket	Sampler Type: VIBRA
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

135 + 136

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG+B | WO: – | Crew: Mark A.
Date: 8/3/17 | Time: 1230 | Vessel: Long Island

Coordinates: Easting | Northing

Sampling Station: SDT-01-041

Weather/Conditions: Sunny, 73°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 2.6'
Core Liner tube length (ft): 3'
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-01-comp-001	0-2': dk brown to black silt w/ strong increasing odor, some lg gravel @ 0.6'	
1-2'			
2-3'		2- bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	–	–	–	5 gal bucket	Sampler Type: Vibra
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

137 + 138

Comments

SDT-01-042 through SDT-01-049 will not exist

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** D. Clark

Sub: **WO:** **Crew:** Mark A.

Date: 8/3/17 **Time:** 1240 **Vessel:** Carrs Cuddihy

Coordinates: **Easting** **Northing**

Sampling Station: SDT - 01 - ~~0050~~ 0002

Weather/Conditions: Sunny, 75°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.6'

Core Liner tube length (ft): 3'

Core Penetration (ft) 2' **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-0.6 - dk brown silts, some shells, oily sheen, odor	
1-2'		0.6-1.2 - black silts, some vegetation	
3-4'		1.2-2 - dk brown silts, uniform, some	
4-5'		Ves.	
5-6'		2 - bottom of core	
6-7'			
7-8'			

					Equipment
Number of containers:	2	1	-	-	Sampler Type: VibraCore
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

139+140

Comments

→ SDT-01-50-0002 for VOCs + SPLP metals + PCBs

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Ciccio

Sub: TG + B **WO:** **Crew:** MCA A.

Date: 8/3/17 **Time:** 1255 **Vessel:** coring cooler

Coordinates: **Easting** **Northing**

Sampling Station: SDT-04-~~45~~050

Weather/Conditions: sunny, 73°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 2.6'

Core Liner tube length (ft): 2'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	#	0-0.6 dk brn silts, some shells, oily sheen, odor	
1-2'		0.6-1.2 - black silts, some vegetation.	
3-4'		1.2-2 dk brn silts, uniform.	
4-5'		2 - bottom of core	
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	—	4	—	—	Sampler Type: Liner
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity:

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

141 + 142

Comments

SDT-04-050-0002 (MS/MSD)

SDT-04-051-0002

Geotechnical Parameters

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clerk
Sub: T6+B | WO: – | Crew: Mark A
Date: 8/8/17 | Time: 0740 | Vessel: coring crew 4
Coordinates: Easting | Northing
Sampling Station: SDT-06-052
Weather/Conditions: p. cloudy, 70°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 2.7
Core Liner tube length (ft): 5'
Core Penetration (ft): 4' | Core Recovery (ft): 4'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-06-052-COMP-0-4	0-4': Black marine silt, some vegetation. no odor, uniform	
1-2'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	1	–		Soil Jar W	Sampler Type: w. ba...
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers: 175-176

Comments

AECOM Foster Wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 36161760064 | Logger: M. Clark

Sub: TB-13 | WO: - | Crew: Mark H

Date: 8/4/17 | Time: 0743 | Vessel: coring crew

Coordinates: Easting | Northing

Sampling Station: SDT-06-053

Weather/Conditions: partly cloudy 70°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 8.5'

Core Liner tube length (ft): 5'

Core Penetration (ft): 4' | Core Recovery (ft): 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-06-Comp-053	0-4 - black marine silts w/ some shells + organic	
1-2'		Odor, woody debris @ 2.3'	
3-4'		4 - bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	-	-	-	5 gal bucket	Sampler Type: x. fork
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

179-182

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: TGr B **WO:** — **Crew:** Mike A.

Date: 8/4/17 **Time:** 0745 **Vessel:** Boring Caroline

Coordinates: **Easting** **Northing**

Sampling Station: SDT-06-034

Weather/Conditions: p. cloudy, 70°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 30

Core Liner tube length (ft): 5'

Core Penetration (ft) 4' **Core Recovery (ft):** 4'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'		0-4: black marine silt w/ organic odor throughout. Some vegetation, many shells (coarse) @ 1.4-1.7'	
	*		
1-2'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	1	—	—	Equipment
					Sampler Type: Vibra.
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

183 - 186

Comments

* SDT-06-034-0004 @ 750 for SPLP met + RBS

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG+B | WO: - | Crew: Mark A.
Date: 8/4/17 | Time: 0755 | Vessel: coring coating
Coordinates: Easting | Northing
Sampling Station: SDT-06-055
Weather/Conditions: P cloudy, 70°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 4.5'
Core Liner tube length (ft): 5'
Core Penetration (ft): 4' | Core Recovery (ft): 4'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	✱	0-4': black mottled silts w/ wood fragments throughout large stones @ 3.0'	
1-2'			
3-4'		4' bottom of Core	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:					Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VC-SDS
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers
187 - 190

Comments
✱ SDT-06-055-0001
SDT-06-055-0102
SDT-06-055-0204

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A.Clark

Sub: T&B **WO:** - **Crew:** Mike A

Date: 8/3/17 **Time:** 0700 **Vessel:** Boring Location

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-056

Weather/Conditions: partly cloudy, 68°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 3.9'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' Core Recovery (ft): 1.5'

Calculated Percent Recovery: 90%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-056-Comp-001	0-2 black massive silt w/ some shells, organic odor, no sheen. 2' - bottom of core	
1-2'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	-	-	-	5 gal bag	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Ponar Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

46-47

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A Clark

Sub: T&B **WO:** — **Crew:** Mike A

Date: 8/3/17 **Time:** 0720 **Vessel:** Quinn Landing

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-057

Weather/Conditions:	p. cloudy, ~85°F	**Traffic:** none	**Water Temp:**

Measured Water Depth (ft):	3.9'	Coring Notes:	
Core Liner tube length (ft):	5'		
Core Penetration (ft):	2'	Core Recovery (ft):	1.8'
Calculated Percent Recovery:	90%		

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-057 comp 0/1	0-2: black marine silt w/ some shells, organic odor, no sheen	
1-2'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: vibra Capacity: —

Live Organisms present	Y (N)	**Comments**
Oil-Like Present	Y (N)	
Odor Present	(Y) N	
Debris Present	Y (N)	

Photo Numbers

48-49

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A Clark

Sub: TGw B **WO:** - **Crew:** Mike A.

Date: 8/3/17 **Time:** 0925 **Vessel:** Coring Gondola

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-0058

Weather/Conditions: P. Cloudy 70 F	Traffic: none	Water Temp:
Measured Water Depth (ft): 2.9'	Coring Notes:	
Core Liner tube length (ft): 5'		
Core Penetration (ft): 2.0' Core Recovery (ft): 1.8'		
Calculated Percent Recovery: 90%		

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-(core cut)	0-2': black marine silts w/ some shells + org. odor. Dark grey silty sand lense @ 0.5'	
1-2'			
2-3'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal Bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra-Corer Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

50 - 51

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. CRUZ
Sub: TG-B | WO: | Crew: Mike A
Date: 8/3/17 | Time: 0732 | Vessel: Spring Cocker
Coordinates: Easting | Northing
Sampling Station: SDT-05-059
Weather/Conditions: p. cloudy, 70°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 2.9'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2.0 | Core Recovery (ft): 1.5'
Calculated Percent Recovery: 90%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-05-Comp-01	0-2': black mine silty w/ some shells + org. odor. Dark gray silty sand loose @ 0.5'	
1-2'			
2-3'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5gal	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	1L other	Sampler Type: Ultra
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
52-53

Comments

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Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Click

Sub: TB+B | WO: | Crew: Mark A.

Date: 8/3/17 | Time: 0940 | Vessel: Corey Gordon

Coordinates: Easting | Northing

Sampling Station: SDT-08-060

Weather/Conditions: P. Cloudy, 70°F | Traffic: Rare | Water Temp:

Measured Water Depth (ft): 3.5'

Core Liner tube length (ft): 5.0'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-060-001	0-2' black mucine silt, strong org odor. some shells, few roots	
1-2'			
2-3'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	1	1	1	5 gal	Sampler Type: K. Box
Type of container:	40 ml VOA	Amber Jar	Plastic bag	Other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

54 - 55

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A Clark

Sub: TG+B **WD:** **Crew:** Clark A.

Date: 5/3/12 **Time:** 0745 **Vessel:** Cargo Carrier

Coordinates: **Easting** **Northing**

Sampling Station: SDT-05-0001

Weather/Conditions: p.cloudy, 70°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 3.5

Core Liner tube length (ft): 5.0

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-05-0001	0-2': black marine silt, strong org. odor. some shells + roots.	
1-2'			
2-3'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	1	1	1	5 Sm. C	Sampler Type: Vibra
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

5465 52

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A CLARK

Sub: TER 4 & 5 | WO: | Crew: MARK A

Date: 08/15/17 | Time: 0830 | Vessel: CORING CAROLINA

Coordinates: Easting | Northing

Sampling Station: SOF 08-042

Weather/Conditions: P. CLOUDY 85°F | Traffic: None | Water Temp:

Measured Water Depth (ft): 42' & 43'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' | Core Recovery (ft): 1.7

Calculated Percent Recovery: 85%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SOF-042-001	0-2': black marine silt w/ few shells & org odor no product. 2. bottom of core	
1-2'			
2-3'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	1	—	—	5 GAL BUCKET	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA Capacity:

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	(Y) N

Photo Numbers: 58-59

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. CLARK

Sub: TG 4B | WO: ——— | Crew: MIKE A.

Date: 08/03/17 | Time: 0815 | Vessel: CARING CAROLINA

Coordinates: Easting | Northing

Sampling Station: SDT-08-063

Weather/Conditions: partly cloudy, LBF | Traffic: NONE | Water Temp:

Measured Water Depth (ft): ~~5~~ 4.3'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' | Core Recovery (ft): 1.7'

Calculated Percent Recovery: 85%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-063-0002	0-2' - black marine silt w/ few shells + strong org odor. no product.	
1-2'			
2-3'		2' - bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	—	—	—	5 GAL BUCKET	Sampler Type: VIBRA
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 60-4

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A CLARK
Sub: T6 & 8 | WO: | Crew: MIKE A
Date: 08/3/17 | Time: 0820 | Vessel: LOBSTER CAROLINA
Coordinates: Easting | Northing
Sampling Station: SDT-08-004
Weather/Conditions: P CLOUDY 68°F | Traffic: None | Water Temp:
Measured Water Depth (ft): 5ft 4.2'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' | Core Recovery (ft): 1.7'
Calculated Percent Recovery: 85%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-Comp-001	0-2' mid brn to black mouse silts few small shells+ org odor.	
1-2'		2'- bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 GAL BUCKET	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 62-63

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A CLARK

Sub: T6 LB **WO:** — **Crew:** MARK A

Date: 08/5/17 **Time:** 0825 **Vessel:** CORINNE CAROLINA

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-005

Weather/Conditions: P. CLOUDY 68°F **Traffic:** NONE **Water Temp:**

Measured Water Depth (ft): 39" @ 4.2'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' **Core Recovery (ft):** 1.7'

Calculated Percent Recovery: 85%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-COMP-001	0-2': Med brn to blk marine silts, few small shells; org odor	
1-2'		2-bottom of core	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gallon	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

04-05

Comments

arnec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A CLARK

Sub: T4 & B | WO: — | Crew: MIKE A

Date: 8/3/17 | Time: 0830 | Vessel: CORINNA CAROLINA

Coordinates: Easting | Northing

Sampling Station: SDT-08-066

Weather/Conditions: P. CLOUDY 68°F | Traffic: MOUF | Water Temp:

Measured Water Depth (ft): 4.3'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-066-0.0	0-0.3' - black marine silt, some shells, no odor	
1-2'		0.3-0.4: med gray fine sand loose, saturated	
3-4'		0.4-1.7 - black marine silt, some shells	
4-5'		1.7-1.9: med gray fine sand loose	
5-6'		1.9-2 - black marine silt. 2. bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal Bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VIBRA
					Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

66-67

Comments

arcadis
foster
wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176084 | Logger: A CLARK

Sub: TA & B | WO: — | Crew: MIKE A

Date: 08/3/17 | Time: 0845 | Vessel: CAROLINA CAROLINA

Coordinates: Easting | Northing

Sampling Station: SOT-08-067

Weather/Conditions: P. CLOUDY 68°F | Traffic: None | Water Temp:

Measured Water Depth (ft): ~~3.48~~ 4.6

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SAT-08-067-0-6 comp	0-0.5': black marine silt some shells, org odor	
1-2'		0.5-0.7': dk gray sand loose	
3-4'		0.7-2': black marine silt, shells, org odor	
4-5'		2' - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 GAL BUCKET	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: W 10 EA
					Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

68-69

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** B C K L

Sub: TG + B **WO:** — **Crew:** Mike A

Date: 8/3/17 **Time:** 0850 **Vessel:** Coring Moling

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08 -0408

Weather/Conditions: p. cloudy, 70°F **Traffic:** None **Water Temp:**

Measured Water Depth (ft): 4.6

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-0408-COMP-001	0-0.7: blk med-fine silts, some shells, slg odor	
1-2'		0.7-0.9: fine gray sand lens	
2-3'		0.9-2': med/dk brown med-fine silts, some shells	
3-4'		2' - bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—		—	1 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Wildco Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

70-71

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: TG-B | WO: – | Crew: Mike A.
Date: 8/3/17 | Time: 0850 | Vessel: Cox Ag Carolina
Coordinates: Easting | Northing
Sampling Station: SDT-08-069
Weather/Conditions: p. cloudy, 72°F | Traffic: none | Water Temp:
Measured Water Depth (ft): 4.6'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-069-COMP-001	0-0.5: black marine silty, some shells, no odor	snails on top
1-2'		0.5-0.7: med gray med-grained quartz + mica rich sands w/ many sm. shells	
3-4'			
4-5'		0.7-1.0 - black marine silty	
5-6'		1.0-2.0: med brown silty w/ few shells	
6-7'		2.0 - bottom of core	
7-8'			

					Equipment
Number of containers:	–	–	–	5 gal bucket	Sampler Type: VanDorn
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: –

Live Organisms present	(Y) N
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 72-73

Comments: snails

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** H Clark
Sub: TG-13 **WO:** — **Crew:** Mike A
Date: 3/13/17 **Time:** 0804 **Vessel:** Coring Gerdine

Coordinates: **Easting** **Northing**

Sampling Station: SDT-05-070

Weather/Conditions: partly cloudy, 72°F **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 4.16'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' **Core Recovery (ft):** 2'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-05-070 composite of 0-2'	0-0.4' black marine silts, org odor - some shells.	
1-2'		0.4 - 0.6 - med gray, med-grained sand w/ many shells, mica rich.	
3-4'		0.6 - 0.8 - black marine silts.	
4-5'		0.8-2.0' mid brown silts w/ fine vegetation + possible bioturbation	
5-6'		2.0 - bottom of core	
6-7'			
7-8'			

Number of containers:	—	—	—	5gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers

74-75

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 36161706.64 **Logger:** A. Clark
Sub: T61B **WO:** ~~81943~~ **Crew:** Mike A
Date: 8/3/17 **Time:** 0730 **Vessel:** Carly Caroline
Coordinates: Easting Northing
Sampling Station: SDT-08-071
Weather/Conditions: P cloudy, 72°F **Traffic:** none **Water Temp:**
Measured Water Depth (ft): 4.7'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' **Core Recovery (ft):** 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-071	0-0.5: black marine silts, odor	
		0.5-0.8: med gray, med grained sand, shell frag, shells	
1-2'		0.8-1.2 black marine silts, some roots + shells, odor	
3-4'		1.2-2.0: dk brn mottled silts, some vegetation	
4-5'		2.0 - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment:
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VC, dredge, Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers
76 + 77

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark

Sub: TG+ B | WO: – | Crew: Mike A

Date: 8/3/17 | Time: 0937 | Vessel: Calig Carding

Coordinates: Easting | Northing

Sampling Station: SDT-08-072

Weather/Conditions: P. cloudy, 72°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 4.7'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-072-0.0-2.0	0-0.4: black marine silts, org odor	
1-2'		0.4-0.7: mdgray med-grained sand w/ many shells, laminated	
3-4'		0.7-1.0: black marine silt, some veg.	
4-5'		1.0-2.0: dk brown marine silts, some shells & veg.	
5-6'		2.0 - bottom of core	
6-7'			
7-8'			

Number of containers:	–	–	–	5 5+1 laundered	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: VibeCore
					Capacity: –

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 78 + 79

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark

Sub: TG+B | WO: — | Crew: Mike A

Date: 8/3/17 | Time: 0937 | Vessel: coring coreline

Coordinates: Easting | Northing

Sampling Station: SDT-08-073

Weather/Conditions: p. cloudy, 72°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 4.9

Core Liner tube length (ft): 5'

Core Penetration (ft): 2.0 | Core Recovery (ft): 2.0'

Calculated Percent Recovery: 100

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-073-0.0-2.0	0.0-0.3 - black medium silts, org odor	
		0.3-0.4 med gray sand w/ many shells.	
1-2'		0.4-0.9 - black medium silts w/ strong inorganic odor	
		0.9-2.0 dk brown medium silts, some shells.	
2-3'			
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: vibrocore
					Capacity: —

Live Organisms present	Y	(N)
Oil-Like Present	Y	(N)
Odor Present	(Y)	N
Debris Present	Y	(N)

Photo Numbers

80187

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant	**Project No.:** 3616176064	**Logger:** A. Cicit	
Sub: TG+ B	**WO:** —	**Crew:** M. Ke A	
Date: 8/13/13	**Time:** 0941	**Vessel:** Long reading	

Coordinates: Easting Northing

Sampling Station: SDT-08-074

Weather/Conditions: p cloudy, 72° F	Traffic: none	Water Temp

Measured Water Depth (ft): 4.9	Coring Notes:
Core Liner tube length (ft): 5'	
Core Penetration (ft): 2ft Core Recovery (ft): 2.0'	
Calculated Percent Recovery: 100%	

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-074-0-0.9	0-0.9 - black marine silt w/ inorganic odors some vegetation + oily sheen @ 0.3-0.4' + 0.6-0.7'	
1-2'			
3-4'			
4-5'		0.9-2' - mud brown marine silty w/ few shells + bioturbations slight inorg odor	
5-6'			
6-7'		2- bottom of core	
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Lexan Capacity:

Live Organisms present	Y (N)
Oil-Like Present	(Y) N
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

82+83

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Clark

Sub: TG+ B3 **WO:** - **Crew:** Mike A

Date: 8/3/17 **Time:** 0946 **Vessel:** Coring Platform

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-075

Weather/Conditions: sunny, 73°F **Traffic:** None **Water Temp:**

Measured Water Depth (ft): 5.0'

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' **Core Recovery (ft):** 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-075-Comp-001	0-0.5 - black marine silts, organic, some shells.	
1-2'		0.5-0.7' med gray sand	
2-3'		0.7-1.1' black silts, some shells, no odor.	
3-4'		1.1-2.0' dk brown silts some bio turbation	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	-	-	-	5 3/4" Liner	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibracore
					Capacity: -

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

84+85

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** B. Clark
Sub: T&B **WO:** – **Crew:** Mike A
Date: 6/3/13 **Time:** 0950 **Vessel:** coring catamaran
Coordinates: **Easting** **Northing**
Sampling Station: SDT-08-076
Weather/Conditions: sunny, 74°F **Traffic:** none **Water Temp:**
Measured Water Depth (ft): 5.0
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' **Core Recovery (ft):** 2'
Calculated Percent Recovery: 100%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-076-0-2	0-0.6 - black silts w/ thin gray sand layer - org. odor.	
1-2'		0.6-0.8 - black silts w/ some shelly- slight oily sheen.	
3-4'		0.8-2.0 dk brn marine silts	
4-5'		2' - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	–	–	–	5 gal buckets	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type Van Veen
					Capacity

Live Organisms present	Y	N
Oil-Like Present	Y	N
Odor Present	Y	N
Debris Present	Y	N

Photo Numbers
86 + 86

Comments

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant **Project No.:** 3616176064 **Logger:** A. Cieck

Sub: TGR B **WO:** - **Crew:** Mike A

Date: 8/3/17 **Time:** 1000 **Vessel:** coring caddy

Coordinates: **Easting** **Northing**

Sampling Station: SDT-08-077

Weather/Conditions: **Traffic:** none **Water Temp:**

Measured Water Depth (ft): 5.0

Core Liner tube length (ft): 5'

Core Penetration (ft): 2' Core Recovery (ft): 2.0

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-COMP-COMP	0-1.1 - black native silts, some veg, org odor	
1-2'		1.1-2.0 med brn silts, some veg + shells	
3-4'		2.0 - bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 gal bucket	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra Ck Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers

87+88

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A. Clark
Sub: TG18 | WO: | Crew: M. Ke A
Date: 8/3/17 | Time: 1002 | Vessel: coring crane

Coordinates: Easting | Northing

Sampling Station: SDT-08-078

Weather/Conditions: sunny, 73°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 5.0
Core Liner tube length (ft): 4'
Core Penetration (ft): 2' | Core Recovery (ft): 2'
Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-comp copy	0-1.1 - black marine silts, org odor, some shells	
1-2'		1.1-2.0 med brown silts, some org + shells	
3-4'			
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	—	-	—	3gal bucket	Sampler Type: VC to 8ft
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 87+88

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 36151760G4 | Logger: A Clark

Sub: TG-B | WO: — | Crew: Mike A

Date: 6/3/17 | Time: 1004 | Vessel: coring engine

Coordinates: Easting | Northing

Sampling Station: SDT-06-079

Weather/Conditions: sunny 73°F | Traffic: none | Water Temp:

Measured Water Depth (ft): 5.11

Core Liner tube length (ft): 5

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-06-comp-004	0-0.8 - black marine silts, some roots org odor	
1-2'			
2-3'		0.8-2.0 - mud bank silts, some shells, few roots	
3-4'			
4-5'		2.0 - bottom of core	
5-6'			
6-7'			
7-8'			

Number of containers:	—	—	—	5 5 1	Equipment
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Sampler Type: Vibra-core; Capacity

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	(Y) N
Debris Present	Y (N)

Photo Numbers: 89-190

Comments

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | **Project No.:** 3616176064 | **Logger:** A Clark
Sub: TG x B | **WO:** | **Crew:** Mrs. A
Date: 8/3/17 | **Time:** 1205 | **Vessel:** coring coordinator
Coordinates: Easting | Northing
Sampling Station: SDT-08-080
Weather/Conditions: sunny, 74°F | **Traffic:** none | **Water Temp:**
Measured Water Depth (ft): 5.2'
Core Liner tube length (ft): 5'
Core Penetration (ft): 2' | **Core Recovery (ft):** 2.17
Calculated Percent Recovery: ~~100%~~ 85%
Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	SDT-08-080-0002	0-0.7' - black mine silts w/ some ves + few shells	
1-2'		0.7-2.0' mud brn silt w/ some shells + ves	
3-4'		2.0 bottom of core	
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:		1L	—	—	Sampler Type: Vibra
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: —

Live Organisms present	Y (N)
Oil-Like Present	Y (N)
Odor Present	Y (N)
Debris Present	Y (N)

Photo Numbers
91 + 92

Comments
SPLP PCBs + metals
SDT-08-080-0002 @ 1015

amec foster wheeler

Stratford Army Engine Plant - Feasibility Study

SEDIMENT CORE and DISCRETE SAMPLE LOG

Site: Stratford Army Engine Plant | Project No.: 3616176064 | Logger: A Clark
Sub: TG+B | WO: - | Crew: Mike A
Date: 6/3/17 | Time: 1020 | Vessel: Barry Graham

Coordinates: Easting | Northing

Sampling Station: SDT-08-081

Weather/Conditions: sunny, 74°F | Traffic: light | Water Temp:

Measured Water Depth (ft): 5.0

Core Liner tube length (ft): 5

Core Penetration (ft): 2' | Core Recovery (ft): 2'

Calculated Percent Recovery: 100%

Coring Notes:

Interval	Sample ID	Description (Odor, Color, Type, etc.)	Notes
0-1'	*	0-0.5: black mud, some silt w/ shells & wood.	
1-2'		Obj. odor	
2-3'		0.5-2.0: mud brown silty w/ fine sand, some wood.	
3-4'		2.0: bottom of core.	
4-5'			
5-6'			
6-7'			
7-8'			

					Equipment
Number of containers:	-	4	-	Eggert bucket	Sampler Type: Vibracore
Type of container:	40 ml VOA	Amber Jar	Plastic bag	other	Capacity: -

Live Organisms present	Y	N
Oil-Like Present	Y	N
Odor Present	Y	N
Debris Present	Y	N

Photo Numbers

93+94

Comments

* SDT-08-081-0001 for Sp Grav, TOC + Grad @1020
SDT-08-081-0102 for Spec Grav, TOC + Grad @1025

Step Test – 20 Gallons Collected for Bacteriological Analysis

SURFACE WATER SAMPLING RECORD

amec foster wheeler

Amec Foster Wheeler
511 Congress Street
Suite 200
Portland, Maine 04101

PROJECT NAME: Stratford Army Engine Plant	SAMPLE LOCATION: Area 6	DATE: 8/2/17
PROJECT NUMBER: 3616176064	START TIME: 1650	END TIME: 1720
SAMPLE ID: SW-06-001-0001	SAMPLE TIME: 1700	PAGE: 1 of 1
Lat:	Long:	

SURFACE WATER DATA

WATER DEPTH AT SAMPLE LOCATION: 3 FT.

DEPTH OF SAMPLE BELOW WATER SURFACE: 2.0 FT.

SAMPLING FLOW RATE: 1gpm ML/MIN

TIDE DIRECTION: ☐ INCOMING ☐ OUTGOING

FIELD SPLIT: ☐ YES ☐ NO

TOTAL PURGE VOLUME: 10 gallons wet

WATER QUALITY PARAMETERS

TEMPERATURE	23.77	°C
SPEC. COND	28.35	mS/cm
PH	3.47	pH Units
ORP	73.6	mV
TURBIDITY	39.3	NTUs
DO	6.32	mg/L
SALINITY	17.39	ppt

☐ FIELD DUPLICATE COLLECTED
DUP. ID
TIME

☐ MATRIX SPIKE COLLECTED
MS ID
TIME

☐ MATRIX SPIKE DUPLICATE COLLECTED
MSD ID
TIME

EQUIPMENT USED

☐ BEAKER
☐ BOTTLE
☐ PACS BOMB
☒ PUMP: Peristaltic Pump (Geopunp)
☐ TUBING:

☐ 3 ft of lab preclaimed 1/4" Teflon Tubing
☐ 3 ft of lab preclaimed MasterFlex Tubing

TYPE OF SURFACE WATER

☐ STREAM
☐ RIVER
☐ LAKE
☐ POND
☐ SEEP
☒ TIDAL FLATS

DECON FLUIDS USED

☐ ALCONOX
☒ LIQUINOX
☐ 10% HNO3 SOLUTION
☐ DEIONIZED WATER
☐ POTABLE WATER
☐ NITRIC ACID
☐ HEXANE
☐ ETHYL ALCOHOL
☒ N/A

SAMPLING EQUIPMENT

WATER QUALITY METER MODEL NO. Multi 45 UNIT ID NO. 10
TURBIDITY METER MODEL NO. 2100P UNIT ID NO.

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED
PCBs		4°C	2x 1L G	Y
As, Cr, Pb		HNO3	1x 125mL P	
Hg		HNO3	1x 125mL G	

NOTES/SKETCH

10 subs Collected for Electricle analysis

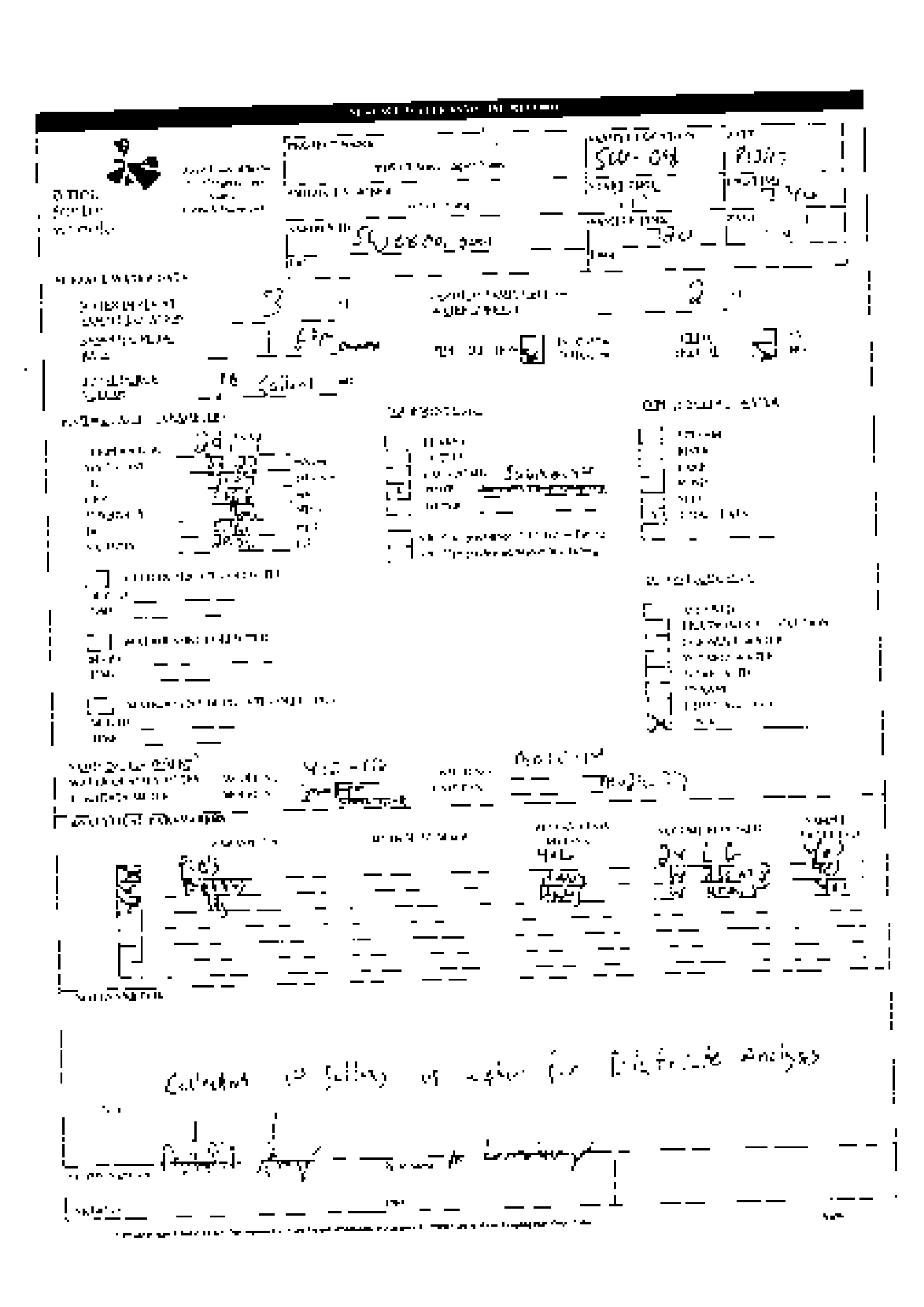
Note:

Sampler Signature: Print Name: Amber Clark

Date:

Checked By:

P:\Projects\3616176064 SAEP FY16-17\Deliverables\2_Work_Plans\SAP\Appendices\Appendix A - FOPs\Surface Water Sampling FOP_Sheet1.xlsx



ATTACHMENT B

Lab Data - Envirosystems, Inc.
(Included in Electronic Submittal)



www.alphalab.com



Lab Number: L1806872

Client: AMEC Foster Wheeler E & I, Inc.

ATTN: Wolfgang Calicchio

Project Name: STRATFORD ARMY ENGINE PLAN

Project Number: 3616176064.08.01

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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50 ug/l Injected on: 02/24/18 15:10 767
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Sample Delivery Group Information

Sample Delivery Group Summary

Alpha Job Number : L1806872

Received : 28-FEB-2018
Reviewer : Isaac Mensah

Account Name : AMEC Foster Wheeler E & I, Inc.
Project Number : F013900990
Project Name : STRATFORD ARMY ENGINE PLANT

Delivery Information

Samples Delivered By : Express Ship
FedEx (771614079708)

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.6	

Condition Information

All samples on COC received? **YES**

Extra samples received? **NO**

Are there any sample container discrepancies? **NO**

Are there any discrepancies between sample labels & COC? **YES**
L1806872-01: SDT-DS-BFT-PC03 vs. SDT-DS-BFT-PC08

Are samples in appropriate containers for requested analysis? **YES**

Are samples properly preserved for requested analysis? **YES**

Are samples within holding time for requested analysis? **YES**

All sampling equipment returned? **NA**

Volatile Organics/VPH

Reagent Water Vials Frozen by Client? **NA**

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2018, 06:34 pm

Login Number: L1806872
Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616176064.08.01
Received: 28FEB18 Due Date: 14MAR18

Sample #	Client ID	Mat	PR	Collected	Container
L1806872-01	SDT-DS-BFT-PC03	3	S0	27FEB18 11:28	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration DPKG-FULL Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-RCP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,DPKG-FULL,PREPP

L1806872-02	SDT-DS-BFT-PC06	3	S0	27FEB18 11:30	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-03	SDT-DS-BFT-PC08	3	S0	27FEB18 11:32	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-04	SDT-DS-BFT-CC03	3	S0	27FEB18 11:34	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2018, 06:34 pm

Login Number: L1806872

Account: AMEC-ME AMEC Foster Wheeler E & I, Inc. Project: 3616176064.08.01

Received: 28FEB18 Due Date: 14MAR18

Sample #	Client ID	Mat	PR	Collected	Container
L1806872-05	SDT-DS-BFT-CC06	3	S0	27FEB18 11:36	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-06	SDT-DS-BFT-CC08	3	S0	27FEB18 11:38	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-07	SDT-DS-GVT-PC02	3	S0	27FEB18 11:40	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-08	SDT-DS-GVT-PC04	3	S0	27FEB18 11:42	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 14 2018, 06:34 pm

Login Number: L1806872

Account: AMEC-ME AMEC Foster Wheeler E & I, Inc.Project: 3616176064.08.01

Received: 28FEB18 Due Date: 14MAR18

Sample #	Client ID	Mat	PR	Collected	Container
L1806872-09	SDT-DS-GVT-PC05	S	0	27FEB18 11:44	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-10	SDT-DS-GVT-CC02	S	0	27FEB18 11:46	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-11	SDT-DS-GVT-CC04	S	0	27FEB18 11:48	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

L1806872-12	SDT-DS-GVT-CC05	S	0	27FEB18 11:50	1-EAmber-A1,2-EPlastic-C.25,1-Glass-A.5,1-Tumble Vessel

PREPP: Metals and PCB Homologs for MF - **** for PCBs use NEW Tumble Vessels, Trace Level PCBs!!! ****
PREPC: Metals Full Narration Package Due Date: 03/14/18

A2-PCBHOMS-SPLP,CT-SPLP-AG-6020,CT-SPLP-AS-6020,CT-SPLP-CD-6020,CT-SPLP-CR-6020,CT-SPLP-CU-6020,CT-SPLP-HG,CT-SPLP-NI-6020,CT-SPLP-PB-6020,CT-SPLP-ZN-6020,CT-TCLP-RCRA8,CT-TCLP-AG,CT-TCLP-AS,CT-TCLP-BA,CT-TCLP-CD,CT-TCLP-CR,CT-TCLP-HG,CT-TCLP-PB,CT-TCLP-SE,PREPC,PREPP

Logged By: Elizabeth Porta

Container Tracking

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-01A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	CUSTODY David Cormier	W10-S3-B CUSTODY	W10-S3-B	CUSTODY David Cormier
L1806872-01A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	CUSTODY Eric Asamoah
L1806872-01A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-01A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-01X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD	CUSTODY Raldi Cabral
L1806872-01X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-01X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIEL	
L1806872-01X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-01X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-01Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD	CUSTODY Raldi Cabral
L1806872-01Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-01Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIEL	
L1806872-01Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nasc
L1806872-01Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-01Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-01Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-01Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-01Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-01Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	F
L1806872-01Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-01Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-02A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	CUSTODY David Cormier	W10-S5-B CUSTODY	W10-S5-B	CUSTODY David Cormier
L1806872-02A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	CUSTODY Eric Asamoah
L1806872-02A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-02A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-02X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-02X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-02X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-02X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-02X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-02Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-02Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-02Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-02Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-02Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-02Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-02Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-02Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-02Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-02Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-02Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-02Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-03A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-03A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-03A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-03A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-03X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-03X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-03X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-03X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-03X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-03Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-03Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-03Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	
L1806872-03Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nas
L1806872-03Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-03Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-03Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-03Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-03Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-03Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-03Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-03Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-04A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-04A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-04A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-04A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-04X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-04X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-04X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	
L1806872-04X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-04X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-04Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-04Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-04Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-04Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-04Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-04Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-04Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-04Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-04Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-04Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-04Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-04Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-05A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	CUSTODY David Cormier	W10-S3-B	CUSTODY	W10-S3-B CUSTODY David Cormier
L1806872-05A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	CUSTODY Eric Asamoah
L1806872-05A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-05A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-05X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-05X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-05X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-05X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-05X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-05Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-05Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-05Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-05Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-05Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-05Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-05Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-05Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-05Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-05Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-05Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-05Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-06A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-06A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-06A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-06A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-06X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-06X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-06X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-06X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-06X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-06Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-06Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-06Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-06Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-06Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-06Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-06Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-06Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-06Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-06Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-06Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1806872-06Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-07A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	CUSTODY David Cormier	W10-S5-B	CUSTODY	W10-S5-B CUSTODY David Cormier
L1806872-07A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	CUSTODY Eric Asamoah
L1806872-07A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-07A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-07X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD	CUSTODY	A2-METALS DEAD CUSTODY Raldi Cabral
L1806872-07X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-07X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-07X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-07X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-07Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD	CUSTODY	A2-METALS DEAD CUSTODY Raldi Cabral
L1806872-07Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-07Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-07Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-07Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-07Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-07Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-07Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-07Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-07Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-07Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-07Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-08A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	CUSTODY David Cormier	W10-S3-B	CUSTODY	W10-S3-B CUSTODY David Cormier
L1806872-08A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	CUSTODY Eric Asamoah
L1806872-08A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-08A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-08X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-08X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-08X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-08X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-08X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-08Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-08Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-08Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-08Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-08Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-08Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-08Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-08Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-08Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-08Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-08Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-08Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-09A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-09A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-09A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-09A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-09X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-09X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-09X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1806872-09X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-09X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-09Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-09Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-09Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-09Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-09Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-09Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-09Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-09Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-09Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-09Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-09Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-09Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-10A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-10A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-10A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-10A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-10X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-10X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-10X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-10X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-10X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-10Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-10Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-10Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIE	
L1806872-10Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nas
L1806872-10Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-10Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-10Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-10Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-10Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-10Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-10Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-10Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-11A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN CUSTODY	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-11A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN CUSTODY	Eric Asamoah
L1806872-11A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-11A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-11X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-11X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-11X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIE	
L1806872-11X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-11X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-11Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-11Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-11Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIE	
L1806872-11Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nas
L1806872-11Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-11Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1806872-11Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-11Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-11Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-11Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	
L1806872-11Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-11Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-12A	Glass-A.5	INTACT	05-MAR-18	CUSTODY	RETURN WALK-IN	David Cormier	W10-S3-B CUSTODY	W10-S3-B CUSTODY	David Cormier
L1806872-12A	Glass-A.5	INTACT	01-MAR-18	ORGPREP	ORGPREP	Eric Asamoah	CUSTODY	RETURN WALK-IN	Eric Asamoah
L1806872-12A	Glass-A.5	INTACT	28-FEB-18		CUSTODY	Caleb Agyepong	ORGPREP	ORGPREP	Caleb Agyepong
L1806872-12A	Glass-A.5	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-12X	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-12X	EPlastic-C.25	INTACT	03-MAR-18	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-12X	EPlastic-C.25	INTACT	03-MAR-18	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER26-TRANSFER_TO_MANSFI	
L1806872-12X	EPlastic-C.25	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER26-TRANSFER_TO_MANSFIELD	COOLER26-TRANSFER_TO_MANSFIELD	Eric Asamoa
L1806872-12X	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-12Y	EPlastic-C.25	INTACT	07-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-METPREP1	Raldi Cabral	A2-METALS DEAD CUSTODY	A2-METALS DEAD CUSTODY	Raldi Cabral
L1806872-12Y	EPlastic-C.25	INTACT	02-MAR-18	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	A2-CUSTODY-METPREP1	A2-CUSTODY-METPREP1	Phillip Renaud
L1806872-12Y	EPlastic-C.25	INTACT	02-MAR-18	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Nascimento	TRANSIT COURIER	COOLER24-TRANSFER_TO_MANSFI	
L1806872-12Y	EPlastic-C.25	INTACT	02-MAR-18		CUSTODY	Tarcisio Nascimento	COOLER24-TRANSFER_TO_MANSFIELD	COOLER24-TRANSFER_TO_MANSFIELD	Tarcisio Na
L1806872-12Y	EPlastic-C.25	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah
L1806872-12Z	EAmber-A1	EMPTY	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-ORGANIC PREP	Brian Anderson	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Brian Anderson
L1806872-12Z	EAmber-A1	INTACT	06-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY-NOAA1	Brian Anderson	A2-ORGANIC PREP	A2-ORGANIC PREP	Brian Anderson
L1806872-12Z	EAmber-A1	INTACT	03-MAR-18	A2-CUSTODY-REFRIDGE	A2-CUSTODY	Bethany Bedard	A2-CUSTODY-NOAA1	A2-CUSTODY-NOAA1	Bethany Bedard
L1806872-12Z	EAmber-A1	INTACT	03-MAR-18	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	A2-CUSTODY	A2-CUSTODY	Phillip Renaud
L1806872-12Z	EAmber-A1	INTACT	03-MAR-18	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah	TRANSIT COURIER	COOLER1-TRANSFER_TO_MANSFIELD	

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1806872-12Z	EAmber-A1	INTACT	02-MAR-18	ORGPREP	CUSTODY	Eric Asamoah	COOLER1-TRANSFER_TO_MANSFIELD	COOLER1-TRANSFER_TO_MANSFIELD	Eric Asamoah
L1806872-12Z	EAmber-A1	INTACT	28-FEB-18	LOGIN	LOGIN	Isaac Mensah	CUSTODY	CUSTODY	Isaac Mensah

Chain of Custody

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 02/26/19 | ALPHA Job #: L1906872

Client Information

Client: Wood
Address: 271 Mill Rd, 3rd Floor
Chelmsford, MA 01824
Phone: 978-392-5319
Fax:
Email: tony.delano@woodplc.com
☐ Those samples have been Previously analyzed by Alpha

Project Information

Project Name: SAEP Sediment Study
Project Location:
Project #:
Project Manager: Tony Delano
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)
Due Date: Email Time:

Other Project Specific Requirements/Comments/Detection Limits:

Report Information — Data Deliverables: ☐ FAX ☐ EMAIL ☐ ADEx ☐ Add'l Deliverables

Billing Information: ☐ Same as Client info | PO #:

Regulatory Requirements/Report Limits

State/Fed Program: | Criteria:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	SPLP PCBs	SPLP 6010C metals (Pb,Cu,Ni)	TCLP metals (Pb,Cu,Ni)	TOTAL # BOTTLES
06872-01	SD1-DS-BF1-20DS	2/21/19	1128	S	TMD	☒	☒	☒	
02	SD1-DS-BF1-RD4		1130			☒	☒	☒	
03	SD1-DS-BF1-RD08		1132			☒	☒	☒	
04	SD1-DS-BF1-RD05		1134			☒	☒	☒	
05	SD1-DS-BF1-RD06		1136			☒	☒	☒	
06	SD1-DS-BF1-RD09		1138			☒	☒	☒	
07	SD1-DS-BF1-RD02		1140			☒	☒	☒	
08	SD1-DS-BF1-RD04		1142			☒	☒	☒	
09	SD1-DS-BF1-RD05		1144			☒	☒	☒	
10	SD1-DS-BF1-RD02	↓	1146	↓	↓	☒	☒	☒	

Container Type	A	A	A											
Preservative	A	A	A											

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

Relinquished By	Date/Time	Received By	Date/Time
Jacqueline Brindley	2/27/19 0905	[signature] AM	2/28/19 0957

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL

Westborough, MA — TEL: 508-898-9220 — FAX: 508-898-9193
Mansfield, MA — TEL: 508-822-9300 — FAX: 508-822-3288

Date Rec'd in Lab: 02/28/18

ALPHA Job #: L1806872

Project Information

Project Name: SAEP Sediment Study

Project Location:

Project #:

Project Manager: Tony Delano

ALPHA Quote #:

Client Information

Client: Wood

Address: 271 Mill Rd, 3rd Floor

Chelmsford, MA 01824

Phone: 978-392-5319

Fax:

Email: tony.delano@woodplc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: *contract* Time:

Report Information Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program: Criteria:

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	SPLP PCBs	SPLP site metals plus Hg	TCLP metals (RCRA 8)
06872-11	SDT-DS-BAT-0004	2/27/18	1148	S	TNB	☒	☒	☒
12	SDT-DS-BAT-0005	↓	1150	S	TNB	☒	☒	☒

	SPLP PCBs	SPLP site metals plus Hg	TCLP metals (RCRA 8)
Container Type	A	A	A
Preservative	A	A	A

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

Relinquished By	Date/Time	Received By	Date/Time
Jennifer Bradley	2/27/18 1805	[signature] AAL	2/28 1214

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

ORIGIN ID:ORFA (404) 518-3172
TOMMY JORDEN
KEMRON ENVIRONMENTAL SERVICES
1359-A ELLSWORTH INDUSTRIAL BLVD

ATLANTA, GA 30318
UNITED STATES US

SHIP DATE: 27FEB18
ACTWGT: 15.00 LB
CAD: 5231866/INET3060
DIMS: 16x14x18 IN

BILL SENDER

TO SAMPLE RECEIVING
ALPHA ANALYTICAL
8 WALKUP DRIVE

WESTBOROUGH MA 01581
(508) 898-9220

REF: ERAS1-GW2-DHDEA

TRK# 7716 1407 9708

WED - 28 FEB 10:30A
PRIORITY OVERNIGHT

01 BBFA

01581
MA-US BOS

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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2/27/2018
https://www.fedex.com/shipping/shipAdvancedInstallPrintDisplay.do

Metals

ICP Analysis

Sequence Logs

Trace5
3/10/18

REVIEWED
By drm at 9:31 am, Mar 14, 2018

3	3/10/2018	4:53:44AM	Std 0	AB
4	3/10/2018	4:58:25AM	ICAL	AB
5	3/10/2018	5:02:50AM	Std Al Fe K Na Si	AB
6	3/10/2018	5:07:29AM	Std Ca Mg Si	AB
7	3/10/2018	5:12:08AM	ICV	AB
8	3/10/2018	5:16:37AM	ICB	AB
9	3/10/2018	5:33:10AM	ICV	AB
10	3/10/2018	5:37:41AM	ICB	AB
11	3/10/2018	5:42:22AM	0.005	AB
12	3/10/2018	5:47:02AM	0.01	AB
13	3/10/2018	5:51:40AM	0.05	AB
14	3/10/2018	5:56:14AM	IPC	AB
15	3/10/2018	6:00:52AM	ICSA	AB
16	3/10/2018	6:05:39AM	ICSAB	AB
17	3/10/2018	6:10:06AM	CRI	AB
18	3/10/2018	6:14:42AM	CCV	AB
19	3/10/2018	6:19:11AM	CCB	AB
20	3/10/2018	6:45:19AM	WG1095678-1,T	AB
21	3/10/2018	6:50:01AM	WG1095678-2,T	AB
22	3/10/2018	6:54:25AM	WG1095678-3,T	AB
23	3/10/2018	6:58:50AM	L1807747-01,T	AB
24	3/10/2018	7:03:26AM	L1807747-02,T	AB
25	3/10/2018	7:07:55AM	L1807747-03,T	AB
26	3/10/2018	7:12:26AM	L1807747-04,T	AB
27	3/10/2018	7:17:06AM	L1807747-05,T	AB
28	3/10/2018	7:21:44AM	L1807747-06,T	AB
29	3/10/2018	7:26:21AM	L1807747-07,T	AB
30	3/10/2018	7:30:57AM	CCV	AB
31	3/10/2018	7:35:28AM	CCB	AB
32	3/10/2018	7:40:10AM	L1807747-08,T	AB
33	3/10/2018	7:44:44AM	L1807747-09,T	AB
34	3/10/2018	7:49:13AM	L1807747-10,T	AB
35	3/10/2018	7:53:50AM	L1807747-11,T	AB
36	3/10/2018	7:58:23AM	L1807747-12,T	AB
37	3/10/2018	8:02:53AM	L1807747-13,T	AB
38	3/10/2018	8:07:22AM	L1807747-14,T	AB
39	3/10/2018	8:11:51AM	L1807747-15,T	AB
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41	3/10/2018	8:20:53AM	WG1094974-5,C	AB
42	3/10/2018	8:25:22AM	CCV	AB
43	3/10/2018	8:29:51AM	CCB	AB
44	3/10/2018	8:34:34AM	L1807747-16,T	AB
45	3/10/2018	8:39:13AM	L1807747-17,T	AB
46	3/10/2018	8:44:05AM	L1807747-18,T	AB
47	3/10/2018	8:48:42AM	L1807747-19,T	AB
48	3/10/2018	8:53:10AM	XXL1807867-01,T	AB
49	3/10/2018	8:57:48AM	XXL1807867-02,T	AB
50	3/10/2018	9:02:24AM	XXL1807655-01,T	AB
51	3/10/2018	9:07:05AM	WG1094000-1,C	AB
52	3/10/2018	9:11:45AM	WG1094000-2,C	AB
53	3/10/2018	9:16:18AM	L1806872-01,C	AB
54	3/10/2018	9:21:04AM	CCV	AB
55	3/10/2018	9:25:33AM	CCB	AB
56	3/10/2018	9:43:39AM	Std 0	AB
57	3/10/2018	9:52:34AM	ICAL	AB
58	3/10/2018	9:56:59AM	Std Al Fe K Na Si	AB
59	3/10/2018	10:01:38AM	Std Ca Mg Si	AB
60	3/10/2018	10:06:17AM	ICV	AB
61	3/10/2018	10:10:47AM	ICB	AB
62	3/10/2018	10:27:36AM	ICV	AB
63	3/10/2018	10:32:06AM	ICB	AB
64	3/10/2018	10:36:48AM	WG1095834-1,T	AB
65	3/10/2018	10:41:29AM	WG1095834-2,T	AB
66	3/10/2018	10:45:56AM	L1807867-01,T	AB
67	3/10/2018	10:50:32AM	WG1095834-3,T	AB
68	3/10/2018	10:54:59AM	WG1095834-4,T	AB
69	3/10/2018	10:59:35AM	WG1095834-5,T	AB
70	3/10/2018	11:04:03AM	L1807869-01,T	AB
71	3/10/2018	11:08:42AM	WG1095834-7,T	AB
72	3/10/2018	11:13:10AM	WG1095834-6,T,5	AB
73	3/10/2018	11:17:49AM	WG1095834-10,T,5	AB
74	3/10/2018	11:22:27AM	CCV	AB
75	3/10/2018	11:26:57AM	CCB	AB
76	3/10/2018	11:31:40AM	WG1095834-8,T	AB
77	3/10/2018	11:36:17AM	WG1095834-9,T	AB
78	3/10/2018	11:40:44AM	L1807075-01,T	AB
79	3/10/2018	11:45:29AM	L1807580-05,T	AB
80	3/10/2018	11:50:06AM	L1807636-02,T	AB
81	3/10/2018	11:54:46AM	L1807636-04,T	AB

82	3/10/2018	11:59:29AM	L1807655-01,T	AB
83	3/10/2018	12:04:16PM	L1807762-01,T	AB
84	3/10/2018	12:08:55PM	L1807762-02,T	AB
85	3/10/2018	12:13:35PM	L1807806-05,T	AB
86	3/10/2018	12:18:14PM	CCV	AB
87	3/10/2018	12:22:43PM	CCB	AB
88	3/10/2018	12:27:25PM	L1807825-01,T	AB
89	3/10/2018	12:32:04PM	L1807825-02,T	AB
90	3/10/2018	12:36:42PM	L1807842-01,T	AB
91	3/10/2018	12:41:20PM	L1807867-02,T	AB
92	3/10/2018	12:45:55PM	L1807869-02,T	AB
93	3/10/2018	12:50:33PM	L1807869-03,T	AB
94	3/10/2018	12:55:11PM	L1807869-04,T	AB
95	3/10/2018	12:59:50PM	L1807869-05,T	AB
96	3/10/2018	1:04:29PM	L1807881-01,T	AB
97	3/10/2018	1:09:16PM	L1807902-03,T	AB
98	3/10/2018	1:13:54PM	CCV	AB
99	3/10/2018	1:18:24PM	CCB	AB
100	3/10/2018	1:23:05PM	L1806872-02,C	AB
101	3/10/2018	1:27:51PM	L1806872-03,C	AB
102	3/10/2018	1:32:37PM	L1806872-04,C	AB
103	3/10/2018	1:37:23PM	L1806872-05,C	AB
104	3/10/2018	1:42:11PM	L1806872-06,C	AB
105	3/10/2018	1:46:58PM	L1806872-07,C	AB
106	3/10/2018	1:51:46PM	L1806872-08,C	AB
107	3/10/2018	1:56:23PM	L1806872-09,C	AB
108	3/10/2018	2:01:08PM	L1806872-10,C	AB
109	3/10/2018	2:05:52PM	L1806872-11,C	AB
110	3/10/2018	2:10:38PM	CCV	AB
111	3/10/2018	2:15:08PM	CCB	AB
112	3/10/2018	2:19:50PM	L1806872-12,C	AB
113	3/10/2018	2:24:35PM	0.005	AB
114	3/10/2018	2:29:15PM	0.01	AB
115	3/10/2018	2:33:54PM	0.05	AB
116	3/10/2018	2:38:29PM	ICSA	AB
117	3/10/2018	2:43:16PM	ICSAB	AB
118	3/10/2018	2:47:42PM	CRI	AB
119	3/10/2018	2:52:18PM	CCV	AB
120	3/10/2018	2:56:47PM	CCB	AB

Sample Raw Data

Sample Name: Std 0 Acquired: 3/10/2018 4:53:44 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

REVIEWED
By drm at 9:32 am, Mar 14, 2018

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**.0004**	**-.0003**	**.0009**	**-.0021**	**.0041**	**.0009**	**-.0002**	**.0013**	**.0005**
Stddev	.0002	.0015	.0001	.0003	.0011	.0003	.0002	.0000	.0004	.0001
%RSD	309.7	353.6	51.38	35.08	50.18	8.142	24.70	22.12	32.73	27.53
#1	.0001	.0017	-.0003	.0007	-.0033	.0044	.0010	-.0002	.0018	.0006
#2	-.0002	.0007	-.0001	.0013	-.0018	.0038	.0007	-.0001	.0012	.0003
#3	.0003	-.0012	-.0004	.0008	-.0013	.0040	.0011	-.0002	.0010	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0002**	**.0040**	**-.0000**	**-.0038**	**.0011**	**-.0001**	**.0001**	**-.0122**	**.0003**	**-.0021**
Stddev	.0001	.0001	.0002	.0016	.0006	.0004	.0001	.0023	.0001	.0004
%RSD	26.39	2.226	475.1	40.61	53.77	432.8	177.0	18.65	21.86	18.17
#1	-.0002	.0039	.0002	-.0021	.0010	.0002	.0002	-.0113	.0003	-.0019
#2	-.0002	.0041	-.0001	-.0043	.0006	-.0005	.0001	-.0106	.0003	-.0019
#3	-.0003	.0039	-.0002	-.0051	.0018	-.0000	-.0001	-.0148	.0004	-.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0007**	**-.0001**	**.0025**	**.0000**	**-.0094**	**-.0006**	**-.0003**	**-.0001**	**.0005**
Stddev	.0002	.0002	.0001	.0001	.0013	.0001	.0001	.0001	.0001
%RSD	31.10	205.7	3.210	1205.	13.43	9.967	34.16	211.7	25.79
#1	-.0009	.0001	.0026	.0000	-.0080	-.0007	-.0002	.0001	.0007
#2	-.0004	-.0001	.0026	.0001	-.0104	-.0006	-.0003	-.0001	.0005
#3	-.0007	-.0003	.0024	-.0001	-.0098	-.0006	-.0005	-.0001	.0004

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3894.2**	**64339.**	**5732.5**
Stddev	11.1	251.	25.8
%RSD	.28464	.39084	.44989
#1	3906.9	64100.	5758.2
#2	3888.2	64317.	5706.6
#3	3887.3	64601.	5732.7

Sample Name: ICAL Acquired: 3/10/2018 4:58:25 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3046**	**.1333**	**.0729**	**.4306**	**7.537**	**3.559**	**.1945**	**.0682**	**3.741**	**1.229**
Stddev	.0005	.0007	.0004	.0010	.011	.006	.0003	.0002	.007	.002
%RSD	.1784	.5152	.5979	.2312	.1452	.1757	.1663	.2878	.1916	.1812
#1	.3052	.1330	.0724	.4299	7.549	3.564	.1944	.0684	3.735	1.227
#2	.3045	.1341	.0731	.4302	7.529	3.552	.1949	.0681	3.740	1.229
#3	.3042	.1328	.0732	.4317	7.531	3.560	.1943	.0680	3.749	1.231

Elem	Cr2677	Cu3247	Fe2599	Mg2790	Mn2576R	Mo2020	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1901**	**.4730**	**.0877**	**.2587**	**.5400**	**.5931**	**.8203**	**.2900**	**.0938**	**.0689**
Stddev	.0005	.0012	.0004	.0025	.0011	.0026	.0007	.0014	.0008	.0004
%RSD	.2397	.2636	.4087	.9825	.2036	.4392	.0848	.4709	.8794	.5486
#1	.1901	.4744	.0876	.2607	.5411	.5905	.8196	.2893	.0929	.0686
#2	.1905	.4723	.0881	.2596	.5389	.5933	.8209	.2892	.0940	.0688
#3	.1896	.4723	.0874	.2559	.5401	.5957	.8205	.2916	.0946	.0694

Elem	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1379**	**.1484**	**6.340**	**.4336**	**.0930**	**.3382**	**1.401**
Stddev	.0005	.0004	.007	.0010	.0004	.0008	.001
%RSD	.3837	.2535	.1122	.2405	.4681	.2351	.0759
#1	.1383	.1483	6.348	.4347	.0925	.3391	1.400
#2	.1381	.1481	6.334	.4334	.0930	.3379	1.402
#3	.1373	.1489	6.337	.4326	.0934	.3376	1.402

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3966.4**	**65385.**	**5838.8**
Stddev	8.5	222.	51.1
%RSD	.21420	.33950	.87484
#1	3976.1	65398.	5790.9
#2	3962.8	65157.	5832.9
#3	3960.3	65600.	5892.6

Sample Name: Std Al Fe K Na Si Acquired: 3/10/2018 5:02:50 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Al3961	Fe2599	K_7664	Na5895	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.920**	**2.056**	**1.297**	**3.337**	**1.839**
Stddev	.018	.010	.008	.024	.007
%RSD	.6277	.4861	.6364	.7259	.3786
#1	2.912	2.052	1.299	3.337	1.833
#2	2.941	2.068	1.304	3.361	1.839
#3	2.907	2.049	1.288	3.312	1.847

Int. Std.	Y_2243	Y_3710
Units	Cts/S	Cts/S
Avg	**4078.9**	**6058.5**
Stddev	8.7	40.8
%RSD	.21260	.67312
#1	4086.1	6065.7
#2	4081.5	6014.6
#3	4069.3	6095.2

Sample Name: Std Ca Mg Si Acquired: 3/10/2018 5:07:29 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ca3158	Mg2790	Si2124
Units	Cts/S	Cts/S	Cts/S
Avg	**.6426**	**2.520**	**.9300**
Stddev	.0027	.008	.0018
%RSD	.4175	.3192	.1917
#1	.6398	2.512	.9282
#2	.6452	2.528	.9302
#3	.6427	2.519	.9317

Int. Std.	Y_2243	Y_3710
Units	Cts/S	Cts/S
Avg	**4123.6**	**6071.8**
Stddev	6.5	25.2
%RSD	.15691	.41520
#1	4120.8	6072.7
#2	4119.0	6046.1
#3	4131.0	6096.5

Sample Name: ICV Acquired: 3/10/2018 5:12:08 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5022**	F **.5710**	**.5176**	**.5039**	**.5152**	**.5007**	**.4867**	**.5196**	**.5037**	**.5054**
Stddev	.0023	.0048	.0027	.0014	.0020	.0013	.0029	.0064	.0016	.0016
%RSD	.4488	.8356	.5166	.2833	.3887	.2524	.5899	1.232	.3166	.3183
#1	.5028	.5726	.5175	.5023	.5130	.4994	.4861	.5222	.5033	.5051
#2	.4996	.5747	.5150	.5041	.5168	.5019	.4841	.5244	.5022	.5040
#3	.5040	.5656	.5204	.5051	.5159	.5008	.4898	.5124	.5054	.5072
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5524								
Low Limit		.4476								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5079**	**.5023**	W **.5407**	W **5.353**	**.5158**	**.5104**	**.5019**	W **10.56**	**.5014**	**.5160**
Stddev	.0002	.0006	.0038	.013	.0024	.0003	.0016	.03	.0018	.0028
%RSD	.0388	.1235	.7120	.2491	.4608	.0536	.3161	.2695	.3514	.5423
#1	.5081	.5016	.5376	5.338	.5133	.5101	.5014	10.53	.5003	.5159
#2	.5079	.5028	.5450	5.359	.5181	.5106	.5007	10.59	.5004	.5133
#3	.5077	.5024	.5395	5.363	.5159	.5104	.5037	10.56	.5034	.5189
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.5274	5.274				10.55		
Low Limit			.4726	4.726				9.452		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5122**	**.4955**	**5.326**	**.5065**	**.4918**	**.5013**	**.4963**	**.5200**	**.4945**
Stddev	.0010	.0027	.022	.0003	.0007	.0002	.0037	.0010	.0008
%RSD	.1895	.5400	.4090	.0662	.1507	.0323	.7393	.1862	.1577
#1	.5131	.4986	5.310	.5065	.4909	.5011	.4936	.5201	.4943
#2	.5122	.4941	5.318	.5062	.4921	.5014	.4948	.5190	.4939
#3	.5112	.4939	5.351	.5069	.4923	.5014	.5005	.5210	.4954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3910.2**	**64685.**	**5810.6**
Stddev	7.2	228.	8.8
%RSD	.18505	.35191	.15148
#1	3909.1	64451.	5819.2
#2	3917.9	64698.	5801.6
#3	3903.5	64905.	5810.9

Sample Name: ICB Acquired: 3/10/2018 5:16:37 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0015**	**.0017**	**.0009**	**.0001**	**-.0001**	**.0013**	**-.0055**	**.0002**	**.0002**
Stddev	.0003	.0044	.0018	.0006	.0001	.0001	.0004	.0031	.0001	.0001
%RSD	108.4	296.7	108.1	70.74	64.39	115.9	32.61	56.13	27.50	44.58
#1	-.0000	.0042	.0028	.0015	.0001	-.0001	.0017	-.0089	.0002	.0002
#2	.0005	.0038	.0027	.0009	.0002	.0000	.0012	-.0046	.0002	.0004
#3	.0003	-.0036	-.0004	.0003	.0001	-.0002	.0009	-.0030	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0007**	**.0058**	**.0239**	**-.0001**	**.0001**	**.0009**	**.0105**	**.0000**	**-.0005**
Stddev	.0003	.0002	.0033	.0273	.0007	.0004	.0002	.0051	.0003	.0010
%RSD	60.69	23.28	55.69	113.9	625.5	283.9	19.38	49.02	656.1	199.1
#1	.0003	-.0006	.0045	.0543	.0004	.0006	.0010	.0163	.0004	.0004
#2	.0009	-.0009	.0096	.0017	.0002	-.0001	.0009	.0070	-.0000	-.0004
#3	.0005	-.0006	.0035	.0158	-.0010	-.0000	.0007	.0080	-.0002	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0041**	**.0028**	**.0015**	**.0001**	**.0003**	**-.0012**	**.0002**	**.0002**
Stddev	.0015	.0036	.0007	.0009	.0003	.0001	.0003	.0002	.0000
%RSD	199.0	88.12	24.07	59.20	253.6	44.53	25.03	128.4	18.57
#1	.0017	.0035	.0036	.0025	-.0002	.0004	-.0013	.0000	.0002
#2	-.0010	.0008	.0025	.0015	.0003	.0003	-.0008	.0004	.0002
#3	.0015	.0079	.0024	.0006	.0002	.0001	-.0013	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3961.5**	**65492.**	**5887.8**
Stddev	12.2	546.	63.0
%RSD	.30870	.83349	1.0693
#1	3970.1	65907.	5817.8
#2	3967.1	64873.	5939.7
#3	3947.5	65695.	5905.9

Sample Name: ICV Acquired: 3/10/2018 5:33:10 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .5278	F .5833	.5191	.4969	W .5277	.5150	.4762	.5133	.5071	.4972
Stddev	.0015	.0082	.0026	.0015	.0009	.0014	.0024	.0116	.0020	.0021
%RSD	.2883	1.413	.4987	.2939	.1659	.2653	.4959	2.265	.3899	.4137
#1	.5270	.5754	.5183	.4956	.5270	.5141	.4739	.5116	.5054	.4954
#2	.5269	.5826	.5169	.4966	.5287	.5166	.4761	.5026	.5067	.4967
#3	.5296	.5919	.5219	.4985	.5274	.5144	.4786	.5257	.5093	.4995
Check ?	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit	.5274	.5524			.5274					
Low Limit	.4726	.4476			.4726					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5050	.4911	W .5476	F 5.761	W .5451	W .5381	.5013	F 11.58	.5008	.5145
Stddev	.0009	.0015	.0023	.009	.0037	.0008	.0015	.06	.0026	.0012
%RSD	.1723	.2959	.4140	.1619	.6754	.1497	.3051	.4755	.5186	.2364
#1	.5041	.4928	.5498	5.754	.5428	.5380	.4996	11.53	.4980	.5150
#2	.5058	.4901	.5479	5.759	.5431	.5389	.5016	11.64	.5012	.5131
#3	.5049	.4905	.5452	5.772	.5493	.5373	.5027	11.56	.5031	.5153
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.5274	5.524	.5274	.5274		11.05		
Low Limit			.4726	4.476	.4726	.4726		8.952		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5124	.4846	5.283	.5084	.4900	.5022	.4929	W .5328	.4895
Stddev	.0042	.0031	.022	.0042	.0008	.0005	.0018	.0012	.0016
%RSD	.8215	.6385	.4115	.8222	.1630	.1065	.3632	.2307	.3327
#1	.5105	.4821	5.271	.5052	.4891	.5028	.4909	.5320	.4878
#2	.5095	.4837	5.270	.5068	.4906	.5021	.4942	.5321	.4897
#3	.5172	.4881	5.308	.5131	.4902	.5017	.4938	.5342	.4910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.5274	
Low Limit								.4726	

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	3986.9	64174.	5653.8
Stddev	10.4	137.	57.1
%RSD	.26016	.21349	1.0095
#1	3997.5	64313.	5719.7
#2	3986.6	64170.	5623.6
#3	3976.7	64039.	5618.3

Sample Name: ICB Acquired: 3/10/2018 5:37:41 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**-.0003**	**.0009**	**.0005**	**.0004**	**.0003**	**-.0007**	**.0060**	**.0005**	**.0005**
Stddev	.0005	.0024	.0024	.0006	.0001	.0001	.0010	.0036	.0001	.0001
%RSD	108.2	875.7	253.7	101.6	22.24	35.64	136.7	59.69	12.71	19.64
#1	-.0001	-.0029	.0029	-.0001	.0005	.0003	-.0019	.0084	.0006	.0006
#2	.0010	.0019	-.0017	.0007	.0005	.0004	.0000	.0077	.0005	.0004
#3	.0006	.0001	.0017	.0010	.0003	.0002	-.0004	.0019	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0001**	**.0048**	**.0677**	**.0007**	**.0002**	**.0009**	**.0162**	**.0005**	**-.0012**
Stddev	.0002	.0001	.0015	.0704	.0020	.0005	.0002	.0085	.0003	.0008
%RSD	30.30	69.85	30.97	104.0	310.8	321.8	25.50	52.40	70.42	68.59
#1	.0004	.0003	.0031	.0636	.0030	.0004	.0012	.0230	.0001	-.0015
#2	.0005	.0001	.0059	-.0006	-.0003	-.0004	.0008	.0067	.0007	-.0003
#3	.0007	.0001	.0054	.1400	-.0007	.0005	.0008	.0190	.0006	-.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0003**	**.0059**	**.0013**	**.0005**	**.0007**	**-.0006**	**.0005**	**.0003**
Stddev	.0024	.0011	.0013	.0002	.0002	.0001	.0006	.0002	.0002
%RSD	1507.	425.8	21.46	15.26	32.84	21.17	98.57	34.51	61.15
#1	.0010	-.0014	.0073	.0015	.0005	.0007	.0000	.0008	.0004
#2	.0015	.0006	.0049	.0013	.0007	.0008	-.0006	.0004	.0001
#3	-.0030	.0000	.0055	.0011	.0004	.0005	-.0011	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4001.3**	**64323.**	**5602.8**
Stddev	14.8	108.	24.2
%RSD	.37069	.16852	.43276
#1	4009.7	64325.	5629.4
#2	4009.9	64213.	5597.1
#3	3984.1	64430.	5581.9

Sample Name: 0.005 Acquired: 3/10/2018 5:42:22 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049**	**-.0008**	W **.0039**	**.0046**	**.0052**	**.0050**	**.0036**	**-.0009**	**.0051**	**.0053**
Stddev	.0005	.0094	.0022	.0003	.0002	.0001	.0005	.0038	.0000	.0001
%RSD	9.318	1182.	56.25	7.073	3.880	1.064	12.61	443.6	.6924	2.003
#1	.0047	-.0116	.0064	.0046	.0052	.0050	.0038	-.0051	.0051	.0052
#2	.0045	.0042	.0029	.0042	.0054	.0051	.0031	.0025	.0051	.0054
#3	.0054	.0050	.0024	.0049	.0050	.0050	.0039	-.0000	.0052	.0053
Check ?	Chk Pass	None	Chk Warn	None	None	Chk Pass	None	None	Chk Pass	None
High Limit			.0060							
Low Limit			.0040							

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**.0048**	**.0050**	**.1788**	**.0037**	**.0047**	**.0052**	**.0103**	**.0054**	**.0046**
Stddev	.0005	.0004	.0010	.0268	.0015	.0001	.0001	.0215	.0002	.0009
%RSD	10.92	7.685	19.76	15.01	41.21	2.763	2.679	207.4	3.278	20.01
#1	.0046	.0051	.0041	.1484	.0026	.0048	.0051	.0350	.0053	.0037
#2	.0042	.0044	.0060	.1992	.0054	.0046	.0050	-.0040	.0053	.0047
#3	.0052	.0048	.0050	.1888	.0031	.0046	.0053	.0001	.0056	.0055
Check ?	None	None	None	None	None	None	None	None	None	None
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.0029**	**.0015**	**.0044**	**.0049**	**.0047**	**.0057**	**.0052**	**.0051**
Stddev	.0011	.0031	.0009	.0011	.0002	.0000	.0006	.0004	.0001
%RSD	32.76	107.5	59.55	26.12	3.247	1.048	9.689	7.353	2.405
#1	.0045	.0018	.0006	.0044	.0048	.0047	.0059	.0048	.0050
#2	.0028	.0005	.0024	.0032	.0049	.0047	.0061	.0056	.0052
#3	.0026	.0063	.0016	.0055	.0051	.0048	.0051	.0052	.0050
Check ?	None	None	None	None	None	None	None	None	None
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4045.9**	**64538.**	**5651.7**
Stddev	4.9	194.	39.1
%RSD	.12123	.30010	.69136
#1	4051.5	64330.	5606.7
#2	4043.0	64568.	5676.3
#3	4043.1	64714.	5672.2

Sample Name: 0.01 Acquired: 3/10/2018 5:47:02 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0110**	**.0157**	**.0095**	**.0099**	**.0107**	**.0104**	**.0102**	**.0115**	**.0104**	**.0103**
Stddev	.0007	.0075	.0023	.0002	.0002	.0002	.0010	.0074	.0000	.0002
%RSD	6.823	47.50	24.28	2.467	1.601	2.153	9.838	64.82	.3661	1.651
#1	.0102	.0073	.0090	.0098	.0108	.0103	.0113	.0047	.0104	.0104
#2	.0117	.0216	.0075	.0102	.0108	.0107	.0098	.0102	.0104	.0104
#3	.0111	.0182	.0121	.0098	.0105	.0103	.0094	.0195	.0104	.0101
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass
Value										
Range										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**.0104**	**.0182**	**.2163**	**.0084**	**.0108**	**.0099**	**.0038**	**.0106**	**.0094**
Stddev	.0004	.0002	.0044	.0045	.0013	.0008	.0003	.0094	.0006	.0006
%RSD	3.458	1.800	24.30	2.069	15.09	7.020	2.776	249.6	5.822	5.972
#1	.0103	.0106	.0183	.2166	.0086	.0100	.0101	.0044	.0110	.0088
#2	.0107	.0102	.0137	.2117	.0070	.0115	.0096	.0128	.0099	.0095
#3	.0099	.0104	.0225	.2206	.0096	.0110	.0100	-.0059	.0108	.0099
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value										
Range										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**.0103**	**.0045**	**.0097**	**.0101**	**.0101**	**.0110**	**.0105**	**.0108**
Stddev	.0017	.0023	.0009	.0005	.0001	.0002	.0016	.0002	.0002
%RSD	16.79	21.83	19.19	4.850	.9104	1.871	14.56	1.710	1.861
#1	.0108	.0115	.0043	.0096	.0102	.0101	.0095	.0107	.0109
#2	.0083	.0118	.0055	.0093	.0101	.0102	.0107	.0105	.0106
#3	.0117	.0077	.0038	.0102	.0100	.0099	.0127	.0104	.0109
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3990.0**	**64095.**	**5603.1**
Stddev	1.6	223.	16.0
%RSD	.04017	.34765	.28497
#1	3989.8	63851.	5597.6
#2	3988.5	64148.	5590.7
#3	3991.7	64287.	5621.1

Sample Name: 0.05 Acquired: 3/10/2018 5:51:40 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0538**	**.0602**	**.0510**	**.0488**	**.0520**	**.0524**	**.0490**	**.0539**	**.0509**	**.0499**
Stddev	.0004	.0062	.0025	.0007	.0002	.0004	.0007	.0024	.0000	.0003
%RSD	.8091	10.37	4.915	1.451	.3150	.7732	1.415	4.367	.0567	.5257
#1	.0534	.0674	.0482	.0494	.0518	.0520	.0496	.0518	.0508	.0498
#2	.0543	.0569	.0523	.0490	.0521	.0523	.0483	.0536	.0509	.0502
#3	.0538	.0564	.0526	.0480	.0521	.0528	.0491	.0564	.0508	.0498
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None
Value										
Range										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0510**	**.0506**	**.0572**	**2.979**	**.0516**	**.0546**	**.0501**	W **2.593**	**.0508**	**.0497**
Stddev	.0005	.0003	.0022	.034	.0025	.0007	.0001	.005	.0002	.0015
%RSD	.9863	.6763	3.840	1.125	4.840	1.319	.2714	.1839	.4278	3.061
#1	.0511	.0502	.0582	3.017	.0512	.0552	.0501	2.588	.0508	.0503
#2	.0515	.0508	.0547	2.960	.0543	.0548	.0500	2.594	.0506	.0508
#3	.0505	.0508	.0587	2.959	.0494	.0538	.0502	2.597	.0511	.0479
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Warn	None	None
Value								2.410		
Range								1.590		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0487**	**.0492**	**.5200**	**.0504**	**.0496**	**.0507**	**.0509**	**.0523**	**.0500**
Stddev	.0017	.0028	.0011	.0009	.0003	.0007	.0020	.0002	.0001
%RSD	3.506	5.677	.2145	1.844	.5502	1.339	4.004	.3716	.1584
#1	.0470	.0513	.5200	.0496	.0493	.0514	.0532	.0522	.0499
#2	.0487	.0504	.5211	.0515	.0499	.0500	.0501	.0523	.0500
#3	.0505	.0460	.5189	.0502	.0497	.0508	.0494	.0525	.0500
Check ?	Chk Pass	None	Chk Pass	None	None	None	None	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4031.6**	**64769.**	**5682.6**
Stddev	5.9	130.	33.9
%RSD	.14671	.20018	.59641
#1	4030.9	64918.	5645.6
#2	4026.0	64683.	5712.1
#3	4037.8	64706.	5690.1

Sample Name: IPC Acquired: 3/10/2018 5:56:14 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0146**	**-.0072**	**-.0004**	**.0004**	**.0007**	**.0032**	**-.0106**	**-.0001**	**.0024**
Stddev	.0004	.0076	.0003	.0003	.0002	.0001	.0003	.0047	.0000	.0003
%RSD	12.67	52.28	4.154	80.68	48.34	19.11	10.52	44.43	12.01	11.55
#1	.0026	.0201	-.0075	-.0004	.0006	.0005	.0028	-.0144	-.0001	.0022
#2	.0027	.0059	-.0070	-.0000	.0002	.0008	.0033	-.0121	-.0002	.0027
#3	.0032	.0179	-.0071	-.0006	.0006	.0007	.0035	-.0053	-.0001	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.648**	**-.0001**	**.0067**	**.0746**	**-.0382**	**10.26**	**-.0008**	**-.0002**	**-.0013**	**-.0017**
Stddev	.009	.0002	.0022	.0330	.0007	.01	.0002	.0131	.0001	.0009
%RSD	.0965	194.4	32.79	44.21	1.895	.0738	26.42	5357.	11.02	54.31
#1	9.644	-.0001	.0072	.0990	-.0389	10.25	-.0006	-.0032	-.0013	-.0027
#2	9.642	.0001	.0043	.0371	-.0382	10.27	-.0010	.0140	-.0012	-.0008
#3	9.659	-.0003	.0085	.0878	-.0375	10.25	-.0008	-.0116	-.0015	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0516**	**.0057**	**.0027**	**-.0010**	**.0002**	**.0020**	**-.0128**	**10.24**	**-.0029**
Stddev	.0013	.0012	.0005	.0002	.0001	.0001	.0008	.01	.0001
%RSD	2.471	21.73	18.19	17.01	23.04	3.858	6.195	.0853	4.500
#1	-.0530	.0061	.0021	-.0011	.0002	.0019	-.0136	10.23	-.0028
#2	-.0514	.0043	.0029	-.0008	.0003	.0020	-.0129	10.24	-.0029
#3	-.0505	.0066	.0031	-.0011	.0003	.0020	-.0120	10.24	-.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4008.5**	**65501.**	**5794.6**
Stddev	10.2	164.	25.2
%RSD	.25352	.25113	.43478
#1	4003.8	65476.	5779.4
#2	4020.1	65677.	5823.7
#3	4001.5	65351.	5780.8

Sample Name: ICSA Acquired: 3/10/2018 6:00:52 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	F **311.1**	**-.0021**	**.0062**	**.0005**	**-.0001**	**.0102**	**276.5**	**.0026**	**-.0001**
Stddev	.0001	.5	.0025	.0003	.0001	.0001	.0027	.2	.0001	.0001
%RSD	30.95	.1465	119.7	4.850	25.75	66.05	26.29	.0683	4.351	101.0
#1	.0005	311.4	.0007	.0065	.0005	-.0001	.0106	276.3	.0028	-.0002
#2	.0003	311.4	-.0042	.0059	.0003	-.0002	.0126	276.4	.0025	.0000
#3	.0006	310.6	-.0028	.0062	.0005	-.0001	.0073	276.7	.0026	-.0001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		301.2								
Low Limit		198.8								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**-.0073**	**112.6**	**.1784**	**271.7**	**.0034**	**-.0010**	**.0822**	**-.0066**	**-.0126**
Stddev	.0002	.0002	.0	.0386	.2	.0001	.0004	.0104	.0006	.0012
%RSD	7.137	2.063	.0276	21.65	.0572	3.585	38.35	12.69	8.830	9.410
#1	.0024	-.0075	112.5	.2022	271.7	.0033	-.0015	.0929	-.0059	-.0112
#2	.0021	-.0073	112.6	.1992	271.5	.0034	-.0009	.0721	-.0069	-.0133
#3	.0024	-.0072	112.6	.1338	271.8	.0035	-.0007	.0815	-.0070	-.0133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0129**	**-.0022**	**-.0005**	**-.0023**	**.0093**	**.0052**	**.0027**	**-.0100**	**.0041**
Stddev	.0023	.0070	.0008	.0010	.0001	.0004	.0009	.0001	.0001
%RSD	18.05	316.5	145.2	44.92	1.110	8.056	33.35	1.456	2.331
#1	-.0150	.0017	.0000	-.0012	.0094	.0056	.0024	-.0102	.0042
#2	-.0133	.0019	-.0014	-.0023	.0092	.0048	.0020	-.0099	.0041
#3	-.0104	-.0102	-.0002	-.0033	.0092	.0051	.0037	-.0099	.0040
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3641.6**	**58922.**	**5558.8**
Stddev	6.6	412.	3.2
%RSD	.18007	.69947	.05749
#1	3645.8	58462.	5555.5
#2	3645.0	59257.	5559.0
#3	3634.1	59049.	5561.9

Sample Name: ICSAB Acquired: 3/10/2018 6:05:39 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3251**	**10.53**	**1.094**	**.5373**	**.3212**	**.1082**	**1.045**	**49.82**	**.3219**	**.3187**
Stddev	.0007	.02	.003	.0029	.0002	.0003	.005	.05	.0012	.0013
%RSD	.2263	.2199	.2597	.5431	.0678	.2708	.5017	.0912	.3870	.4223
#1	.3250	10.51	1.095	.5357	.3211	.1079	1.041	49.78	.3207	.3172
#2	.3243	10.55	1.091	.5355	.3215	.1084	1.043	49.83	.3220	.3189
#3	.3258	10.54	1.096	.5407	.3211	.1082	1.051	49.87	.3232	.3199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3242**	**.3252**	**42.69**	**23.25**	**24.40**	**.2153**	**.3347**	**8.577**	**.3143**	**1.044**
Stddev	.0004	.0005	.08	.07	.02	.0006	.0017	.030	.0007	.002
%RSD	.1304	.1405	.1831	.2946	.0875	.2971	.4946	.3557	.2311	.1734
#1	.3242	.3253	42.73	23.27	24.41	.2159	.3332	8.549	.3135	1.043
#2	.3246	.3247	42.74	23.30	24.38	.2153	.3345	8.609	.3145	1.043
#3	.3238	.3256	42.60	23.17	24.41	.2147	.3365	8.573	.3149	1.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.078**	**.5512**	**1.344**	**1.074**	**1.055**	**1.091**	**1.055**	**.3260**	**.3253**
Stddev	.018	.0031	.005	.006	.001	.002	.006	.0008	.0010
%RSD	1.699	.5678	.3992	.5560	.0595	.1501	.5968	.2379	.3161
#1	1.060	.5502	1.342	1.069	1.056	1.091	1.051	.3255	.3244
#2	1.077	.5488	1.340	1.072	1.054	1.090	1.051	.3256	.3250
#3	1.096	.5547	1.350	1.081	1.055	1.093	1.062	.3269	.3264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3931.4**	**64426.**	**5876.7**
Stddev	16.6	259.	11.5
%RSD	.42330	.40127	.19543
#1	3948.1	64723.	5888.0
#2	3931.1	64306.	5877.1
#3	3914.9	64249.	5865.0

Sample Name: CRI Acquired: 3/10/2018 6:10:06 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0225**	F **4.991**	**.0240**	**.1118**	**.0445**	**.0115**	**.0221**	F **.5427**	**.0112**	**.1080**
Stddev	.0004	.006	.0018	.0000	.0002	.0003	.0007	.0096	.0001	.0003
%RSD	1.672	.1276	7.528	.0354	.4597	2.339	3.383	1.772	.6238	.2508
#1	.0228	4.993	.0220	.1118	.0444	.0114	.0215	.5413	.0113	.1079
#2	.0227	4.983	.0249	.1118	.0444	.0113	.0219	.5339	.0112	.1079
#3	.0221	4.995	.0253	.1118	.0447	.0118	.0229	.5530	.0111	.1084
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit		.5219						.5219		
Low Limit		.2781						.2781		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0230**	**.0572**	F **.3000**	W **6.077**	W **.5151**	**.0326**	**.1094**	**5.884**	**.0858**	**.0481**
Stddev	.0002	.0003	.0031	.061	.0061	.0010	.0002	.030	.0002	.0011
%RSD	.8409	.5283	1.038	1.007	1.193	3.006	.1617	.5048	.1755	2.185
#1	.0231	.0569	.3035	6.039	.5104	.0315	.1092	5.861	.0857	.0486
#2	.0228	.0571	.2987	6.148	.5129	.0334	.1094	5.873	.0859	.0469
#3	.0231	.0575	.2976	6.045	.5220	.0330	.1095	5.917	.0856	.0489
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.2610	6.024	.4819					
Low Limit			.1390	3.976	.3181					

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1201**	**.0222**	**1.118**	F **.0263**	**.0224**	**.0236**	**.0222**	**.1110**	F **.0529**
Stddev	.0006	.0027	.004	.0003	.0001	.0001	.0011	.0006	.0001
%RSD	.4668	12.13	.3182	1.322	.2662	.4415	4.868	.5578	.1368
#1	.1204	.0191	1.115	.0259	.0223	.0236	.0211	.1115	.0528
#2	.1195	.0231	1.116	.0265	.0225	.0235	.0222	.1113	.0529
#3	.1205	.0243	1.122	.0265	.0224	.0237	.0232	.1103	.0530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit				.0261					.0522
Low Limit				.0139					.0278

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3988.8**	**65576.**	**5869.1**
Stddev	5.9	283.	45.5
%RSD	.14897	.43193	.77592
#1	3985.0	65736.	5902.0
#2	3995.6	65249.	5888.1
#3	3985.7	65744.	5817.1

Sample Name: CCV Acquired: 3/10/2018 6:14:42 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5019**	F **.5676**	**.5131**	**.4987**	**.5113**	**.5018**	**.4858**	**.5237**	**.5002**	**.5012**
Stddev	.0009	.0068	.0008	.0007	.0010	.0007	.0018	.0027	.0008	.0004
%RSD	.1819	1.194	.1601	.1417	.1999	.1442	.3624	.5207	.1538	.0812
#1	.5009	.5601	.5131	.4986	.5103	.5013	.4842	.5235	.4998	.5008
#2	.5024	.5733	.5122	.4980	.5123	.5026	.4877	.5264	.4997	.5016
#3	.5026	.5694	.5139	.4994	.5111	.5014	.4856	.5210	.5011	.5012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5524								
Low Limit		.4476								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5038**	**.5015**	**.5518**	**5.314**	**.5139**	**.5150**	**.4990**	**10.48**	**.4993**	**.5094**
Stddev	.0001	.0016	.0031	.032	.0036	.0016	.0015	.01	.0012	.0022
%RSD	.0156	.3122	.5580	.6080	.7007	.3128	.2918	.0853	.2394	.4393
#1	.5039	.5023	.5546	5.333	.5105	.5138	.4978	10.47	.4983	.5068
#2	.5037	.5024	.5524	5.277	.5177	.5169	.4985	10.49	.4990	.5108
#3	.5039	.4997	.5485	5.332	.5136	.5145	.5006	10.48	.5007	.5106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5178**	**.4940**	**5.276**	**.5071**	**.4910**	**.4989**	**.4979**	**.5188**	**.4928**
Stddev	.0022	.0010	.015	.0006	.0009	.0004	.0009	.0003	.0004
%RSD	.4237	.1938	.2800	.1091	.1836	.0758	.1755	.0651	.0875
#1	.5164	.4937	5.262	.5069	.4907	.4986	.4971	.5186	.4928
#2	.5203	.4932	5.275	.5078	.4920	.4993	.4988	.5186	.4924
#3	.5166	.4951	5.291	.5067	.4903	.4988	.4977	.5192	.4932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3933.0**	**64963.**	**5899.9**
Stddev	5.6	108.	31.6
%RSD	.14166	.16685	.53644
#1	3926.7	65057.	5935.0
#2	3937.2	64988.	5873.6
#3	3935.2	64845.	5891.2

Sample Name: CCB Acquired: 3/10/2018 6:19:11 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0239**	**-.0011**	**.0010**	**.0007**	**.0005**	**.0003**	**.0148**	**.0004**	**.0004**
Stddev	.0009	.0039	.0009	.0003	.0001	.0000	.0012	.0042	.0001	.0001
%RSD	167.6	16.56	83.30	33.50	19.52	7.144	342.2	28.55	23.60	27.58
#1	-.0003	.0277	-.0013	.0011	.0009	.0005	.0002	.0108	.0005	.0005
#2	.0015	.0199	-.0019	.0012	.0006	.0006	-.0008	.0193	.0003	.0004
#3	.0005	.0240	-.0001	.0006	.0007	.0005	.0016	.0145	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0002**	**.0132**	**.0553**	**.0057**	**.0002**	**.0009**	**.0285**	**.0005**	**-.0008**
Stddev	.0003	.0001	.0052	.0472	.0023	.0004	.0003	.0119	.0002	.0011
%RSD	37.94	61.83	39.39	85.39	40.08	227.8	35.81	41.61	41.44	137.8
#1	.0007	.0004	.0176	.0153	.0058	.0005	.0013	.0168	.0004	-.0020
#2	.0004	.0001	.0075	.0432	.0080	.0001	.0007	.0405	.0007	-.0001
#3	.0009	.0001	.0144	.1073	.0034	-.0002	.0008	.0282	.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.0023**	**.0049**	**.0016**	**.0005**	**.0005**	**.0001**	**.0007**	**.0002**
Stddev	.0006	.0013	.0013	.0008	.0001	.0005	.0020	.0001	.0001
%RSD	20.39	55.20	26.32	50.00	28.58	83.81	4008.	12.39	72.75
#1	.0031	.0021	.0064	.0020	.0003	.0009	-.0013	.0006	.0003
#2	.0025	.0011	.0042	.0020	.0005	.0007	.0024	.0006	.0001
#3	.0038	.0037	.0042	.0007	.0005	.0000	-.0010	.0008	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3967.9**	**65361.**	**5817.3**
Stddev	11.6	168.	16.8
%RSD	.29198	.25683	.28825
#1	3972.4	65419.	5800.4
#2	3976.6	65172.	5817.6
#3	3954.8	65492.	5834.0

Sample Name: WG1095678-1,T Acquired: 3/10/2018 6:45:19 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0042**	**.0007**	**-.0006**	**-.0002**	**-.0002**	**-.0014**	**-.0015**	**-.0001**	**.0004**
Stddev	.0006	.0036	.0011	.0005	.0001	.0001	.0012	.0067	.0000	.0003
%RSD	1658.	83.89	144.5	78.82	74.02	32.59	87.43	439.9	41.76	79.59
#1	-.0001	.0027	.0003	-.0001	-.0000	-.0001	.0000	-.0032	-.0001	.0001
#2	.0006	.0017	-.0001	-.0009	-.0002	-.0002	-.0023	-.0072	-.0001	.0004
#3	-.0005	.0083	.0019	-.0008	-.0003	-.0003	-.0020	.0058	-.0001	.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0002**	**.0228**	**.1512**	**-.0005**	**.0005**	**-.0003**	**.0314**	**.0005**	**-.0015**
Stddev	.0004	.0003	.0047	.0169	.0016	.0003	.0001	.0027	.0001	.0009
%RSD	441.4	165.0	20.44	11.15	337.8	62.09	42.88	8.435	29.34	60.54
#1	.0001	-.0001	.0245	.1656	-.0018	.0007	-.0003	.0327	.0003	-.0017
#2	-.0003	-.0005	.0264	.1552	.0013	.0007	-.0003	.0332	.0006	-.0005
#3	.0005	.0001	.0176	.1327	-.0009	.0001	-.0001	.0284	.0005	-.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0023**	**.0004**	**-.0016**	**.0011**	**.0002**	**.0001**	**.0002**	**.0000**	**.0005**
Stddev	.0012	.0018	.0004	.0004	.0002	.0002	.0014	.0000	.0001
%RSD	53.69	412.7	24.37	36.40	144.3	148.3	609.1	440.2	16.32
#1	-.0023	-.0004	-.0020	.0013	.0001	-.0001	.0016	.0000	.0004
#2	-.0011	-.0008	-.0012	.0015	.0004	.0002	.0003	.0000	.0004
#3	-.0035	.0025	-.0016	.0007	-.0000	.0003	-.0012	-.0000	.0006

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4165.6**	**66695.**	**5859.1**
Stddev	5.3	176.	11.2
%RSD	.12667	.26324	.19103
#1	4167.3	66746.	5846.2
#2	4169.7	66840.	5865.7
#3	4159.6	66500.	5865.4

Sample Name: WG1095678-2,T Acquired: 3/10/2018 6:50:01 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6114**	**41.06**	**1.117**	**.4401**	**1.297**	**.3856**	**-.0143**	**29.73**	**.8220**	**.4243**
Stddev	.0027	.05	.003	.0017	.003	.0005	.0008	.12	.0030	.0017
%RSD	.4410	.1154	.2383	.3907	.1895	.1369	5.788	.3889	.3684	.3908
#1	.6087	41.03	1.117	.4387	1.294	.3849	-.0134	29.81	.8197	.4226
#2	.6141	41.12	1.120	.4395	1.299	.3858	-.0147	29.79	.8210	.4245
#3	.6113	41.04	1.115	.4420	1.297	.3859	-.0149	29.60	.8255	.4259

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6199**	**.6812**	**93.64**	**12.50**	**13.77**	**2.451**	**.1976**	**4.578**	**.5426**	**1.245**
Stddev	.0011	.0003	.11	.01	.07	.006	.0005	.017	.0009	.001
%RSD	.1751	.0410	.1204	.0805	.5420	.2368	.2416	.3807	.1579	.0951
#1	.6187	.6809	93.55	12.50	13.81	2.450	.1976	4.575	.5417	1.244
#2	.6201	.6815	93.77	12.49	13.81	2.457	.1971	4.563	.5433	1.245
#3	.6209	.6813	93.61	12.51	13.68	2.445	.1981	4.597	.5429	1.247

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8336**	**.7551**	**10.22**	**.8510**	**.3190**	**1.852**	**.8764**	**.6081**	**1.507**
Stddev	.0065	.0036	.02	.0036	.0003	.001	.0037	.0015	.005
%RSD	.7836	.4752	.1687	.4214	.1090	.0773	.4240	.2522	.3196
#1	.8285	.7510	10.20	.8486	.3187	1.850	.8724	.6064	1.504
#2	.8315	.7564	10.23	.8493	.3191	1.852	.8769	.6087	1.504
#3	.8410	.7578	10.23	.8551	.3193	1.853	.8798	.6093	1.512

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4277.0**	**68443.**	**6147.1**
Stddev	19.0	181.	32.5
%RSD	.44335	.26382	.52888
#1	4284.0	68542.	6118.5
#2	4291.5	68553.	6140.4
#3	4255.6	68235.	6182.5

Sample Name: WG1095678-3,T Acquired: 3/10/2018 6:54:25 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7216**	**43.76**	**1.314**	**.5085**	**1.564**	**.4505**	**-.0134**	**34.62**	**.9357**	**.4858**
Stddev	.0026	.15	.002	.0005	.004	.0016	.0009	.08	.0010	.0007
%RSD	.3539	.3476	.1824	.0990	.2703	.3627	6.945	.2346	.1027	.1541
#1	.7244	43.94	1.316	.5081	1.568	.4524	-.0123	34.71	.9352	.4851
#2	.7194	43.64	1.312	.5083	1.560	.4492	-.0140	34.57	.9351	.4857
#3	.7210	43.71	1.315	.5091	1.564	.4500	-.0138	34.58	.9368	.4866

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7304**	**.8016**	**106.9**	**13.78**	**14.74**	**2.958**	**.2329**	**5.094**	**.6213**	**1.441**
Stddev	.0033	.0010	.4	.04	.05	.010	.0012	.013	.0011	.002
%RSD	.4477	.1229	.3603	.2893	.3070	.3421	.5123	.2587	.1710	.1431
#1	.7320	.8012	107.3	13.77	14.79	2.966	.2327	5.106	.6212	1.440
#2	.7266	.8009	106.6	13.75	14.70	2.946	.2318	5.080	.6203	1.444
#3	.7325	.8027	106.8	13.83	14.74	2.961	.2342	5.097	.6224	1.441

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9605**	**.8832**	**11.16**	**1.004**	**.3877**	**1.961**	**1.007**	**.7107**	**1.725**
Stddev	.0010	.0008	.01	.002	.0008	.003	.005	.0014	.001
%RSD	.1045	.0944	.1188	.2071	.1976	.1397	.5417	.1948	.0766
#1	.9595	.8825	11.17	1.002	.3884	1.963	1.011	.7122	1.724
#2	.9604	.8830	11.14	1.005	.3879	1.958	1.001	.7095	1.724
#3	.9615	.8842	11.16	1.006	.3869	1.963	1.008	.7104	1.726

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4250.9**	**67858.**	**6207.9**
Stddev	7.5	338.	15.3
%RSD	.17612	.49784	.24595
#1	4258.6	67854.	6197.6
#2	4250.3	68197.	6225.5
#3	4243.7	67522.	6200.6

Sample Name: L1807747-01,T Acquired: 3/10/2018 6:58:50 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0062**	**197.4**	**1.596**	**.0384**	**1.529**	**.0029**	**.0015**	**40.34**	**.0130**	**.1104**
Stddev	.0005	1.1	.006	.0013	.009	.0000	.0004	.35	.0001	.0005
%RSD	8.381	.5589	.4097	3.419	.5898	1.380	25.08	.8666	.7478	.4974
#1	.0058	198.2	1.590	.0388	1.533	.0029	.0014	40.43	.0129	.1101
#2	.0061	196.1	1.595	.0395	1.519	.0029	.0012	39.95	.0130	.1101
#3	.0068	197.9	1.603	.0370	1.536	.0028	.0020	40.63	.0131	.1111

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2941**	**2.903**	**242.9**	**8.751**	**39.84**	**3.850**	**.0166**	**3.119**	**.2537**	**18.76**
Stddev	.0010	.013	1.5	.092	.16	.013	.0004	.028	.0008	.06
%RSD	.3539	.4427	.6240	1.053	.3913	.3313	2.697	.9025	.2984	.3273
#1	.2951	2.917	243.7	8.793	39.82	3.861	.0162	3.151	.2531	18.72
#2	.2941	2.902	241.2	8.646	39.69	3.836	.0164	3.099	.2535	18.73
#3	.2930	2.891	243.9	8.815	40.00	3.854	.0171	3.108	.2546	18.83

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0052**	**.0139**	**16.59**	**1.717**	**.3097**	**7.498**	**-.0126**	**.4173**	**2.791**
Stddev	.0020	.0053	.07	.007	.0026	.035	.0017	.0022	.012
%RSD	39.39	37.94	.4074	.3972	.8295	.4739	13.58	.5384	.4358
#1	-.0074	.0142	16.55	1.712	.3100	7.537	-.0107	.4197	2.782
#2	-.0047	.0084	16.55	1.713	.3070	7.467	-.0130	.4170	2.786
#3	-.0034	.0189	16.67	1.725	.3122	7.490	-.0141	.4152	2.805

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4463.6**	**71003.**	**6660.7**
Stddev	14.6	154.	30.7
%RSD	.32743	.21660	.46037
#1	4478.1	70842.	6672.8
#2	4464.0	71149.	6683.4
#3	4448.8	71017.	6625.8

Sample Name: L1807747-02,T Acquired: 3/10/2018 7:03:26 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039**	**188.1**	**.2999**	**.0233**	**1.603**	**.0038**	**.0163**	**41.55**	**.0163**	**.1491**
Stddev	.0004	.3	.0005	.0011	.003	.0001	.0005	.02	.0000	.0003
%RSD	9.753	.1775	.1819	4.593	.1889	1.764	3.253	.0550	.3047	.2062
#1	.0043	188.0	.3005	.0246	1.605	.0039	.0158	41.54	.0163	.1494
#2	.0035	187.8	.2996	.0228	1.600	.0038	.0162	41.53	.0163	.1488
#3	.0039	188.4	.2995	.0226	1.604	.0038	.0168	41.57	.0164	.1493

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3770**	**.9796**	**394.6**	**8.021**	**39.50**	**5.095**	**.0304**	**3.057**	**.2877**	**1.802**
Stddev	.0004	.0019	.7	.045	.33	.014	.0006	.016	.0009	.008
%RSD	.0986	.1919	.1718	.5629	.8316	.2677	2.102	.5177	.3244	.4380
#1	.3767	.9794	394.7	8.067	39.18	5.094	.0307	3.042	.2884	1.800
#2	.3774	.9778	393.9	7.977	39.47	5.081	.0297	3.055	.2866	1.795
#3	.3769	.9815	395.3	8.020	39.84	5.109	.0308	3.073	.2881	1.810

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0960**	**.0217**	**11.39**	**.6821**	**.3859**	**6.576**	**-.0091**	**.4625**	**1.982**
Stddev	.0009	.0011	.03	.0024	.0009	.009	.0016	.0002	.006
%RSD	.9581	5.163	.2367	.3500	.2228	.1317	17.48	.0431	.3288
#1	.0951	.0230	11.39	.6813	.3867	6.567	-.0104	.4624	1.978
#2	.0969	.0208	11.36	.6803	.3850	6.576	-.0073	.4628	1.978
#3	.0962	.0213	11.41	.6848	.3861	6.584	-.0095	.4625	1.989

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4469.1**	**71501.**	**6704.5**
Stddev	16.3	11.	44.9
%RSD	.36504	.01556	.67032
#1	4473.7	71488.	6743.0
#2	4482.6	71505.	6715.5
#3	4451.0	71510.	6655.1

Sample Name: L1807747-03,T Acquired: 3/10/2018 7:07:55 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**149.9**	**.2186**	**.0274**	**1.839**	**.0057**	**.0020**	**59.83**	**.0177**	**.1443**
Stddev	.0000	.3	.0040	.0008	.004	.0001	.0009	.12	.0001	.0006
%RSD	.6619	.2000	1.837	2.842	.2241	2.594	44.13	.1932	.7275	.4078
#1	.0046	149.6	.2141	.0269	1.834	.0056	.0014	59.71	.0176	.1445
#2	.0046	150.2	.2201	.0283	1.842	.0057	.0030	59.82	.0177	.1436
#3	.0045	149.9	.2217	.0269	1.840	.0059	.0017	59.95	.0179	.1447

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3346**	**2.061**	**308.3**	**10.70**	**30.44**	**4.501**	**.0433**	**1.961**	**.4555**	**3.095**
Stddev	.0011	.001	.4	.05	.12	.010	.0004	.009	.0018	.011
%RSD	.3223	.0467	.1251	.4647	.3795	.2267	.9623	.4710	.3991	.3434
#1	.3334	2.060	307.9	10.68	30.34	4.495	.0437	1.957	.4539	3.085
#2	.3356	2.062	308.6	10.75	30.57	4.513	.0433	1.971	.4551	3.094
#3	.3347	2.062	308.5	10.66	30.42	4.495	.0429	1.954	.4574	3.106

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087**	**.0190**	**8.491**	**.6137**	**.5773**	**4.961**	**-.0100**	**.5271**	**3.062**
Stddev	.0004	.0021	.021	.0005	.0015	.001	.0023	.0006	.007
%RSD	5.112	10.86	.2431	.0742	.2600	.0182	22.54	.1071	.2313
#1	.0090	.0211	8.493	.6141	.5757	4.961	-.0078	.5266	3.058
#2	.0082	.0188	8.470	.6132	.5777	4.961	-.0100	.5268	3.059
#3	.0089	.0170	8.512	.6139	.5786	4.960	-.0123	.5277	3.071

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4521.3**	**72461.**	**6644.1**
Stddev	9.0	66.	22.6
%RSD	.19983	.09097	.33945
#1	4531.4	72530.	6667.3
#2	4518.6	72454.	6622.2
#3	4514.0	72399.	6642.8

Sample Name: L1807747-04,T Acquired: 3/10/2018 7:12:26 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**228.1**	**.2624**	**.0164**	**1.338**	**-.0004**	**.0042**	**52.31**	**.0134**	**.1629**
Stddev	.0010	1.1	.0017	.0009	.004	.0001	.0021	.06	.0000	.0003
%RSD	30.06	.4995	.6442	5.414	.3205	23.62	49.52	.1074	.3317	.2046
#1	.0028	229.4	.2641	.0157	1.342	-.0003	.0065	52.37	.0133	.1630
#2	.0025	227.4	.2622	.0161	1.335	-.0005	.0035	52.30	.0134	.1625
#3	.0043	227.4	.2608	.0174	1.336	-.0005	.0026	52.25	.0134	.1631

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5907**	**1.291**	**338.3**	**50.04**	**85.00**	**3.956**	**.0272**	**2.443**	**.3916**	**1.691**
Stddev	.0014	.000	.9	.38	.28	.023	.0002	.031	.0013	.003
%RSD	.2301	.0223	.2568	.7613	.3240	.5771	.7512	1.263	.3303	.1534
#1	.5916	1.291	339.3	50.47	85.30	3.983	.0274	2.476	.3921	1.690
#2	.5912	1.291	337.7	49.91	84.95	3.943	.0270	2.439	.3901	1.689
#3	.5891	1.291	337.8	49.74	84.76	3.943	.0272	2.414	.3925	1.694

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0484**	**.0076**	**11.67**	**.1215**	**.2355**	**9.335**	**-.0152**	**.5626**	**1.648**
Stddev	.0017	.0032	.03	.0010	.0004	.109	.0010	.0015	.003
%RSD	3.589	41.70	.2827	.8095	.1723	1.168	6.637	.2651	.1596
#1	-.0472	.0113	11.65	.1204	.2355	9.450	-.0147	.5641	1.648
#2	-.0504	.0060	11.66	.1220	.2351	9.321	-.0163	.5627	1.645
#3	-.0475	.0055	11.71	.1222	.2359	9.233	-.0145	.5611	1.650

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4462.8**	**72591.**	**6844.5**
Stddev	5.9	476.	30.8
%RSD	.13299	.65572	.44990
#1	4468.3	72114.	6813.5
#2	4463.6	72592.	6844.9
#3	4456.5	73066.	6875.1

Sample Name: L1807747-05,T Acquired: 3/10/2018 7:17:06 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**227.4**	**.3270**	**.0144**	**1.033**	**-.0003**	**.0073**	**34.56**	**.0109**	**.1545**
Stddev	.0002	.8	.0036	.0006	.002	.0001	.0018	.10	.0001	.0003
%RSD	13.14	.3459	1.100	4.377	.2290	19.46	25.18	.3015	1.281	.2108
#1	.0013	228.3	.3311	.0150	1.036	-.0003	.0094	34.65	.0108	.1543
#2	.0011	227.1	.3258	.0138	1.032	-.0004	.0058	34.59	.0108	.1543
#3	.0015	226.7	.3242	.0142	1.031	-.0003	.0068	34.45	.0110	.1548

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5527**	**.8836**	**285.9**	**24.00**	**74.41**	**5.398**	**.0088**	**1.228**	**.3158**	**1.850**
Stddev	.0023	.0020	1.0	.17	.84	.015	.0001	.007	.0002	.002
%RSD	.4135	.2208	.3476	.6951	1.127	.2790	1.362	.5840	.0722	.1146
#1	.5551	.8858	286.9	24.18	75.35	5.414	.0088	1.220	.3159	1.849
#2	.5525	.8825	285.7	23.96	74.16	5.394	.0086	1.232	.3156	1.849
#3	.5506	.8823	285.0	23.85	73.73	5.385	.0088	1.233	.3160	1.853

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0559**	**.0104**	**11.77**	**.1676**	**.1793**	**11.00**	**-.0181**	**.5420**	**1.317**
Stddev	.0006	.0010	.05	.0009	.0004	.09	.0008	.0017	.002
%RSD	1.083	9.832	.4476	.5274	.2145	.7751	4.219	.3206	.1675
#1	-.0556	.0100	11.73	.1685	.1797	11.05	-.0176	.5440	1.319
#2	-.0565	.0097	11.75	.1668	.1794	10.91	-.0177	.5407	1.315
#3	-.0554	.0116	11.83	.1673	.1789	11.06	-.0189	.5414	1.318

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4387.8**	**71605.**	**6832.0**
Stddev	8.6	167.	70.2
%RSD	.19692	.23303	1.0271
#1	4378.9	71416.	6754.3
#2	4396.2	71733.	6851.0
#3	4388.3	71665.	6890.8

Sample Name: L1807747-06,T Acquired: 3/10/2018 7:21:44 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**232.4**	**.1071**	**.0108**	**.8341**	**-.0002**	**.0002**	**31.08**	**.0095**	**.1579**
Stddev	.0003	.4	.0019	.0003	.0005	.0001	.0016	.09	.0001	.0004
%RSD	28.85	.1535	1.813	2.633	.0650	56.53	784.7	.2977	.7181	.2576
#1	.0009	232.7	.1048	.0110	.8345	-.0001	.0008	31.18	.0095	.1575
#2	.0016	232.6	.1081	.0105	.8343	-.0002	-.0016	31.06	.0094	.1579
#3	.0011	232.0	.1083	.0110	.8335	-.0003	.0014	31.00	.0095	.1583

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3029**	**1.216**	**288.8**	**14.90**	**64.58**	**3.596**	**.0063**	**2.046**	**.2547**	**.7141**
Stddev	.0007	.001	.6	.02	.36	.006	.0004	.002	.0006	.0018
%RSD	.2331	.0849	.2215	.1544	.5579	.1804	6.079	.1015	.2334	.2542
#1	.3022	1.217	289.3	14.90	64.74	3.595	.0065	2.046	.2540	.7125
#2	.3029	1.215	289.0	14.88	64.82	3.602	.0059	2.048	.2548	.7138
#3	.3036	1.217	288.1	14.92	64.16	3.589	.0065	2.044	.2552	.7161

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0514**	**.0048**	**11.01**	**.0090**	**.1366**	**10.19**	**-.0190**	**.5188**	**1.101**
Stddev	.0025	.0021	.02	.0007	.0003	.08	.0021	.0006	.004
%RSD	4.774	43.90	.1789	7.666	.2420	.7656	11.13	.1204	.3311
#1	-.0540	.0066	10.99	.0089	.1370	10.24	-.0210	.5182	1.101
#2	-.0490	.0053	11.03	.0098	.1365	10.10	-.0193	.5194	1.097
#3	-.0513	.0025	11.01	.0084	.1364	10.22	-.0168	.5189	1.104

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4502.9**	**73628.**	**7011.8**
Stddev	17.0	270.	25.6
%RSD	.37713	.36633	.36448
#1	4500.8	73764.	6997.6
#2	4520.8	73801.	6996.4
#3	4487.0	73317.	7041.3

Sample Name: L1807747-07,T Acquired: 3/10/2018 7:26:21 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**247.8**	**.2331**	**.0155**	**.9842**	**.0004**	**.0119**	**35.35**	**.0137**	**.1764**
Stddev	.0004	.7	.0033	.0004	.0043	.0002	.0022	.05	.0001	.0004
%RSD	84.40	.2765	1.408	2.863	.4326	39.25	18.80	.1432	.4229	.2185
#1	.0000	248.2	.2355	.0150	.9859	.0006	.0144	35.38	.0136	.1766
#2	.0005	248.3	.2294	.0158	.9874	.0004	.0111	35.29	.0137	.1767
#3	.0007	247.0	.2344	.0157	.9794	.0002	.0102	35.36	.0137	.1760

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5479**	**.9745**	**358.4**	**26.63**	**86.54**	**5.029**	**.0090**	**1.514**	**.8567**	**1.394**
Stddev	.0011	.0011	.6	.03	.62	.018	.0000	.020	.0005	.002
%RSD	.2077	.1146	.1563	.1017	.7212	.3621	.5429	1.313	.0558	.1342
#1	.5492	.9743	358.5	26.64	86.46	5.032	.0089	1.510	.8567	1.394
#2	.5469	.9735	358.8	26.66	85.96	5.046	.0090	1.536	.8563	1.392
#3	.5478	.9757	357.7	26.60	87.20	5.010	.0090	1.497	.8572	1.396

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0614**	**.0086**	**11.31**	**.0041**	**.1483**	**11.62**	**-.0195**	**.6334**	**1.556**
Stddev	.0032	.0014	.01	.0012	.0001	.06	.0022	.0017	.001
%RSD	5.273	16.17	.0904	29.30	.0856	.5451	11.29	.2750	.0911
#1	-.0584	.0096	11.32	.0055	.1484	11.64	-.0213	.6354	1.555
#2	-.0610	.0092	11.30	.0033	.1484	11.68	-.0202	.6324	1.556
#3	-.0648	.0070	11.30	.0035	.1482	11.55	-.0171	.6324	1.558

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4462.4**	**73148.**	**7021.1**
Stddev	5.6	167.	48.8
%RSD	.12486	.22870	.69508
#1	4467.6	72964.	7040.8
#2	4463.1	73292.	7056.9
#3	4456.5	73189.	6965.5

Sample Name: CCV Acquired: 3/10/2018 7:30:57 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4965**	F **.5779**	**.5089**	**.4947**	**.5088**	**.5073**	**.4822**	**.5311**	**.4944**	**.4973**
Stddev	.0006	.0121	.0007	.0025	.0009	.0003	.0017	.0107	.0019	.0016
%RSD	.1254	2.099	.1405	.5122	.1805	.0569	.3491	2.017	.3828	.3296
#1	.4972	.5830	.5093	.4919	.5078	.5073	.4805	.5204	.4929	.4959
#2	.4964	.5641	.5080	.4955	.5096	.5070	.4838	.5311	.4937	.4969
#3	.4960	.5867	.5092	.4968	.5091	.5076	.4824	.5418	.4965	.4991
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5524								
Low Limit		.4476								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4975**	**.4991**	F **.5993**	**5.319**	**.5129**	**.5413**	**.4946**	**10.46**	**.4948**	**.5048**
Stddev	.0020	.0009	.0027	.028	.0043	.0012	.0020	.06	.0024	.0024
%RSD	.3961	.1862	.4505	.5198	.8394	.2210	.4104	.5688	.4759	.4787
#1	.4957	.5001	.6019	5.320	.5092	.5404	.4927	10.40	.4927	.5062
#2	.4972	.4990	.5995	5.291	.5176	.5426	.4944	10.46	.4942	.5020
#3	.4996	.4982	.5965	5.346	.5120	.5408	.4967	10.52	.4973	.5062
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.5524							
Low Limit			.4476							

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5061**	**.4924**	**5.349**	**.4993**	**.4869**	**.5014**	**.4928**	**.5129**	**.4888**
Stddev	.0028	.0020	.011	.0026	.0007	.0003	.0026	.0007	.0016
%RSD	.5622	.4086	.2086	.5300	.1449	.0501	.5376	.1454	.3284
#1	.5037	.4924	5.337	.4962	.4864	.5015	.4913	.5135	.4873
#2	.5055	.4904	5.352	.5004	.4877	.5016	.4912	.5131	.4885
#3	.5093	.4945	5.359	.5012	.4866	.5012	.4959	.5120	.4905
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3946.2**	**65187.**	**5878.4**
Stddev	13.0	236.	52.9
%RSD	.32837	.36245	.90064
#1	3951.7	65159.	5937.9
#2	3955.5	65436.	5836.4
#3	3931.4	64966.	5861.0

Sample Name: CCB Acquired: 3/10/2018 7:35:28 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0223**	**.0001**	**.0004**	**.0006**	**.0003**	**-.0001**	**.0117**	**.0003**	**.0005**
Stddev	.0005	.0102	.0014	.0004	.0001	.0000	.0011	.0073	.0000	.0001
%RSD	228.3	45.95	950.4	99.61	20.13	17.22	1069.	62.06	13.99	17.82
#1	.0008	.0249	.0001	.0002	.0006	.0003	.0008	.0143	.0004	.0005
#2	.0000	.0310	.0016	.0008	.0008	.0002	.0002	.0174	.0004	.0006
#3	-.0002	.0110	-.0012	.0001	.0005	.0003	-.0013	.0035	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0001**	**.0420**	**.0142**	**.0062**	**.0010**	**.0008**	**.0092**	**.0004**	**-.0010**
Stddev	.0006	.0003	.0031	.0257	.0002	.0005	.0003	.0086	.0003	.0014
%RSD	91.21	354.9	7.323	181.2	3.094	52.78	35.44	93.91	98.17	138.0
#1	.0010	.0003	.0446	.0119	.0062	.0012	.0009	.0127	.0008	-.0011
#2	-.0000	.0002	.0428	-.0103	.0061	.0014	.0009	.0154	.0002	-.0023
#3	.0009	-.0003	.0386	.0409	.0064	.0004	.0004	-.0007	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0007**	**.0394**	**.0002**	**.0005**	**.0016**	**.0004**	**.0006**	**.0004**
Stddev	.0011	.0026	.0022	.0006	.0001	.0003	.0010	.0002	.0001
%RSD	229.9	359.2	5.704	292.8	12.90	20.83	268.2	34.12	34.71
#1	-.0008	.0026	.0420	.0008	.0004	.0015	.0007	.0005	.0004
#2	.0008	-.0023	.0387	-.0003	.0006	.0014	-.0008	.0008	.0005
#3	.0014	.0018	.0376	.0001	.0005	.0020	.0012	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3981.6**	**65974.**	**5885.6**
Stddev	16.3	280.	33.0
%RSD	.40870	.42464	.56137
#1	3979.5	65651.	5874.0
#2	3998.9	66119.	5859.9
#3	3966.6	66152.	5922.9

Sample Name: L1807747-08,T Acquired: 3/10/2018 7:40:10 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090**	**208.6**	**.2570**	**.0272**	**1.204**	**.0055**	**.0352**	**53.08**	**.0349**	**.2337**
Stddev	.0001	.5	.0053	.0009	.002	.0001	.0021	.08	.0001	.0003
%RSD	1.019	.2166	2.066	3.447	.1896	.9902	6.039	.1449	.1759	.1455
#1	.0091	208.6	.2512	.0281	1.205	.0055	.0363	53.04	.0350	.2333
#2	.0090	209.1	.2581	.0271	1.205	.0054	.0366	53.17	.0349	.2339
#3	.0089	208.2	.2616	.0263	1.201	.0055	.0328	53.04	.0349	.2339

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7092**	**2.570**	**647.7**	**16.58**	**63.71**	**9.054**	**.0301**	**1.273**	**.4793**	**11.07**
Stddev	.0015	.003	5.8	.07	.45	.017	.0006	.002	.0008	.02
%RSD	.2180	.1255	.8990	.4052	.7025	.1907	1.927	.1147	.1642	.2000
#1	.7109	2.572	653.8	16.58	63.21	9.047	.0305	1.271	.4788	11.05
#2	.7080	2.566	642.1	16.64	64.07	9.074	.0305	1.274	.4790	11.09
#3	.7086	2.571	647.2	16.51	63.84	9.042	.0295	1.273	.4802	11.09

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0325**	**.0322**	**9.715**	**1.444**	**.2460**	**5.811**	**-.0029**	**.6842**	**5.346**
Stddev	.0011	.0038	.017	.003	.0007	.005	.0018	.0005	.007
%RSD	3.381	11.66	.1768	.1931	.2752	.0937	64.13	.0758	.1282
#1	-.0319	.0312	9.704	1.442	.2464	5.817	-.0028	.6837	5.339
#2	-.0319	.0291	9.706	1.443	.2464	5.807	-.0048	.6842	5.346
#3	-.0338	.0364	9.734	1.447	.2452	5.808	-.0011	.6847	5.353

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4426.1**	**73364.**	**7046.6**
Stddev	10.5	319.	37.0
%RSD	.23640	.43452	.52575
#1	4438.2	72997.	7089.0
#2	4419.6	73574.	7020.9
#3	4420.5	73520.	7029.8

Sample Name: L1807747-09,T Acquired: 3/10/2018 7:44:44 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**222.4**	**.1537**	**.0159**	**.9031**	**.0035**	**.0122**	**20.31**	**.0110**	**.1151**
Stddev	.0002	.5	.0019	.0005	.0023	.0001	.0006	.03	.0001	.0002
%RSD	6.887	.2269	1.218	3.147	.2561	2.622	5.032	.1494	.6349	.1831
#1	.0031	222.0	.1535	.0157	.9045	.0036	.0121	20.30	.0110	.1153
#2	.0032	222.2	.1519	.0155	.9005	.0034	.0129	20.29	.0111	.1149
#3	.0035	222.9	.1556	.0164	.9045	.0035	.0117	20.35	.0110	.1151

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2901**	**.5876**	**260.4**	**11.57**	**46.09**	**3.501**	**.0063**	**12.92**	**.2008**	**18.69**
Stddev	.0005	.0012	.2	.04	.26	.011	.0003	.05	.0005	.03
%RSD	.1620	.2068	.0891	.3723	.5552	.3210	4.871	.3760	.2309	.1446
#1	.2902	.5864	260.3	11.53	45.79	3.492	.0063	12.87	.2010	18.68
#2	.2905	.5876	260.3	11.57	46.24	3.499	.0061	12.93	.2003	18.68
#3	.2896	.5888	260.7	11.62	46.23	3.514	.0067	12.97	.2012	18.72

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0407**	**.0056**	**17.37**	**.0444**	**.1141**	**7.120**	**-.0135**	**.4157**	**2.942**
Stddev	.0029	.0004	.02	.0013	.0003	.009	.0014	.0013	.004
%RSD	7.027	7.053	.1328	2.916	.2202	.1325	10.73	.3228	.1537
#1	-.0430	.0061	17.37	.0456	.1142	7.130	-.0145	.4152	2.937
#2	-.0417	.0053	17.35	.0430	.1138	7.111	-.0118	.4172	2.945
#3	-.0375	.0056	17.39	.0445	.1142	7.119	-.0141	.4147	2.946

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4339.6**	**70196.**	**6677.0**
Stddev	11.2	83.	38.5
%RSD	.25799	.11753	.57655
#1	4352.0	70142.	6721.4
#2	4336.6	70291.	6656.5
#3	4330.2	70156.	6653.1

Sample Name: L1807747-10,T Acquired: 3/10/2018 7:49:13 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0054**	**208.0**	**.2056**	**.0339**	**1.388**	**.0044**	**.0123**	**44.85**	**.0173**	**.1501**
Stddev	.0003	.1	.0037	.0004	.002	.0000	.0014	.11	.0000	.0002
%RSD	5.751	.0265	1.795	1.313	.1314	.6354	11.54	.2389	.0789	.1048
#1	.0057	208.0	.2024	.0341	1.387	.0044	.0107	44.75	.0173	.1500
#2	.0055	208.0	.2096	.0342	1.387	.0044	.0132	44.85	.0173	.1502
#3	.0051	208.1	.2049	.0334	1.390	.0044	.0131	44.96	.0173	.1503

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4740**	**1.385**	**342.3**	**7.632**	**43.49**	**5.939**	**.0210**	**2.030**	**.2796**	**4.181**
Stddev	.0008	.002	.4	.064	.13	.001	.0005	.007	.0007	.007
%RSD	.1741	.1418	.1141	.8350	.3015	.0087	2.496	.3455	.2533	.1569
#1	.4750	1.385	341.9	7.668	43.37	5.939	.0206	2.037	.2788	4.178
#2	.4735	1.384	342.3	7.558	43.63	5.940	.0208	2.029	.2800	4.177
#3	.4736	1.387	342.7	7.669	43.48	5.940	.0216	2.023	.2801	4.189

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0498**	**.0199**	**11.78**	**.6501**	**.3649**	**7.842**	**-.0123**	**.5493**	**2.867**
Stddev	.0031	.0038	.03	.0025	.0013	.075	.0032	.0020	.003
%RSD	6.222	19.07	.2382	.3791	.3448	.9553	25.99	.3709	.1122
#1	.0466	.0191	11.75	.6510	.3638	7.928	-.0151	.5517	2.864
#2	.0499	.0165	11.77	.6473	.3646	7.806	-.0132	.5483	2.868
#3	.0528	.0240	11.81	.6520	.3663	7.792	-.0088	.5480	2.870

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4621.1**	**75778.**	**7205.2**
Stddev	3.6	497.	19.3
%RSD	.07740	.65546	.26828
#1	4621.6	75207.	7224.0
#2	4617.3	76112.	7185.4
#3	4624.4	76015.	7206.1

Sample Name: L1807747-11,T Acquired: 3/10/2018 7:53:50 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060**	**166.6**	**.2222**	**.0186**	**1.150**	**.0042**	**.0186**	**41.54**	**.0208**	**.1510**
Stddev	.0001	.1	.0033	.0011	.000	.0000	.0006	.06	.0001	.0006
%RSD	2.268	.0691	1.504	5.849	.0228	.7124	3.438	.1497	.7090	.3757
#1	.0062	166.7	.2219	.0198	1.150	.0042	.0182	41.50	.0209	.1509
#2	.0060	166.5	.2257	.0183	1.150	.0042	.0183	41.61	.0206	.1505
#3	.0059	166.5	.2190	.0178	1.150	.0042	.0194	41.50	.0208	.1516

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4672**	**.8473**	**429.1**	**11.81**	**39.16**	**8.808**	**.0244**	**1.084**	**.1926**	**2.956**
Stddev	.0002	.0018	3.4	.02	.23	.010	.0004	.009	.0006	.008
%RSD	.0343	.2104	.7828	.2098	.5983	.1139	1.447	.7878	.3314	.2580
#1	.4671	.8453	431.0	11.80	39.29	8.804	.0241	1.083	.1919	2.953
#2	.4674	.8488	431.0	11.79	39.30	8.820	.0248	1.076	.1930	2.951
#3	.4671	.8477	425.2	11.84	38.89	8.801	.0244	1.093	.1930	2.965

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1179**	**.0191**	**9.097**	**.8657**	**.2201**	**6.556**	**-.0034**	**.4804**	**1.516**
Stddev	.0007	.0042	.029	.0032	.0001	.005	.0016	.0011	.004
%RSD	.6066	21.97	.3215	.3732	.0397	.0729	47.39	.2229	.2528
#1	.1171	.0156	9.094	.8641	.2201	6.555	-.0035	.4795	1.514
#2	.1184	.0180	9.069	.8636	.2202	6.552	-.0017	.4801	1.513
#3	.1183	.0238	9.127	.8694	.2202	6.562	-.0050	.4816	1.520

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4614.0**	**76008.**	**7182.7**
Stddev	7.1	161.	32.1
%RSD	.15471	.21195	.44661
#1	4617.2	76036.	7172.4
#2	4618.9	76153.	7157.0
#3	4605.8	75834.	7218.6

Sample Name: L1807747-12,T Acquired: 3/10/2018 7:58:23 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**94.84**	**.1486**	**.0179**	**1.887**	**.0063**	**-.0128**	**58.41**	**.0083**	**.1114**
Stddev	.0001	.19	.0002	.0005	.001	.0001	.0010	.16	.0000	.0001
%RSD	13.73	.2052	.1099	2.948	.0702	1.683	8.007	.2811	.5353	.0929
#1	.0006	94.85	.1485	.0177	1.887	.0062	-.0118	58.49	.0082	.1113
#2	.0008	94.64	.1487	.0185	1.886	.0062	-.0138	58.22	.0083	.1114
#3	.0008	95.02	.1488	.0175	1.889	.0064	-.0129	58.52	.0083	.1115

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1823**	**2.089**	**180.3**	**9.244**	**19.45**	**3.358**	**.0243**	**12.12**	**.3717**	**2.229**
Stddev	.0004	.004	.3	.030	.15	.016	.0001	.04	.0019	.008
%RSD	.2429	.2033	.1684	.3204	.7946	.4767	.4987	.3715	.5009	.3768
#1	.1828	2.089	180.4	9.278	19.38	3.351	.0243	12.08	.3705	2.222
#2	.1819	2.085	180.0	9.226	19.35	3.346	.0242	12.12	.3707	2.227
#3	.1822	2.094	180.6	9.228	19.63	3.376	.0245	12.17	.3738	2.238

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0094**	**.0067**	**5.695**	**.9447**	**.7351**	**2.302**	**-.0070**	**.3428**	**1.795**
Stddev	.0011	.0035	.019	.0044	.0009	.006	.0011	.0010	.008
%RSD	11.73	52.32	.3361	.4605	.1233	.2708	15.60	.3020	.4686
#1	-.0081	.0029	5.690	.9428	.7355	2.304	-.0077	.3419	1.790
#2	-.0099	.0099	5.679	.9416	.7357	2.295	-.0058	.3424	1.791
#3	-.0101	.0073	5.716	.9497	.7340	2.307	-.0076	.3439	1.805

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4470.9**	**71593.**	**6652.9**
Stddev	11.8	55.	44.7
%RSD	.26313	.07661	.67180
#1	4477.5	71530.	6671.8
#2	4477.8	71617.	6685.2
#3	4457.3	71632.	6601.9

Sample Name: L1807747-13,T Acquired: 3/10/2018 8:02:53 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**132.8**	**.2829**	**.0306**	**1.756**	**.0075**	**.0064**	**35.80**	**.0151**	**.2812**
Stddev	.0003	.4	.0029	.0008	.005	.0001	.0011	.13	.0001	.0007
%RSD	6.194	.2690	1.020	2.671	.2927	1.788	16.59	.3764	.5752	.2605
#1	.0046	133.2	.2808	.0312	1.761	.0076	.0068	35.94	.0150	.2807
#2	.0047	132.5	.2862	.0308	1.751	.0073	.0052	35.67	.0152	.2809
#3	.0052	132.7	.2817	.0297	1.757	.0075	.0073	35.79	.0151	.2821

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3228**	**1.914**	**380.9**	**11.66**	**30.29**	**10.93**	**.0322**	**41.77**	**.5540**	**7.411**
Stddev	.0006	.002	1.4	.06	.11	.03	.0003	.11	.0030	.019
%RSD	.1751	.1079	.3660	.5252	.3575	.2553	1.076	.2596	.5404	.2508
#1	.3228	1.912	382.5	11.73	30.40	10.96	.0322	41.77	.5532	7.404
#2	.3222	1.916	379.7	11.62	30.27	10.91	.0319	41.66	.5514	7.396
#3	.3233	1.914	380.7	11.63	30.19	10.94	.0326	41.88	.5573	7.432

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0288**	**9.923**	**.6494**	**.5609**	**4.157**	**-.0007**	**.6600**	**4.780**
Stddev	.0022	.0023	.019	.0011	.0020	.007	.0012	.0018	.017
%RSD	198.7	7.972	.1952	.1736	.3592	.1781	174.3	.2742	.3546
#1	.0001	.0315	9.904	.6482	.5628	4.149	.0006	.6581	4.774
#2	-.0004	.0279	9.923	.6496	.5588	4.163	-.0009	.6617	4.766
#3	.0036	.0272	9.943	.6504	.5610	4.159	-.0018	.6602	4.799

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4458.3**	**71217.**	**6636.8**
Stddev	16.4	258.	15.6
%RSD	.36889	.36192	.23536
#1	4461.6	71512.	6619.4
#2	4472.8	71102.	6641.3
#3	4440.4	71036.	6649.7

Sample Name: L1807747-14,T Acquired: 3/10/2018 8:07:22 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0059**	**164.4**	**.2103**	**.0387**	**1.281**	**.0036**	**-.0268**	**136.8**	**.0156**	**.1330**
Stddev	.0005	.8	.0013	.0002	.007	.0000	.0019	.6	.0001	.0006
%RSD	7.892	.4659	.6164	.5712	.5319	.5632	7.106	.4230	.8673	.4814
#1	.0055	165.2	.2089	.0384	1.288	.0037	-.0282	137.1	.0154	.1325
#2	.0064	163.7	.2105	.0388	1.274	.0036	-.0246	136.1	.0157	.1327
#3	.0059	164.4	.2115	.0388	1.281	.0036	-.0276	137.0	.0157	.1337

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3403**	**2.958**	**310.5**	**25.85**	**68.83**	**6.504**	**.0208**	**20.72**	**.2573**	**2.411**
Stddev	.0007	.007	1.3	.08	.22	.024	.0003	.09	.0012	.003
%RSD	.2150	.2384	.4051	.2952	.3237	.3671	1.528	.4239	.4630	.1430
#1	.3401	2.963	311.4	25.93	68.58	6.525	.0205	20.81	.2563	2.410
#2	.3411	2.950	309.1	25.78	68.91	6.478	.0211	20.63	.2571	2.407
#3	.3396	2.962	311.1	25.85	69.01	6.509	.0207	20.71	.2586	2.414

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0301**	**.0162**	**9.236**	**.5269**	**.5224**	**6.708**	**-.0109**	**.6192**	**2.527**
Stddev	.0012	.0050	.030	.0015	.0024	.016	.0019	.0013	.008
%RSD	3.895	31.01	.3240	.2903	.4588	.2415	17.22	.2112	.3119
#1	-.0293	.0191	9.237	.5255	.5243	6.724	-.0096	.6207	2.521
#2	-.0297	.0191	9.206	.5266	.5197	6.692	-.0101	.6186	2.525
#3	-.0315	.0104	9.265	.5286	.5233	6.707	-.0131	.6184	2.536

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4479.7**	**71223.**	**6735.8**
Stddev	10.3	282.	23.0
%RSD	.22898	.39537	.34193
#1	4490.8	70914.	6758.3
#2	4477.6	71465.	6736.8
#3	4470.6	71289.	6712.3

Sample Name: L1807747-15,T Acquired: 3/10/2018 8:11:51 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**183.3**	**.2408**	**.0342**	**1.420**	**.0046**	**.0157**	**84.56**	**.0268**	**.1311**
Stddev	.0003	.3	.0014	.0003	.001	.0001	.0004	.12	.0001	.0001
%RSD	2.767	.1366	.5733	1.016	.0496	1.371	2.401	.1476	.3719	.0576
#1	.0107	183.6	.2421	.0346	1.421	.0045	.0156	84.43	.0267	.1311
#2	.0102	183.2	.2408	.0342	1.420	.0046	.0155	84.59	.0268	.1310
#3	.0101	183.2	.2394	.0339	1.419	.0046	.0162	84.67	.0269	.1312

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.026**	**1.001**	**341.7**	**9.743**	**51.23**	**6.770**	**.0278**	**1.866**	**.2673**	**4.838**
Stddev	.004	.002	.4	.072	.16	.006	.0004	.011	.0006	.014
%RSD	.3675	.1986	.1063	.7354	.3057	.0963	1.491	.6133	.2273	.2782
#1	1.030	1.003	342.0	9.824	51.36	6.770	.0274	1.875	.2668	4.822
#2	1.026	1.001	341.3	9.715	51.26	6.763	.0282	1.871	.2672	4.847
#3	1.022	.9995	341.9	9.689	51.06	6.776	.0277	1.853	.2680	4.844

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0860**	**.0166**	**9.891**	**.3008**	**.4433**	**5.493**	**-.0074**	**.5645**	**3.015**
Stddev	.0008	.0003	.003	.0008	.0006	.018	.0028	.0038	.010
%RSD	.9496	1.996	.0288	.2680	.1458	.3231	37.54	.6667	.3176
#1	.0869	.0166	9.893	.2999	.4435	5.507	-.0090	.5679	3.005
#2	.0854	.0163	9.891	.3009	.4426	5.499	-.0090	.5651	3.016
#3	.0856	.0169	9.887	.3015	.4438	5.473	-.0042	.5604	3.025

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4508.9**	**72195.**	**6790.8**
Stddev	5.9	379.	14.3
%RSD	.13167	.52559	.20995
#1	4513.3	71811.	6774.3
#2	4511.2	72205.	6798.4
#3	4502.2	72569.	6799.5

Sample Name: WG1094974-3,C Acquired: 3/10/2018 8:16:20 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0523**	**2.433**	**.1304**	**1.072**	**2.129**	**.0546**	**-.0027**	**64.61**	**.0542**	**.4781**
Stddev	.0006	.005	.0010	.001	.005	.0004	.0006	.01	.0002	.0014
%RSD	1.090	.2209	.8044	.0621	.2345	.7380	21.53	.0219	.3804	.2997
#1	.0530	2.436	.1316	1.071	2.134	.0547	-.0027	64.63	.0541	.4764
#2	.0521	2.427	.1300	1.071	2.124	.0542	-.0032	64.60	.0545	.4789
#3	.0519	2.437	.1296	1.072	2.129	.0550	-.0021	64.61	.0542	.4790

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2029**	**.2543**	**1.373**	**12.36**	**11.49**	**.8242**	**1.035**	**171.9**	**.4909**	**.5110**
Stddev	.0006	.0006	.006	.01	.06	.0031	.003	1.9	.0013	.0010
%RSD	.3196	.2544	.4458	.0435	.5208	.3752	.3009	1.095	.2714	.1884
#1	.2034	.2546	1.373	12.36	11.42	.8245	1.032	172.7	.4895	.5102
#2	.2022	.2536	1.367	12.35	11.52	.8209	1.038	169.8	.4911	.5108
#3	.2030	.2547	1.380	12.36	11.53	.8271	1.037	173.3	.4921	.5120

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5341**	**.1283**	**3.806**	**1.030**	**1.231**	**1.065**	**.1081**	**.5404**	**.5973**
Stddev	.0037	.0047	.004	.002	.003	.001	.0028	.0015	.0015
%RSD	.6947	3.681	.0918	.1665	.2153	.0964	2.564	.2687	.2487
#1	.5321	.1262	3.810	1.029	1.234	1.064	.1051	.5390	.5958
#2	.5318	.1337	3.805	1.029	1.229	1.065	.1090	.5419	.5973
#3	.5383	.1250	3.803	1.032	1.230	1.066	.1104	.5402	.5988

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3783.2**	**60111.**	**5603.6**
Stddev	5.4	139.	33.8
%RSD	.14377	.23054	.60320
#1	3789.2	60223.	5641.0
#2	3778.7	59956.	5594.6
#3	3781.7	60154.	5575.3

Sample Name: WG1094974-5,C Acquired: 3/10/2018 8:20:53 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0517**	**2.422**	**.1312**	**1.052**	**2.129**	**.0549**	**-.0023**	**63.75**	**.0539**	**.4764**
Stddev	.0009	.003	.0012	.002	.005	.0000	.0028	.19	.0001	.0005
%RSD	1.663	.1138	.8786	.1410	.2429	.0639	125.3	.2973	.1670	.1049
#1	.0521	2.420	.1320	1.054	2.127	.0548	-.0002	63.58	.0539	.4769
#2	.0523	2.425	.1317	1.051	2.135	.0549	-.0055	63.96	.0540	.4762
#3	.0507	2.421	.1299	1.052	2.126	.0549	-.0011	63.72	.0538	.4760

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2029**	**.2539**	**1.360**	**12.16**	**11.56**	**.8305**	**1.013**	**169.0**	**.4878**	**.5090**
Stddev	.0013	.0001	.007	.07	.09	.0029	.004	.5	.0018	.0025
%RSD	.6269	.0428	.4828	.5519	.7727	.3534	.3803	.2784	.3675	.4874
#1	.2021	.2539	1.354	12.19	11.57	.8290	1.017	169.1	.4898	.5115
#2	.2044	.2539	1.367	12.21	11.64	.8339	1.011	169.4	.4863	.5090
#3	.2023	.2537	1.360	12.08	11.46	.8287	1.011	168.5	.4874	.5066

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5279**	**.1290**	**3.280**	**1.004**	**1.217**	**1.047**	**.1102**	**.5409**	**.5964**
Stddev	.0042	.0005	.009	.002	.003	.002	.0011	.0028	.0006
%RSD	.8033	.3998	.2641	.1954	.2511	.1424	1.020	.5164	.1003
#1	.5328	.1284	3.290	1.006	1.216	1.049	.1115	.5411	.5959
#2	.5254	.1294	3.277	1.004	1.221	1.047	.1096	.5435	.5964
#3	.5255	.1293	3.274	1.002	1.215	1.046	.1095	.5379	.5971

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3797.4**	**60292.**	**5534.6**
Stddev	13.1	140.	31.4
%RSD	.34444	.23246	.56758
#1	3812.4	60377.	5532.8
#2	3791.3	60130.	5504.2
#3	3788.5	60369.	5567.0

Sample Name: CCV Acquired: 3/10/2018 8:25:22 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5150**	F **.5863**	**.5182**	**.4993**	**.5171**	**.5299**	**.4838**	**.5463**	**.5028**	**.5005**
Stddev	.0026	.0057	.0007	.0012	.0018	.0014	.0006	.0109	.0011	.0021
%RSD	.4975	.9785	.1340	.2402	.3411	.2641	.1298	1.988	.2216	.4245
#1	.5172	.5834	.5185	.4992	.5151	.5283	.4842	.5584	.5017	.4986
#2	.5122	.5929	.5175	.4981	.5182	.5307	.4830	.5375	.5027	.5000
#3	.5156	.5827	.5188	.5005	.5180	.5308	.4840	.5428	.5040	.5028
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5524								
Low Limit		.4476								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5069**	**.5012**	F **.6133**	**5.495**	**.5342**	F **.5792**	**.5034**	**10.99**	**.5024**	**.5105**
Stddev	.0014	.0008	.0010	.011	.0025	.0017	.0018	.05	.0012	.0020
%RSD	.2766	.1532	.1634	.2055	.4602	.2899	.3601	.4946	.2463	.3972
#1	.5073	.5004	.6129	5.498	.5327	.5772	.5017	10.94	.5010	.5101
#2	.5081	.5015	.6126	5.482	.5371	.5800	.5032	10.99	.5028	.5086
#3	.5054	.5018	.6145	5.504	.5329	.5803	.5053	11.05	.5034	.5126
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.5524			.5524				
Low Limit			.4476			.4476				

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5174**	**.5013**	**5.357**	**.5087**	**.4889**	**.5028**	**.4995**	**.5273**	**.4964**
Stddev	.0014	.0030	.014	.0013	.0015	.0001	.0016	.0008	.0013
%RSD	.2639	.5939	.2573	.2473	.3136	.0190	.3257	.1544	.2586
#1	.5183	.4982	5.345	.5075	.4872	.5029	.5013	.5277	.4952
#2	.5159	.5014	5.354	.5087	.4902	.5027	.4983	.5278	.4962
#3	.5181	.5042	5.372	.5100	.4892	.5029	.4987	.5264	.4977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3943.1**	**64402.**	**5749.1**
Stddev	2.7	277.	30.6
%RSD	.06832	.42959	.53305
#1	3945.5	64416.	5781.5
#2	3943.5	64672.	5720.6
#3	3940.2	64119.	5745.0

Sample Name: CCB Acquired: 3/10/2018 8:29:51 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0045**	**-.0006**	**.0005**	**.0002**	**.0001**	**.0003**	**.0040**	**.0001**	**.0001**
Stddev	.0008	.0048	.0010	.0003	.0001	.0000	.0010	.0012	.0001	.0000
%RSD	495.4	106.3	168.9	59.16	74.03	16.30	349.4	30.81	160.2	23.50
#1	-.0008	-.0000	-.0016	.0002	.0000	.0001	-.0004	.0033	.0002	.0001
#2	.0007	.0095	-.0006	.0005	.0002	.0001	.0015	.0033	.0000	.0001
#3	.0006	.0040	.0004	.0007	.0003	.0002	-.0002	.0054	-.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0092**	**.0126**	**.0007**	**-.0005**	**.0011**	**.0215**	**.0005**	**-.0001**
Stddev	.0003	.0004	.0019	.0267	.0033	.0007	.0003	.0065	.0004	.0009
%RSD	173.3	303.1	20.74	211.1	486.6	150.7	24.60	30.23	78.93	1266.
#1	.0001	.0005	.0094	.0035	-.0022	.0001	.0013	.0146	.0008	-.0006
#2	.0006	.0002	.0109	-.0083	.0043	-.0002	.0011	.0275	.0006	.0010
#3	-.0001	-.0003	.0071	.0427	-.0001	-.0012	.0008	.0225	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0019**	**.0256**	**-.0000**	**.0002**	**.0005**	**.0007**	**.0004**	**.0006**
Stddev	.0021	.0009	.0025	.0004	.0001	.0004	.0018	.0000	.0001
%RSD	142.9	46.25	9.874	1682.	70.94	70.88	242.3	3.690	22.14
#1	-.0001	.0017	.0277	.0000	.0001	.0007	.0016	.0005	.0007
#2	.0038	.0028	.0264	.0004	.0001	.0001	-.0013	.0004	.0006
#3	.0006	.0011	.0228	-.0004	.0004	.0007	.0019	.0004	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3968.8**	**64987.**	**5833.2**
Stddev	12.9	242.	85.6
%RSD	.32628	.37240	1.4671
#1	3983.6	64784.	5845.4
#2	3959.6	64923.	5912.0
#3	3963.2	65255.	5742.1

Sample Name: L1807747-16,T Acquired: 3/10/2018 8:34:34 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060**	**203.3**	**.2899**	**.0407**	**1.246**	**.0038**	**.0207**	**45.66**	**.0227**	**.1568**
Stddev	.0002	.5	.0014	.0016	.005	.0003	.0014	.12	.0001	.0002
%RSD	3.525	.2218	.4869	3.879	.3693	7.700	6.857	.2674	.3880	.1024
#1	.0058	203.3	.2909	.0411	1.244	.0037	.0216	45.64	.0226	.1568
#2	.0060	202.9	.2883	.0389	1.243	.0036	.0214	45.55	.0227	.1567
#3	.0062	203.8	.2905	.0420	1.252	.0042	.0191	45.79	.0228	.1570

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6721**	**.9459**	**398.7**	**14.27**	**51.40**	**8.687**	**.0347**	**7.552**	**.2123**	**3.615**
Stddev	.0019	.0015	.5	.03	.30	.006	.0001	.013	.0003	.004
%RSD	.2765	.1556	.1314	.2321	.5876	.0700	.4259	.1653	.1377	.1033
#1	.6707	.9461	398.9	14.27	51.62	8.691	.0349	7.550	.2127	3.612
#2	.6715	.9444	398.2	14.23	51.52	8.680	.0347	7.541	.2121	3.615
#3	.6742	.9473	399.2	14.30	51.06	8.690	.0346	7.566	.2123	3.619

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0546**	**.0238**	**12.75**	**.0940**	**.7458**	**7.393**	**-.0076**	**.6107**	**2.148**
Stddev	.0006	.0029	.03	.0022	.0026	.027	.0019	.0015	.005
%RSD	1.176	12.26	.2400	2.340	.3538	.3612	25.13	.2398	.2166
#1	.0543	.0229	12.73	.0946	.7452	7.379	-.0088	.6094	2.146
#2	.0542	.0270	12.74	.0915	.7435	7.424	-.0054	.6104	2.145
#3	.0554	.0214	12.79	.0958	.7487	7.377	-.0085	.6123	2.153

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4511.2**	**74402.**	**7127.1**
Stddev	16.8	340.	38.2
%RSD	.37173	.45744	.53613
#1	4508.8	74743.	7105.0
#2	4529.1	74400.	7105.0
#3	4495.8	74062.	7171.2

Sample Name: L1807747-17,T Acquired: 3/10/2018 8:39:13 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0130**	**114.0**	**.2348**	**.2385**	**13.09**	**.0062**	**.0546**	**41.59**	**.0831**	**.2228**
Stddev	.0004	.1	.0051	.0007	.19	.0000	.0032	.07	.0001	.0002
%RSD	2.868	.0772	2.176	.2793	1.460	.1617	5.898	.1581	.1152	.0873
#1	.0127	114.1	.2407	.2378	12.87	.0062	.0519	41.52	.0830	.2227
#2	.0128	114.1	.2319	.2388	13.22	.0062	.0581	41.60	.0830	.2230
#3	.0134	113.9	.2317	.2391	13.18	.0062	.0536	41.65	.0832	.2226

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.57**	**9.066**	**1119.**	**7.575**	**29.45**	**10.44**	**.6261**	**11.22**	**9.813**	**6.513**
Stddev	.01	.017	1.	.019	.14	.01	.0016	.06	.016	.020
%RSD	.0678	.1903	.1171	.2478	.4828	.1263	.2549	.4904	.1643	.3020
#1	10.56	9.075	1120.	7.593	29.28	10.44	.6255	11.23	9.798	6.499
#2	10.58	9.076	1117.	7.576	29.51	10.46	.6249	11.27	9.811	6.504
#3	10.57	9.046	1120.	7.555	29.54	10.44	.6279	11.16	9.830	6.536

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0172**	**.0535**	**13.30**	**1.016**	**.2997**	**4.100**	**.0126**	**.2535**	**15.58**
Stddev	.0005	.0061	.02	.004	.0003	.004	.0013	.0002	.01
%RSD	2.696	11.37	.1342	.3730	.1062	.1049	10.50	.0767	.0947
#1	-.0175	.0593	13.29	1.012	.2994	4.096	.0118	.2537	15.57
#2	-.0175	.0540	13.28	1.015	.2996	4.105	.0141	.2536	15.59
#3	-.0167	.0472	13.32	1.020	.3000	4.100	.0119	.2533	15.59

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4040.5**	**68436.**	**6622.5**
Stddev	6.6	101.	34.9
%RSD	.16313	.14786	.52756
#1	4047.6	68500.	6662.9
#2	4034.5	68319.	6601.6
#3	4039.5	68489.	6603.2

Sample Name: L1807747-18,T Acquired: 3/10/2018 8:44:05 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**152.7**	**.1147**	**.0074**	**.4344**	**.0020**	**-.0003**	**48.99**	**.0102**	**.1779**
Stddev	.0007	.2	.0019	.0006	.0003	.0000	.0025	.03	.0000	.0006
%RSD	94.09	.1002	1.700	7.923	.0752	1.642	913.6	.0612	.4410	.3290
#1	-.0008	152.6	.1150	.0070	.4341	.0021	.0024	48.99	.0102	.1777
#2	-.0000	152.6	.1127	.0080	.4347	.0021	-.0006	48.96	.0101	.1774
#3	-.0013	152.9	.1165	.0071	.4345	.0020	-.0026	49.02	.0102	.1785

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2368**	**.4928**	**333.2**	**24.25**	**73.27**	**7.625**	**.0082**	**36.67**	**.1944**	**.1826**
Stddev	.0005	.0005	.1	.03	.42	.006	.0002	.02	.0006	.0021
%RSD	.2125	.1011	.0229	.1126	.5724	.0804	2.860	.0568	.3206	1.160
#1	.2362	.4932	333.2	24.27	73.57	7.619	.0085	36.69	.1939	.1839
#2	.2371	.4929	333.2	24.22	72.79	7.625	.0081	36.65	.1942	.1802
#3	.2371	.4922	333.3	24.27	73.44	7.631	.0080	36.68	.1951	.1838

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0398**	**.0073**	**8.124**	**-.0043**	**.1263**	**7.577**	**-.0091**	**.5055**	**.7912**
Stddev	.0024	.0041	.006	.0012	.0004	.045	.0007	.0015	.0011
%RSD	6.011	55.96	.0758	28.99	.3540	.5893	7.275	.3034	.1404
#1	-.0371	.0027	8.123	-.0057	.1260	7.554	-.0087	.5062	.7906
#2	-.0409	.0087	8.119	-.0033	.1268	7.548	-.0087	.5038	.7905
#3	-.0415	.0105	8.131	-.0039	.1261	7.628	-.0098	.5066	.7925

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4530.0**	**72381.**	**6838.1**
Stddev	4.3	189.	39.7
%RSD	.09387	.26109	.58069
#1	4530.8	72299.	6808.2
#2	4533.8	72597.	6883.2
#3	4525.4	72247.	6823.0

Sample Name: L1807747-19,T Acquired: 3/10/2018 8:48:42 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**182.7**	**.2662**	**.0218**	**1.543**	**.0071**	**.0096**	**55.33**	**.0158**	**.1574**
Stddev	.0006	1.0	.0029	.0004	.007	.0001	.0005	.30	.0001	.0001
%RSD	16.83	.5234	1.107	1.968	.4406	1.362	4.994	.5381	.7397	.0934
#1	.0027	181.8	.2696	.0214	1.537	.0072	.0098	55.00	.0159	.1573
#2	.0036	182.5	.2647	.0219	1.541	.0070	.0091	55.43	.0157	.1573
#3	.0036	183.7	.2643	.0222	1.551	.0070	.0100	55.57	.0158	.1576

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6606**	**1.135**	**340.7**	**16.54**	**60.58**	**7.734**	**.0228**	**60.15**	**.3245**	**4.969**
Stddev	.0012	.001	2.1	.09	.60	.039	.0002	.31	.0011	.007
%RSD	.1826	.0940	.6243	.5600	.9952	.5093	.9946	.5149	.3291	.1458
#1	.6616	1.135	338.6	16.47	60.05	7.700	.0225	59.96	.3237	4.970
#2	.6609	1.136	340.8	16.51	60.46	7.725	.0230	59.99	.3240	4.961
#3	.6593	1.134	342.8	16.65	61.24	7.777	.0228	60.51	.3257	4.976

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043**	**.0203**	**9.671**	**.0908**	**.4639**	**5.170**	**-.0044**	**.4910**	**1.837**
Stddev	.0012	.0019	.028	.0005	.0022	.004	.0014	.0012	.004
%RSD	27.33	9.540	.2910	.5745	.4803	.0872	30.76	.2492	.2212
#1	.0053	.0207	9.664	.0913	.4619	5.167	-.0060	.4896	1.837
#2	.0030	.0221	9.647	.0903	.4634	5.176	-.0036	.4917	1.833
#3	.0045	.0182	9.702	.0909	.4663	5.169	-.0037	.4917	1.841

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4436.0**	**70523.**	**6738.5**
Stddev	10.7	294.	65.8
%RSD	.24173	.41709	.97669
#1	4435.7	70619.	6806.3
#2	4446.8	70193.	6734.5
#3	4425.4	70757.	6674.8

Sample Name: XXL1807867-01,T Acquired: 3/10/2018 8:53:10 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0670**	**.0010**	**.0187**	**.0212**	**-.0000**	**-.0010**	**34.07**	**-.0001**	**.0003**
Stddev	.0007	.0042	.0020	.0003	.0002	.0000	.0005	.08	.0000	.0001
%RSD	735.7	6.225	195.6	1.708	1.166	92.06	50.53	.2331	42.26	45.32
#1	-.0002	.0681	.0033	.0190	.0210	-.0000	-.0013	34.05	-.0001	.0001
#2	-.0007	.0705	.0004	.0184	.0214	-.0000	-.0004	34.16	-.0000	.0003
#3	.0007	.0624	-.0006	.0188	.0214	-.0001	-.0012	34.00	-.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0022**	**.1096**	**1.643**	**8.800**	**.0039**	**.0010**	**12.35**	**.0009**	**-.0008**
Stddev	.0002	.0002	.0008	.021	.048	.0006	.0002	.09	.0001	.0013
%RSD	67.75	8.549	.7572	1.273	.5464	15.33	20.79	.7257	10.75	169.0
#1	.0001	.0022	.1104	1.642	8.777	.0032	.0009	12.24	.0008	-.0005
#2	.0004	.0024	.1087	1.623	8.855	.0040	.0009	12.40	.0010	.0004
#3	.0006	.0021	.1097	1.665	8.767	.0044	.0013	12.40	.0009	-.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0003**	**.6119**	**-.0004**	**.1415**	**.0033**	**.0001**	**.0003**	**.0035**
Stddev	.0015	.0048	.0061	.0011	.0001	.0002	.0006	.0001	.0000
%RSD	3713.	1521.	.9991	276.0	.0639	5.282	610.6	24.16	1.089
#1	.0017	-.0054	.6183	-.0014	.1416	.0033	.0007	.0004	.0035
#2	-.0013	.0042	.6114	.0008	.1414	.0035	.0002	.0004	.0036
#3	-.0002	.0003	.6061	-.0006	.1416	.0031	-.0005	.0002	.0036

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4060.6**	**65052.**	**5889.2**
Stddev	17.2	88.	25.2
%RSD	.42287	.13492	.42787
#1	4077.2	65073.	5898.5
#2	4061.8	64955.	5860.7
#3	4042.9	65126.	5908.5

Sample Name: XXL1807867-02,T Acquired: 3/10/2018 8:57:48 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.3010**	**.0001**	**.0170**	**.0254**	**-.0001**	**-.0008**	**35.65**	**.0001**	**.0007**
Stddev	.0005	.0016	.0025	.0007	.0001	.0001	.0005	.10	.0000	.0000
%RSD	115.0	.5398	2392.	4.104	.5017	97.97	65.62	.2772	33.10	6.619
#1	-.0004	.3020	-.0017	.0174	.0253	.0000	-.0006	35.77	.0001	.0007
#2	-.0000	.3019	.0030	.0174	.0255	-.0001	-.0014	35.59	.0001	.0006
#3	-.0011	.2991	-.0010	.0162	.0254	-.0002	-.0004	35.61	.0001	.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0034**	**4.071**	**2.988**	**6.175**	**.1261**	**.0005**	**150.1**	**.0012**	**.0038**
Stddev	.0005	.0003	.011	.020	.009	.0003	.0002	.6	.0003	.0010
%RSD	32.25	9.219	.2702	.6830	.1464	.2268	44.23	.4320	23.81	27.64
#1	.0014	.0034	4.075	3.004	6.184	.1260	.0003	150.8	.0015	.0047
#2	.0010	.0038	4.079	2.994	6.175	.1258	.0007	149.5	.0009	.0027
#3	.0019	.0031	4.058	2.965	6.166	.1264	.0005	150.0	.0012	.0040

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0017**	**-.0005**	**3.148**	**-.0002**	**.1054**	**.0073**	**.0011**	**.0012**	**.0233**
Stddev	.0015	.0019	.002	.0007	.0004	.0002	.0015	.0002	.0001
%RSD	88.64	358.5	.0655	325.0	.3925	2.276	136.0	18.76	.2385
#1	-.0034	.0004	3.149	-.0001	.1059	.0074	.0026	.0014	.0234
#2	-.0004	-.0027	3.146	-.0010	.1053	.0074	-.0004	.0011	.0233
#3	-.0013	.0007	3.150	.0004	.1050	.0072	.0012	.0010	.0233

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3970.6**	**62928.**	**5884.2**
Stddev	11.4	63.	3.6
%RSD	.28663	.09998	.06083
#1	3983.7	62958.	5883.3
#2	3963.2	62856.	5888.2
#3	3964.9	62971.	5881.2

Sample Name: XXL1807655-01,T Acquired: 3/10/2018 9:02:24 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0792**	**.0019**	**.1339**	**.0347**	**-.0001**	**.0012**	**93.66**	**-.0001**	**.0005**
Stddev	.0008	.0039	.0010	.0005	.0001	.0001	.0014	.24	.0000	.0001
%RSD	323.8	4.948	50.85	.3589	.2622	71.03	117.1	.2608	41.06	14.44
#1	.0011	.0749	.0008	.1334	.0347	-.0002	.0024	93.78	-.0000	.0004
#2	.0000	.0827	.0025	.1344	.0346	-.0000	.0013	93.82	-.0001	.0004
#3	-.0004	.0799	.0025	.1338	.0347	-.0001	-.0003	93.38	-.0001	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0071**	**.1839**	**5.957**	**15.18**	**.0970**	**.0018**	**157.6**	**.0011**	**.0018**
Stddev	.0002	.0003	.0035	.071	.08	.0007	.0001	1.0	.0005	.0011
%RSD	18.74	4.613	1.922	1.185	.5114	.7463	5.710	.6171	41.99	60.69
#1	.0010	.0069	.1873	5.912	15.22	.0969	.0017	158.2	.0015	.0008
#2	.0013	.0069	.1803	6.038	15.23	.0977	.0019	158.1	.0006	.0016
#3	.0009	.0075	.1842	5.921	15.09	.0963	.0017	156.5	.0011	.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0030**	**4.694**	**-.0009**	**.3304**	**.0049**	**.0009**	**.0014**	**.0100**
Stddev	.0010	.0038	.023	.0005	.0004	.0006	.0027	.0000	.0001
%RSD	230.1	128.9	.4993	63.46	.1352	11.52	305.7	2.737	.8200
#1	-.0016	.0041	4.680	-.0013	.3306	.0045	.0039	.0013	.0100
#2	.0003	-.0013	4.680	-.0010	.3299	.0056	-.0009	.0014	.0100
#3	.0000	.0062	4.721	-.0003	.3307	.0048	-.0005	.0014	.0099

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3892.7**	**62431.**	**5836.4**
Stddev	1.8	150.	34.4
%RSD	.04586	.24050	.58962
#1	3893.3	62418.	5820.3
#2	3894.1	62287.	5812.9
#3	3890.7	62587.	5875.9

Sample Name: WG1094000-1,C Acquired: 3/10/2018 9:07:05 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 3/14

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0128**	**-.0003**	**.0045**	**.0014**	**-.0002**	**-.0005**	**.3215**	**-.0001**	**.0003**
Stddev	.0008	.0060	.0049	.0003	.0002	.0002	.0009	.0028	.0001	.0002
%RSD	2100.	46.60	1529.	5.976	13.23	108.4	177.0	.8704	75.74	50.10
#1	.0009	.0062	.0006	.0048	.0013	.0001	-.0011	.3183	-.0001	.0003
#2	-.0007	.0179	-.0056	.0042	.0013	-.0003	.0006	.3232	-.0000	.0005
#3	-.0001	.0143	.0041	.0044	.0016	-.0003	-.0010	.3230	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0006**	**.0074**	**.0432**	**.1020**	**.0001**	**.0009**	**149.9**	**.0003**	**-.0009**
Stddev	.0008	.0001	.0020	.0418	.0019	.0001	.0002	.7	.0001	.0014
%RSD	1123.	18.86	26.57	96.79	1.907	114.7	27.24	.4594	21.48	155.2
#1	.0010	.0008	.0077	-.0025	.1042	.0000	.0011	150.5	.0002	-.0023
#2	-.0002	.0006	.0092	.0795	.1013	.0001	.0007	149.9	.0003	.0006
#3	-.0006	.0005	.0053	.0525	.1004	.0002	.0008	149.2	.0002	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0013**	**.0015**	**.0431**	**.0011**	**.0005**	**.0011**	**.0004**	**.0004**	**.0049**
Stddev	.0016	.0013	.0008	.0007	.0003	.0007	.0005	.0001	.0000
%RSD	119.3	87.66	1.952	63.40	63.57	62.37	129.1	31.64	1.022
#1	-.0028	.0000	.0439	.0016	.0001	.0008	.0009	.0002	.0048
#2	-.0016	.0025	.0422	.0003	.0007	.0006	.0004	.0005	.0049
#3	.0004	.0019	.0433	.0013	.0007	.0019	-.0001	.0004	.0049

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3799.2**	**61798.**	**5764.6**
Stddev	1.5	216.	35.8
%RSD	.03910	.34897	.62170
#1	3797.5	61719.	5737.7
#2	3800.3	61633.	5750.9
#3	3799.7	62042.	5805.3

Sample Name: WG1094000-2,C Acquired: 3/10/2018 9:11:45 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0468**	**2.209**	**.1256**	**1.055**	**1.918**	**.0518**	**-.0026**	**11.44**	**.0522**	**.4694**
Stddev	.0005	.012	.0043	.002	.003	.0001	.0012	.05	.0002	.0013
%RSD	1.045	.5381	3.437	.2175	.1788	.1872	48.30	.4073	.3486	.2864
#1	.0472	2.196	.1228	1.053	1.914	.0518	-.0040	11.38	.0522	.4685
#2	.0463	2.213	.1234	1.055	1.919	.0516	-.0019	11.47	.0520	.4689
#3	.0470	2.218	.1306	1.058	1.920	.0518	-.0018	11.46	.0524	.4710

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1970**	**.2483**	**1.223**	**10.57**	**9.560**	**.5361**	**1.006**	**152.1**	**.4721**	**.4938**
Stddev	.0009	.0002	.002	.04	.039	.0017	.003	1.0	.0008	.0012
%RSD	.4807	.0724	.1500	.3359	.4088	.3198	.2784	.6770	.1748	.2429
#1	.1962	.2485	1.224	10.58	9.575	.5342	1.005	153.3	.4723	.4947
#2	.1968	.2482	1.225	10.53	9.589	.5365	1.004	151.6	.4712	.4924
#3	.1981	.2481	1.221	10.60	9.516	.5375	1.009	151.4	.4728	.4942

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5073**	**.1255**	**.8087**	**1.004**	**.9776**	**1.035**	**.1066**	**.5070**	**.5044**
Stddev	.0022	.0045	.0015	.001	.0019	.002	.0016	.0003	.0007
%RSD	.4349	3.553	.1851	.0556	.1916	.1467	1.545	.0591	.1352
#1	.5085	.1221	.8084	1.004	.9756	1.034	.1082	.5072	.5049
#2	.5048	.1240	.8074	1.004	.9792	1.034	.1067	.5067	.5036
#3	.5087	.1306	.8104	1.003	.9781	1.037	.1049	.5072	.5046

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3798.9**	**61999.**	**5889.3**
Stddev	5.0	275.	19.0
%RSD	.13110	.44302	.32333
#1	3797.3	62316.	5888.1
#2	3804.4	61856.	5870.9
#3	3794.8	61827.	5908.9

Sample Name: L1806872-01,C Acquired: 3/10/2018 9:16:18 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.2674**	**.0002**	**.0469**	**.0178**	**.0000**	**.0003**	**55.56**	**.0054**	**.0021**
Stddev	.0004	.0079	.0021	.0004	.0001	.0000	.0010	.38	.0000	.0002
%RSD	64.31	2.951	993.0	.8629	.6343	160.4	294.0	.6835	.8150	8.521
#1	-.0010	.2664	.0001	.0466	.0178	.0001	.0003	55.23	.0054	.0021
#2	-.0008	.2757	.0023	.0473	.0180	-.0000	-.0006	55.98	.0053	.0019
#3	-.0002	.2600	-.0019	.0467	.0178	.0000	.0014	55.47	.0054	.0023

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0147**	**.1056**	**.0913**	**2.992**	**3.838**	**.1238**	**.0057**	**169.3**	**.0147**	**.0026**
Stddev	.0002	.0003	.0001	.031	.051	.0007	.0001	1.6	.0001	.0006
%RSD	1.216	.3015	.1076	1.042	1.319	.5581	1.476	.9387	.4610	22.66
#1	.0145	.1053	.0912	2.984	3.780	.1230	.0057	167.5	.0147	.0030
#2	.0147	.1055	.0912	3.026	3.874	.1244	.0056	170.3	.0148	.0029
#3	.0149	.1060	.0914	2.966	3.859	.1240	.0058	170.2	.0147	.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**.0017**	**7.974**	**.0023**	**.1763**	**.0078**	**-.0014**	**.0061**	**.2540**
Stddev	.0007	.0031	.013	.0005	.0006	.0002	.0026	.0002	.0004
%RSD	42.32	181.1	.1636	20.30	.3153	2.169	178.3	3.122	.1433
#1	.0013	-.0008	7.984	.0028	.1761	.0077	-.0031	.0059	.2539
#2	.0013	.0052	7.959	.0022	.1770	.0080	.0015	.0063	.2544
#3	.0026	.0007	7.978	.0019	.1760	.0077	-.0027	.0060	.2537

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3806.1**	**60853.**	**5739.3**
Stddev	2.1	145.	55.4
%RSD	.05635	.23755	.96463
#1	3807.3	60981.	5802.2
#2	3807.4	60881.	5697.9
#3	3803.6	60696.	5717.8

Sample Name: CCV Acquired: 3/10/2018 9:21:04 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5307**	F **.5851**	**.5199**	**.4957**	**.5246**	**.5493**	**.4801**	F **.5578**	**.5057**	**.4970**
Stddev	.0019	.0102	.0028	.0010	.0020	.0024	.0008	.0026	.0005	.0005
%RSD	.3627	1.737	.5333	.2006	.3723	.4377	.1708	.4747	.1049	.1033
#1	.5287	.5736	.5166	.4965	.5226	.5473	.4796	.5577	.5056	.4965
#2	.5326	.5930	.5214	.4946	.5249	.5485	.4795	.5604	.5052	.4970
#3	.5308	.5886	.5215	.4959	.5264	.5519	.4810	.5551	.5063	.4975
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit		.5524						.5524		
Low Limit		.4476						.4476		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5064**	**.4991**	F **.6300**	F **5.711**	**.5407**	F **.6101**	**.5045**	F **11.52**	**.5046**	**.5119**
Stddev	.0011	.0010	.0054	.033	.0056	.0027	.0008	.08	.0010	.0027
%RSD	.2103	.1988	.8496	.5804	1.036	.4385	.1556	.7369	.1988	.5241
#1	.5074	.4982	.6348	5.673	.5385	.6079	.5041	11.46	.5038	.5129
#2	.5053	.4989	.6309	5.726	.5366	.6094	.5039	11.48	.5042	.5089
#3	.5064	.5001	.6242	5.735	.5471	.6131	.5054	11.62	.5057	.5140
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.5524	5.524		.5524		11.05		
Low Limit			.4476	4.476		.4476		8.952		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5165**	**.4945**	**5.347**	**.5099**	**.4909**	**.5024**	**.4999**	**.5340**	**.4943**
Stddev	.0017	.0019	.011	.0028	.0008	.0006	.0020	.0015	.0003
%RSD	.3363	.3824	.1971	.5507	.1685	.1136	.3967	.2776	.0580
#1	.5175	.4939	5.339	.5082	.4902	.5023	.4976	.5324	.4940
#2	.5145	.4930	5.342	.5084	.4918	.5030	.5006	.5353	.4943
#3	.5175	.4966	5.359	.5131	.4908	.5018	.5014	.5345	.4946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3964.1**	**64123.**	**5681.5**
Stddev	2.9	227.	21.1
%RSD	.07192	.35431	.37203
#1	3962.9	64308.	5692.2
#2	3967.3	63869.	5695.1
#3	3961.9	64190.	5657.1

Sample Name: CCB Acquired: 3/10/2018 9:25:33 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0037**	**-.0008**	**.0012**	**.0001**	**.0001**	**.0013**	**.0034**	**.0002**	**.0003**
Stddev	.0005	.0120	.0018	.0003	.0004	.0001	.0010	.0074	.0000	.0003
%RSD	6062.	326.6	231.6	22.96	403.3	68.14	79.12	218.9	4.013	107.2
#1	.0002	-.0091	.0013	.0012	.0001	.0000	.0005	-.0002	.0002	.0002
#2	-.0006	.0054	-.0017	.0009	-.0003	.0002	.0010	-.0016	.0002	.0000
#3	.0004	.0148	-.0019	.0014	.0005	.0001	.0025	.0120	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0008**	**.0047**	**.0487**	**.0003**	**.0001**	**.0008**	**.0100**	**.0003**	**-.0006**
Stddev	.0003	.0003	.0020	.0216	.0023	.0007	.0002	.0173	.0002	.0014
%RSD	120.4	41.78	42.81	44.43	663.8	529.5	20.12	172.9	71.65	222.8
#1	.0001	.0011	.0028	.0494	.0015	.0009	.0010	-.0038	.0005	-.0001
#2	.0001	.0006	.0067	.0267	-.0023	.0000	.0008	.0044	.0001	-.0022
#3	.0006	.0005	.0045	.0699	.0018	-.0005	.0006	.0294	.0005	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**.0002**	**.0206**	**.0011**	**.0002**	**.0001**	**-.0015**	**.0003**	**.0011**
Stddev	.0015	.0015	.0016	.0007	.0001	.0002	.0016	.0003	.0002
%RSD	96.32	668.6	7.611	58.59	54.91	196.6	105.9	110.3	14.14
#1	.0032	-.0013	.0220	.0018	.0001	.0003	.0003	.0004	.0010
#2	.0008	.0018	.0189	.0012	.0003	.0001	-.0025	.0005	.0013
#3	.0005	.0002	.0208	.0004	.0002	-.0001	-.0025	-.0001	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3983.8**	**63780.**	**5667.4**
Stddev	10.8	79.	56.4
%RSD	.27049	.12395	.99434
#1	3990.6	63696.	5603.8
#2	3989.3	63792.	5711.3
#3	3971.3	63852.	5687.1

Sample Name: Std 0 Acquired: 3/10/2018 9:43:39 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0003**	**-.0004**	**.0009**	**-.0030**	**.0034**	**.0008**	**-.0000**	**.0014**	**.0006**
Stddev	.0002	.0011	.0002	.0003	.0018	.0004	.0003	.0003	.0002	.0001
%RSD	791.7	378.2	45.49	35.16	60.74	11.45	32.93	5664.	16.79	8.303
#1	.0001	-.0010	-.0002	.0011	-.0044	.0036	.0008	-.0000	.0012	.0006
#2	.0002	.0006	-.0004	.0005	-.0010	.0030	.0010	.0003	.0013	.0006
#3	-.0002	.0013	-.0005	.0011	-.0036	.0037	.0005	-.0003	.0016	.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0003**	**.0043**	**.0003**	**-.0008**	**.0007**	**-.0003**	**.0000**	**-.0118**	**.0008**	**-.0025**
Stddev	.0001	.0001	.0003	.0015	.0006	.0002	.0001	.0012	.0005	.0004
%RSD	20.08	3.307	88.16	175.2	85.41	65.02	437.1	10.57	61.37	17.39
#1	-.0002	.0041	.0002	-.0025	.0000	-.0001	.0000	-.0107	.0002	-.0021
#2	-.0003	.0042	.0006	-.0005	.0012	-.0004	-.0001	-.0115	.0010	-.0029
#3	-.0003	.0044	.0001	.0004	.0008	-.0003	.0001	-.0131	.0012	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0008**	**-.0001**	**.0043**	**-.0001**	**-.0088**	**-.0008**	**-.0004**	**.0000**	**.0008**
Stddev	.0002	.0001	.0001	.0001	.0002	.0001	.0001	.0001	.0001
%RSD	21.74	166.0	2.966	56.10	1.795	14.12	30.84	1355.	18.63
#1	-.0007	-.0001	.0044	-.0001	-.0089	-.0007	-.0006	-.0001	.0008
#2	-.0006	-.0002	.0041	-.0002	-.0089	-.0009	-.0004	.0001	.0006
#3	-.0010	.0001	.0042	-.0000	-.0086	-.0007	-.0003	.0000	.0009

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3966.3**	**64177.**	**5663.6**
Stddev	2.8	184.	14.9
%RSD	.07174	.28745	.26333
#1	3965.0	64385.	5680.5
#2	3969.6	64036.	5657.6
#3	3964.4	64109.	5652.5

Sample Name: ICAL Acquired: 3/10/2018 9:52:34 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3216**	**.1355**	**.0725**	**.4198**	**7.654**	**3.887**	**.1901**	**.0708**	**3.728**	**1.199**
Stddev	.0007	.0011	.0001	.0009	.052	.023	.0002	.0007	.008	.003
%RSD	.2097	.8453	.1317	.2255	.6857	.5867	.1267	.9853	.2056	.2161
#1	.3212	.1366	.0725	.4192	7.710	3.912	.1899	.0714	3.725	1.197
#2	.3212	.1355	.0724	.4193	7.606	3.867	.1900	.0700	3.722	1.198
#3	.3224	.1343	.0726	.4209	7.645	3.882	.1903	.0711	3.736	1.202

Elem	Cr2677	Cu3247	Fe2599	Mg2790	Mn2576R	Mo2020	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1896**	**.4690**	**.1016**	**.2680**	**.6416**	**.5919**	**.8175**	**.2874**	**.0940**	**.0687**
Stddev	.0005	.0008	.0005	.0006	.0041	.0017	.0022	.0003	.0006	.0003
%RSD	.2540	.1783	.4658	.2388	.6341	.2909	.2679	.0961	.6844	.4230
#1	.1894	.4680	.1018	.2685	.6440	.5900	.8169	.2875	.0935	.0686
#2	.1892	.4697	.1011	.2673	.6369	.5925	.8157	.2870	.0938	.0685
#3	.1901	.4692	.1020	.2682	.6439	.5933	.8200	.2876	.0948	.0690

Elem	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1477**	**.1480**	**6.304**	**.4330**	**.0929**	**.3469**	**1.395**
Stddev	.0003	.0002	.037	.0008	.0003	.0005	.003
%RSD	.2053	.1597	.5916	.1809	.3350	.1308	.2438
#1	.1480	.1479	6.345	.4321	.0926	.3468	1.393
#2	.1477	.1479	6.272	.4335	.0929	.3466	1.393
#3	.1474	.1483	6.297	.4334	.0932	.3474	1.399

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4041.3**	**64740.**	**5782.0**
Stddev	8.7	165.	28.8
%RSD	.21419	.25433	.49853
#1	4046.7	64865.	5794.9
#2	4045.9	64801.	5802.2
#3	4031.3	64553.	5749.0

Sample Name: Std Al Fe K Na Si Acquired: 3/10/2018 9:56:59 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Al3961	Fe2599	K_7664	Na5895	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.143**	**2.490**	**1.428**	**3.765**	**1.883**
Stddev	.006	.004	.005	.020	.004
%RSD	.1890	.1632	.3591	.5322	.1941
#1	3.139	2.487	1.426	3.744	1.881
#2	3.150	2.494	1.434	3.785	1.881
#3	3.142	2.487	1.425	3.766	1.888

Int. Std.	Y_2243	Y_3710
Units	Cts/S	Cts/S
Avg	**4031.2**	**5791.2**
Stddev	4.8	34.8
%RSD	.12002	.60089
#1	4036.8	5806.2
#2	4028.8	5751.5
#3	4028.0	5816.1

Sample Name: Std Ca Mg Si Acquired: 3/10/2018 10:01:38 Type: Cal
Method: Trace_5_E200.7_SW6010(v105) Mode: IR Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ca3158	Mg2790	Si2124
Units	Cts/S	Cts/S	Cts/S
Avg	.6866	2.595	.9461
Stddev	.0016	.021	.0013
%RSD	.2296	.8288	.1401
#1	.6856	2.595	.9460
#2	.6857	2.616	.9448
#3	.6884	2.573	.9474

Int. Std.	Y_2243	Y_3710
Units	Cts/S	Cts/S
Avg	4072.7	6013.4
Stddev	13.0	36.4
%RSD	.31973	.60503
#1	4067.7	6011.0
#2	4087.5	5978.4
#3	4062.9	6051.0

Sample Name: ICV Acquired: 3/10/2018 10:06:17 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4785**	W **.5316**	**.5152**	**.5087**	**.5007**	**.4875**	**.4972**	**.5121**	**.5010**	**.5116**
Stddev	.0012	.0034	.0011	.0013	.0016	.0006	.0020	.0125	.0005	.0011
%RSD	.2566	.6345	.2153	.2521	.3105	.1158	.3947	2.441	.0939	.2192
#1	.4776	.5277	.5141	.5093	.4989	.4870	.4985	.5067	.5005	.5105
#2	.4799	.5332	.5153	.5073	.5019	.4881	.4949	.5264	.5011	.5114
#3	.4781	.5338	.5163	.5096	.5012	.4874	.4981	.5032	.5014	.5128
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5274								
Low Limit		.4726								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5051**	**.5078**	**.5086**	**4.765**	**.4945**	**.4859**	**.5012**	W **9.304**	**.5015**	**.5118**
Stddev	.0013	.0010	.0041	.008	.0037	.0003	.0017	.011	.0017	.0005
%RSD	.2651	.2034	.8135	.1722	.7577	.0705	.3333	.1222	.3300	.1046
#1	.5040	.5080	.5039	4.770	.4906	.4856	.5001	9.293	.4999	.5116
#2	.5049	.5087	.5100	4.770	.4981	.4860	.5005	9.303	.5014	.5125
#3	.5066	.5066	.5118	4.756	.4948	.4862	.5032	9.315	.5032	.5114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit								10.55		
Low Limit								9.452		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5143**	**.5082**	**5.182**	**.5063**	**.4905**	**.4987**	**.5028**	**.5062**	**.4977**
Stddev	.0027	.0029	.015	.0020	.0013	.0005	.0025	.0002	.0008
%RSD	.5154	.5634	.2873	.3880	.2606	.0995	.4954	.0450	.1595
#1	.5138	.5049	5.174	.5046	.4890	.4984	.5045	.5063	.4975
#2	.5120	.5103	5.173	.5058	.4915	.4985	.5039	.5064	.4986
#3	.5172	.5093	5.199	.5084	.4910	.4993	.4999	.5060	.4971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3943.3**	**64902.**	**5961.5**
Stddev	4.1	94.	26.2
%RSD	.10399	.14499	.43899
#1	3941.3	65010.	5990.8
#2	3940.6	64861.	5952.9
#3	3948.0	64835.	5940.6

Sample Name: ICB Acquired: 3/10/2018 10:10:47 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0031**	**.0012**	**.0007**	**.0002**	**.0003**	**-.0007**	**.0055**	**.0003**	**.0001**
Stddev	.0004	.0053	.0021	.0001	.0002	.0001	.0009	.0033	.0000	.0002
%RSD	42.70	171.6	174.6	12.42	68.96	30.59	118.6	60.55	6.367	183.6
#1	.0014	-.0014	.0022	.0006	.0002	.0003	-.0010	.0082	.0003	-.0001
#2	.0006	.0017	.0026	.0008	.0004	.0004	.0002	.0064	.0003	.0002
#3	.0009	.0090	-.0012	.0008	.0001	.0002	-.0014	.0018	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0004**	**.0008**	**.0105**	**.0035**	**-.0000**	**.0009**	**.0096**	**-.0004**	**.0007**
Stddev	.0002	.0001	.0031	.0139	.0020	.0006	.0002	.0116	.0003	.0008
%RSD	37.06	27.43	404.7	133.1	55.92	4115.	18.43	120.3	66.00	112.2
#1	.0003	.0004	.0016	.0081	.0040	-.0006	.0011	.0077	-.0005	.0005
#2	.0006	.0005	-.0027	.0254	.0014	.0001	.0010	.0221	-.0001	.0015
#3	.0004	.0003	.0033	-.0021	.0052	.0005	.0007	-.0009	-.0006	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**-.0002**	**.0031**	**.0026**	**.0002**	**.0003**	**.0003**	**.0003**	**.0008**
Stddev	.0011	.0012	.0013	.0004	.0000	.0003	.0007	.0004	.0001
%RSD	40.32	743.5	40.86	16.22	23.10	90.43	281.8	138.3	7.802
#1	.0035	-.0006	.0019	.0022	.0003	.0005	.0011	.0000	.0008
#2	.0035	-.0010	.0045	.0030	.0002	-.0000	-.0001	.0001	.0009
#3	.0015	.0012	.0030	.0026	.0002	.0005	-.0003	.0007	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3954.0**	**64469.**	**5746.8**
Stddev	9.6	150.	18.6
%RSD	.24287	.23274	.32296
#1	3962.7	64310.	5755.0
#2	3955.6	64609.	5759.8
#3	3943.7	64487.	5725.5

Sample Name: ICV Acquired: 3/10/2018 10:27:36 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4996**	W **.5387**	**.5221**	**.5037**	**.5141**	**.5038**	**.4914**	**.5092**	**.5059**	**.5065**
Stddev	.0013	.0102	.0016	.0036	.0011	.0015	.0014	.0059	.0015	.0018
%RSD	.2544	1.900	.3069	.7067	.2079	.2883	.2915	1.153	.2986	.3598
#1	.5002	.5486	.5239	.5013	.5139	.5046	.4915	.5113	.5048	.5054
#2	.4982	.5393	.5208	.5020	.5153	.5046	.4899	.5137	.5053	.5055
#3	.5005	.5282	.5215	.5078	.5132	.5021	.4928	.5026	.5076	.5086
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.5274								
Low Limit		.4726								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5068**	**.5065**	**.5179**	**5.162**	**.5265**	**.5127**	**.5048**	**10.07**	**.5049**	**.5132**
Stddev	.0005	.0003	.0023	.004	.0046	.0019	.0024	.04	.0014	.0029
%RSD	.0908	.0614	.4431	.0852	.8727	.3629	.4660	.4155	.2779	.5659
#1	.5072	.5062	.5182	5.159	.5315	.5141	.5028	10.08	.5036	.5112
#2	.5070	.5068	.5155	5.160	.5225	.5133	.5042	10.10	.5046	.5119
#3	.5063	.5065	.5200	5.167	.5255	.5106	.5074	10.02	.5064	.5165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5203**	**.5080**	**5.152**	**.5114**	**.4942**	**.5003**	**.5046**	**.5189**	**.4991**
Stddev	.0022	.0019	.023	.0025	.0002	.0009	.0012	.0009	.0012
%RSD	.4292	.3739	.4517	.4843	.0478	.1806	.2392	.1825	.2385
#1	.5191	.5058	5.132	.5085	.4941	.5014	.5033	.5199	.4980
#2	.5190	.5093	5.145	.5128	.4945	.4997	.5049	.5181	.4990
#3	.5229	.5089	5.178	.5129	.4941	.5000	.5056	.5185	.5004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3965.0**	**63959.**	**5746.5**
Stddev	9.1	67.	35.5
%RSD	.22843	.10474	.61771
#1	3975.3	63896.	5711.1
#2	3961.6	64029.	5746.4
#3	3958.2	63951.	5782.1

Sample Name: ICB Acquired: 3/10/2018 10:32:06 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0027**	**.0029**	**.0008**	**.0003**	**.0005**	**.0005**	**.0027**	**.0003**	**.0003**
Stddev	.0003	.0043	.0018	.0002	.0002	.0001	.0012	.0026	.0000	.0003
%RSD	39.22	161.0	61.01	29.83	75.39	19.81	211.6	95.06	8.405	74.18
#1	.0007	-.0022	.0046	.0010	.0004	.0005	-.0008	-.0000	.0003	.0001
#2	.0013	.0044	.0011	.0008	.0000	.0005	.0012	.0031	.0004	.0006
#3	.0006	.0059	.0030	.0005	.0004	.0004	.0012	.0051	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0011**	**.0046**	**.0203**	**.0023**	**.0001**	**.0009**	**-.0000**	**-.0000**	**.0011**
Stddev	.0004	.0003	.0009	.0546	.0041	.0004	.0001	.0144	.0003	.0019
%RSD	35.06	26.10	20.47	269.2	179.7	379.2	16.59	118100.	1601.	174.0
#1	.0007	.0014	.0052	-.0247	.0056	-.0002	.0010	-.0067	-.0004	.0025
#2	.0015	.0009	.0049	.0810	.0036	.0006	.0009	.0166	.0002	-.0011
#3	.0011	.0009	.0035	.0045	-.0023	-.0001	.0007	-.0099	.0001	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0027**	**.0026**	**.0022**	**.0002**	**.0004**	**-.0004**	**.0004**	**.0011**
Stddev	.0025	.0010	.0005	.0004	.0001	.0002	.0015	.0003	.0001
%RSD	529.5	35.63	20.48	15.95	34.45	49.06	367.4	91.32	12.77
#1	.0014	.0034	.0030	.0025	.0002	.0002	.0008	.0000	.0013
#2	.0005	.0030	.0020	.0018	.0003	.0006	.0001	.0007	.0011
#3	-.0033	.0016	.0028	.0024	.0003	.0004	-.0021	.0004	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3953.5**	**64086.**	**5642.7**
Stddev	11.0	285.	38.7
%RSD	.27735	.44438	.68558
#1	3956.5	64286.	5609.1
#2	3962.7	64211.	5685.0
#3	3941.4	63760.	5634.0

Sample Name: WG1095834-1,T Acquired: 3/10/2018 10:36:48 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: RECAL

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0036**	**.0011**	**.0000**	**.0000**	**.0001**	**-.0001**	**.0111**	**-.0001**	**.0002**
Stddev	.0005	.0068	.0020	.0005	.0001	.0001	.0000	.0024	.0000	.0001
%RSD	218.9	186.8	179.0	1780.	323.9	107.6	40.17	21.53	21.26	55.43
#1	.0005	.0105	.0022	.0002	.0001	.0000	-.0001	.0100	-.0001	.0003
#2	.0004	.0033	-.0012	.0004	.0002	.0001	-.0001	.0139	-.0002	.0001
#3	-.0003	-.0030	.0023	-.0005	-.0001	.0002	-.0001	.0095	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0001**	**-.0006**	**-.0089**	**-.0009**	**.0003**	**.0002**	**.0066**	**.0002**	**-.0000**
Stddev	.0002	.0002	.0033	.0255	.0028	.0003	.0001	.0057	.0002	.0002
%RSD	38.81	165.3	569.4	285.7	305.4	89.91	47.42	85.80	88.26	2790.
#1	.0008	.0000	.0030	.0127	-.0037	.0000	.0002	.0008	.0001	.0003
#2	.0004	.0004	-.0036	-.0025	.0019	.0005	.0003	.0121	.0001	-.0001
#3	.0005	-.0000	-.0011	-.0371	-.0009	.0004	.0001	.0069	.0004	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0008**	**-.0029**	**.0009**	**.0000**	**.0003**	**.0019**	**-.0002**	**.0002**
Stddev	.0012	.0006	.0026	.0012	.0001	.0007	.0012	.0002	.0001
%RSD	5230.	72.69	87.35	133.1	361.8	258.1	63.19	89.77	39.20
#1	.0011	-.0015	-.0046	.0021	.0001	-.0005	.0025	.0000	.0002
#2	.0003	-.0004	.0000	.0007	-.0001	.0007	.0005	-.0003	.0004
#3	-.0013	-.0005	-.0042	-.0002	.0001	.0007	.0026	-.0002	.0002

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4028.6**	**67088.**	**6024.9**
Stddev	136.7	153.	22.9
%RSD	3.3937	.22869	.38087
#1	4121.3	67139.	6048.3
#2	3871.6	67210.	6002.4
#3	4093.0	66916.	6024.0

Sample Name: WG1095834-2,T Acquired: 3/10/2018 10:41:29 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0487**	**2.104**	**.1293**	**1.042**	**1.895**	**.0477**	**-.0017**	**10.12**	**.0533**	**.4903**
Stddev	.0004	.019	.0022	.004	.010	.0005	.0001	.07	.0001	.0011
%RSD	.9143	.9114	1.713	.3721	.5146	1.000	4.371	.7009	.2442	.2176
#1	.0485	2.126	.1271	1.040	1.907	.0482	-.0017	10.20	.0532	.4895
#2	.0493	2.097	.1315	1.040	1.888	.0473	-.0017	10.09	.0533	.4900
#3	.0485	2.090	.1291	1.047	1.892	.0475	-.0018	10.06	.0535	.4915

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1988**	**.2534**	**1.029**	**9.189**	**9.630**	**.4635**	**.9537**	**9.060**	**.4886**	**.5169**
Stddev	.0014	.0005	.005	.158	.078	.0037	.0051	.050	.0018	.0017
%RSD	.7262	.1872	.4547	1.718	.8096	.7901	.5386	.5546	.3664	.3374
#1	.1998	.2539	1.034	9.371	9.719	.4678	.9492	9.118	.4887	.5158
#2	.1995	.2533	1.030	9.085	9.597	.4614	.9525	9.026	.4868	.5160
#3	.1972	.2529	1.024	9.112	9.574	.4614	.9593	9.037	.4904	.5189

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4875**	**.1330**	**.7300**	**.9655**	**.9494**	**.9803**	**.1201**	**.4896**	**.5161**
Stddev	.0065	.0018	.0018	.0052	.0023	.0012	.0006	.0007	.0007
%RSD	1.332	1.357	.2468	.5372	.2456	.1253	.4667	.1403	.1436
#1	.4803	.1349	.7290	.9599	.9521	.9815	.1196	.4901	.5156
#2	.4893	.1313	.7290	.9665	.9480	.9803	.1207	.4900	.5157
#3	.4929	.1326	.7321	.9701	.9481	.9791	.1199	.4889	.5169

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4033.0**	**66015.**	**6037.6**
Stddev	7.3	83.	44.4
%RSD	.18156	.12514	.73492
#1	4038.9	66017.	5986.8
#2	4024.8	65932.	6057.7
#3	4035.5	66097.	6068.5

Sample Name: L1807867-01,T Acquired: 3/10/2018 10:45:56 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.9941**	**.0083**	**.3177**	**.0232**	**.0001**	**.0005**	**48.83**	**.0000**	**.0009**
Stddev	.0002	.0181	.0001	.0005	.0001	.0000	.0008	.06	.0000	.0001
%RSD	165.9	1.825	1.681	.1523	.4105	31.87	156.1	.1215	251.6	9.666
#1	.0003	.9790	.0082	.3171	.0232	.0001	.0009	48.82	.0000	.0009
#2	.0001	.9890	.0085	.3180	.0231	.0001	.0010	48.77	.0000	.0010
#3	-.0001	1.014	.0083	.3178	.0233	.0002	-.0004	48.89	-.0000	.0009

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0324**	**.0243**	**.8105**	**30.19**	**.3810**	**.0160**	**.1910**	**97.81**	**.0016**	**.0043**
Stddev	.0011	.0001	.0010	.15	.0009	.0005	.0005	.48	.0004	.0007
%RSD	3.264	.2517	.1214	.5131	.2364	2.835	.2536	.4918	25.68	15.67
#1	.0332	.0243	.8117	30.01	.3808	.0155	.1905	97.26	.0020	.0043
#2	.0328	.0244	.8102	30.23	.3820	.0161	.1911	98.01	.0012	.0049
#3	.0312	.0243	.8098	30.31	.3802	.0163	.1915	98.16	.0016	.0036

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0109**	**.0227**	**7.438**	**.0069**	**.3831**	**.0348**	**-.0004**	**.0451**	**.0106**
Stddev	.0031	.0002	.017	.0013	.0004	.0004	.0013	.0003	.0001
%RSD	28.24	.7868	.2280	19.53	.0967	1.224	342.0	.6611	.9702
#1	.0127	.0229	7.423	.0083	.3828	.0346	-.0001	.0455	.0106
#2	.0127	.0225	7.434	.0067	.3829	.0352	.0008	.0450	.0107
#3	.0074	.0226	7.456	.0057	.3835	.0344	-.0018	.0449	.0105

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3959.2**	**63622.**	**5954.1**
Stddev	13.9	265.	16.0
%RSD	.35136	.41711	.26788
#1	3961.6	63490.	5960.3
#2	3971.7	63928.	5966.1
#3	3944.2	63449.	5936.0

Sample Name: WG1095834-3,T Acquired: 3/10/2018 10:50:32 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0533**	**3.227**	**.1413**	**1.383**	**2.007**	**.0507**	**-.0027**	**59.79**	**.0543**	**.4922**
Stddev	.0002	.022	.0017	.004	.006	.0003	.0008	.26	.0002	.0015
%RSD	.3805	.6735	1.194	.2763	.3037	.5453	27.84	.4268	.3278	.2990
#1	.0530	3.236	.1403	1.382	2.014	.0507	-.0032	60.09	.0542	.4918
#2	.0534	3.243	.1433	1.380	2.002	.0510	-.0031	59.67	.0541	.4911
#3	.0534	3.202	.1404	1.387	2.006	.0504	-.0018	59.62	.0545	.4939

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2357**	**.2820**	**1.870**	**41.12**	**9.913**	**.5084**	**1.173**	**112.4**	**.4938**	**.5167**
Stddev	.0008	.0011	.010	.14	.022	.0011	.004	.4	.0018	.0024
%RSD	.3451	.3926	.5302	.3323	.2223	.2253	.3564	.3435	.3718	.4561
#1	.2348	.2808	1.877	41.27	9.937	.5089	1.170	112.8	.4921	.5143
#2	.2364	.2830	1.859	41.04	9.906	.5071	1.171	112.1	.4935	.5168
#3	.2360	.2822	1.873	41.03	9.894	.5091	1.178	112.2	.4958	.5190

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5300**	**.1562**	**8.493**	**.9720**	**1.355**	**1.044**	**.1145**	**.5674**	**.5335**
Stddev	.0035	.0056	.024	.0079	.003	.002	.0029	.0006	.0025
%RSD	.6638	3.589	.2874	.8084	.2119	.2108	2.498	.1073	.4677
#1	.5270	.1517	8.493	.9669	1.358	1.042	.1141	.5673	.5320
#2	.5290	.1545	8.469	.9680	1.352	1.045	.1175	.5668	.5321
#3	.5338	.1625	8.518	.9810	1.354	1.046	.1118	.5680	.5364

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3922.2**	**62517.**	**5863.5**
Stddev	8.5	189.	11.3
%RSD	.21760	.30210	.19202
#1	3929.8	62441.	5851.9
#2	3923.8	62732.	5864.2
#3	3912.9	62378.	5874.3

Sample Name: WG1095834-4,T Acquired: 3/10/2018 10:54:59 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**1.002**	**.0057**	**.3162**	**.0228**	**-.0001**	**.0009**	**48.71**	**-.0001**	**.0010**
Stddev	.0006	.002	.0020	.0013	.0003	.0001	.0011	.14	.0001	.0001
%RSD	194.1	.2426	35.01	.4014	1.467	259.1	119.2	.2795	64.40	11.41
#1	-.0004	1.003	.0035	.3161	.0225	.0000	.0022	48.57	-.0001	.0010
#2	.0003	.9993	.0073	.3150	.0232	.0000	.0002	48.84	-.0001	.0008
#3	-.0009	1.004	.0064	.3176	.0228	-.0002	.0004	48.71	-.0000	.0011

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0318**	**.0245**	**.8348**	**30.86**	**.3880**	**.0165**	**.1910**	**100.8**	**.0017**	**.0038**
Stddev	.0002	.0002	.0027	.06	.0042	.0005	.0006	.2	.0004	.0016
%RSD	.6115	.6711	.3260	.1906	1.070	2.936	.2941	.2425	22.44	43.75
#1	.0320	.0247	.8317	30.80	.3885	.0164	.1913	100.6	.0020	.0028
#2	.0318	.0245	.8365	30.92	.3918	.0160	.1903	100.9	.0019	.0029
#3	.0316	.0244	.8363	30.86	.3835	.0170	.1913	101.1	.0013	.0057

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**.0241**	**7.426**	**.0070**	**.3816**	**.0354**	**.0009**	**.0455**	**.0104**
Stddev	.0014	.0034	.003	.0017	.0016	.0005	.0007	.0004	.0000
%RSD	17.91	14.23	.0462	24.24	.4282	1.313	86.42	.7815	.4368
#1	.0097	.0201	7.430	.0077	.3804	.0355	.0007	.0453	.0105
#2	.0078	.0264	7.423	.0082	.3835	.0349	.0017	.0459	.0104
#3	.0068	.0258	7.425	.0051	.3811	.0358	.0002	.0452	.0105

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3945.8**	**63055.**	**5885.6**
Stddev	10.1	81.	13.7
%RSD	.25682	.12868	.23235
#1	3954.3	62962.	5885.3
#2	3948.5	63092.	5872.0
#3	3934.6	63110.	5899.4

Sample Name: WG1095834-5,T Acquired: 3/10/2018 10:59:35 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0577**	**3.749**	**.1307**	**1.304**	**2.556**	**.0648**	**-.0028**	**59.78**	**.0495**	**.4491**
Stddev	.0015	.063	.0146	.117	.051	.0014	.0015	.25	.0061	.0552
%RSD	2.631	1.670	11.15	8.944	2.014	2.161	52.47	.4106	12.30	12.29
#1	.0591	3.813	.1463	1.426	2.609	.0662	-.0012	60.06	.0559	.5068
#2	.0581	3.746	.1282	1.293	2.553	.0649	-.0030	59.66	.0488	.4436
#3	.0561	3.688	.1175	1.193	2.506	.0634	-.0042	59.61	.0437	.3969

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2688**	**.3253**	**2.145**	**42.81**	**11.86**	**.6478**	**1.115**	**111.7**	**.4510**	**.4731**
Stddev	.0082	.0095	.029	.13	.43	.0129	.111	.1	.0555	.0578
%RSD	3.065	2.929	1.329	.2954	3.636	1.984	9.938	.0937	12.30	12.21
#1	.2773	.3349	2.177	42.93	12.30	.6610	1.230	111.6	.5090	.5332
#2	.2681	.3253	2.135	42.82	11.84	.6469	1.107	111.8	.4456	.4680
#3	.2609	.3158	2.123	42.68	11.44	.6354	1.009	111.8	.3984	.4180

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4887**	**.1453**	**7.632**	**.9221**	**1.628**	**1.254**	**.1035**	**.6575**	**.4925**
Stddev	.0459	.0159	.009	.1103	.027	.039	.0123	.0201	.0581
%RSD	9.393	10.97	.1179	11.96	1.635	3.134	11.88	3.060	11.79
#1	.5356	.1629	7.622	1.038	1.656	1.294	.1166	.6772	.5533
#2	.4867	.1415	7.634	.9101	1.624	1.253	.1017	.6583	.4866
#3	.4438	.1317	7.639	.8183	1.603	1.215	.0922	.6370	.4376

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3923.5**	**62153.**	**5868.7**
Stddev	9.5	21.	25.8
%RSD	.24180	.03375	.43973
#1	3931.3	62164.	5839.1
#2	3926.3	62167.	5880.2
#3	3913.0	62129.	5886.7

Sample Name: L1807869-01,T Acquired: 3/10/2018 11:04:03 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0289**	**.0026**	**.0233**	**.1132**	**.0001**	**-.0011**	**137.6**	**-.0001**	**.0008**
Stddev	.0005	.0084	.0024	.0010	.0001	.0000	.0005	.5	.0000	.0003
%RSD	374.2	28.93	90.52	4.132	.0885	42.33	47.19	.3694	22.42	36.00
#1	-.0003	.0244	.0009	.0242	.1130	.0001	-.0016	137.1	-.0001	.0007
#2	.0000	.0237	.0053	.0233	.1132	.0002	-.0009	138.1	-.0001	.0011
#3	.0007	.0385	.0017	.0223	.1132	.0001	-.0007	137.5	-.0001	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0014**	**.1257**	**2.310**	**39.33**	**.1482**	**.0036**	**67.55**	**.0013**	**.0009**
Stddev	.0007	.0002	.0008	.057	.20	.0003	.0005	.53	.0002	.0018
%RSD	210.1	16.90	.6674	2.462	.5039	.1800	12.96	.7809	18.17	205.5
#1	-.0004	.0012	.1256	2.257	39.11	.1480	.0039	67.00	.0013	.0028
#2	.0010	.0013	.1249	2.370	39.50	.1482	.0037	68.05	.0011	-.0006
#3	.0004	.0016	.1266	2.304	39.39	.1485	.0030	67.60	.0015	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0113**	**.0001**	**6.523**	**.0068**	**.2625**	**.0033**	**.0003**	**.0001**	**.0079**
Stddev	.0017	.0020	.088	.0022	.0011	.0004	.0018	.0003	.0000
%RSD	15.37	1501.	1.349	31.56	.4289	11.54	532.4	210.2	.4120
#1	.0131	.0021	6.447	.0076	.2613	.0035	.0022	-.0001	.0079
#2	.0111	-.0020	6.619	.0085	.2635	.0029	-.0014	.0000	.0080
#3	.0097	.0002	6.502	.0044	.2628	.0036	.0003	.0004	.0079

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3829.3**	**61765.**	**5772.5**
Stddev	36.1	263.	27.1
%RSD	.94358	.42626	.46974
#1	3857.4	61590.	5800.4
#2	3788.5	61637.	5746.3
#3	3841.8	62067.	5770.9

Sample Name: WG1095834-7,T Acquired: 3/10/2018 11:08:42 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0528**	**2.224**	**.1343**	**1.065**	**2.093**	**.0503**	**-.0019**	**142.0**	**.0529**	**.4764**
Stddev	.0003	.026	.0017	.003	.019	.0006	.0005	1.1	.0001	.0019
%RSD	.6121	1.155	1.296	.2478	.9131	1.204	26.61	.7431	.1377	.3901
#1	.0525	2.254	.1325	1.062	2.114	.0510	-.0013	143.1	.0529	.4757
#2	.0532	2.211	.1360	1.064	2.088	.0499	-.0019	141.7	.0528	.4751
#3	.0528	2.208	.1345	1.068	2.077	.0500	-.0023	141.1	.0530	.4786

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1993**	**.2562**	**1.181**	**12.13**	**46.71**	**.6329**	**.9688**	**74.26**	**.4792**	**.5026**
Stddev	.0009	.0019	.010	.13	.48	.0071	.0036	.85	.0014	.0016
%RSD	.4706	.7237	.8120	1.086	1.032	1.119	.3693	1.141	.2927	.3262
#1	.1994	.2566	1.191	12.27	47.22	.6407	.9656	75.23	.4793	.5007
#2	.2003	.2579	1.179	12.09	46.65	.6310	.9681	73.84	.4778	.5033
#3	.1984	.2542	1.172	12.02	46.26	.6270	.9726	73.70	.4806	.5037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5224**	**.1294**	**6.898**	**.9666**	**1.220**	**1.002**	**.1138**	**.5148**	**.5141**
Stddev	.0063	.0014	.013	.0041	.010	.003	.0017	.0009	.0023
%RSD	1.214	1.088	.1883	.4283	.7840	.2706	1.481	.1696	.4402
#1	.5162	.1279	6.886	.9639	1.230	1.003	.1156	.5148	.5130
#2	.5222	.1296	6.896	.9645	1.217	1.005	.1136	.5157	.5126
#3	.5289	.1307	6.912	.9713	1.212	.9995	.1122	.5140	.5167

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3839.8**	**61245.**	**5782.6**
Stddev	10.2	108.	52.8
%RSD	.26666	.17676	.91258
#1	3837.3	61168.	5726.6
#2	3851.0	61197.	5789.9
#3	3831.0	61369.	5831.4

Sample Name: WG1095834-6,T,5 Acquired: 3/10/2018 11:13:10 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.1469**	**.0031**	**.0835**	**.0036**	**.0000**	**.0019**	**7.488**	**-.0001**	**.0003**
Stddev	.0006	.0178	.0015	.0054	.0007	.0001	.0011	1.193	.0000	.0000
%RSD	266.8	12.12	47.62	6.479	20.28	7285.	55.77	15.94	55.76	9.903
#1	.0009	.1288	.0043	.0779	.0028	.0001	.0027	6.287	-.0000	.0003
#2	-.0003	.1475	.0014	.0838	.0037	-.0001	.0007	7.503	-.0001	.0004
#3	.0000	.1644	.0036	.0887	.0042	-.0000	.0023	8.673	-.0000	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0074**	**.0053**	**.1181**	**4.410**	**.0927**	**.0026**	**.0545**	**14.58**	**.0002**	**.0020**
Stddev	.0009	.0003	.0177	.559	.0086	.0004	.0024	2.11	.0001	.0009
%RSD	11.63	6.011	15.01	12.67	9.311	15.54	4.337	14.48	49.74	43.54
#1	.0064	.0050	.1014	3.830	.0835	.0022	.0524	12.42	.0003	.0012
#2	.0077	.0055	.1162	4.456	.0941	.0024	.0540	14.67	.0001	.0019
#3	.0081	.0056	.1367	4.945	.1006	.0030	.0570	16.64	.0002	.0029

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0085**	**.0068**	**1.960**	**.0070**	**.0581**	**.0084**	**.0010**	**.0099**	**.0031**
Stddev	.0010	.0020	.110	.0010	.0092	.0005	.0005	.0008	.0003
%RSD	12.05	30.13	5.627	14.58	15.77	6.184	43.64	7.862	9.372
#1	.0077	.0045	1.852	.0080	.0491	.0079	.0006	.0092	.0028
#2	.0096	.0075	1.957	.0069	.0580	.0089	.0011	.0098	.0030
#3	.0080	.0084	2.072	.0060	.0674	.0085	.0015	.0108	.0034

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3870.0**	**63465.**	**5820.7**
Stddev	5.0	254.	32.7
%RSD	.12828	.40088	.56235
#1	3874.5	63624.	5810.2
#2	3870.7	63172.	5794.5
#3	3864.7	63601.	5857.4

Sample Name: WG1095834-10,T,5 Acquired: 3/10/2018 11:17:49 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0134**	**.0009**	**.0055**	**.0233**	**-.0000**	**-.0003**	**28.95**	**-.0001**	**.0003**
Stddev	.0005	.0077	.0028	.0004	.0003	.0001	.0011	.21	.0000	.0002
%RSD	260.1	57.90	310.2	6.741	1.457	4926.	389.3	.7287	20.38	89.82
#1	.0003	.0208	-.0007	.0059	.0229	-.0001	-.0014	28.70	-.0001	.0003
#2	.0006	.0139	.0041	.0051	.0234	.0001	-.0002	29.07	-.0001	.0005
#3	-.0003	.0054	-.0007	.0055	.0235	.0000	.0008	29.06	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0002**	**.0255**	**.3711**	**8.483**	**.0303**	**.0012**	**12.82**	**-.0001**	**.0014**
Stddev	.0005	.0002	.0017	.0186	.042	.0004	.0004	.18	.0003	.0006
%RSD	85.35	99.30	6.740	5.014	.4989	1.283	32.17	1.394	220.1	43.34
#1	.0009	.0004	.0270	.3847	8.506	.0299	.0016	12.62	.0000	.0020
#2	.0000	.0001	.0237	.3787	8.509	.0305	.0013	12.91	-.0004	.0008
#3	.0006	.0000	.0258	.3499	8.434	.0306	.0008	12.94	.0000	.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.0012**	**1.503**	**.0030**	**.0554**	**.0013**	**.0004**	**-.0000**	**.0022**
Stddev	.0017	.0023	.113	.0005	.0009	.0002	.0017	.0003	.0002
%RSD	39.08	192.5	7.497	16.68	1.535	16.71	431.5	1097.	9.590
#1	.0063	.0008	1.415	.0033	.0544	.0012	.0024	.0000	.0020
#2	.0038	.0036	1.464	.0024	.0556	.0016	-.0004	-.0003	.0022
#3	.0030	-.0009	1.630	.0033	.0561	.0012	-.0008	.0002	.0024

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3785.7**	**63618.**	**5867.1**
Stddev	149.2	172.	92.8
%RSD	3.9412	.27099	1.5816
#1	3875.1	63807.	5778.1
#2	3868.7	63469.	5859.8
#3	3613.5	63577.	5963.3

Sample Name: CCV Acquired: 3/10/2018 11:22:27 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4903	.5283	.5117	.4979	.5053	.4976	.4850	.5116	.4948	.4987
Stddev	.0019	.0111	.0015	.0012	.0014	.0011	.0007	.0051	.0005	.0005
%RSD	.3887	2.095	.2942	.2459	.2786	.2245	.1457	.9967	.1022	.1077
#1	.4913	.5156	.5134	.4969	.5045	.4970	.4847	.5060	.4952	.4981
#2	.4881	.5330	.5108	.4975	.5070	.4989	.4845	.5159	.4948	.4991
#3	.4915	.5362	.5109	.4993	.5046	.4970	.4858	.5128	.4942	.4988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4980	.4998	.5169	4.944	.5021	.5077	.4961	9.857	.4941	.5029
Stddev	.0030	.0002	.0054	.009	.0013	.0021	.0008	.070	.0002	.0005
%RSD	.6064	.0477	1.050	.1891	.2498	.4185	.1673	.7109	.0306	.0900
#1	.5001	.4997	.5110	4.954	.5022	.5078	.4961	9.791	.4939	.5029
#2	.4994	.5001	.5181	4.936	.5033	.5098	.4970	9.930	.4942	.5024
#3	.4945	.4997	.5217	4.942	.5008	.5056	.4953	9.849	.4942	.5034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5122	.4962	5.085	.5018	.4875	.4946	.4942	.5095	.4870
Stddev	.0004	.0033	.005	.0013	.0013	.0010	.0017	.0012	.0005
%RSD	.0775	.6590	.0993	.2564	.2652	.1931	.3425	.2281	.1034
#1	.5122	.4927	5.082	.5007	.4874	.4954	.4952	.5108	.4876
#2	.5126	.4991	5.091	.5014	.4889	.4936	.4952	.5093	.4868
#3	.5118	.4969	5.083	.5032	.4863	.4949	.4923	.5085	.4866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	4006.3	64788.	5928.0
Stddev	5.1	221.	12.0
%RSD	.12762	.34176	.20169
#1	4001.2	64590.	5923.2
#2	4011.5	64748.	5919.1
#3	4006.3	65027.	5941.6

Sample Name: CCB Acquired: 3/10/2018 11:26:57 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0042**	**.0010**	**.0009**	**.0005**	**.0006**	**.0010**	**.0039**	**.0003**	**.0005**
Stddev	.0004	.0043	.0016	.0006	.0001	.0001	.0014	.0016	.0000	.0002
%RSD	59.66	103.9	163.9	69.67	16.85	8.642	142.2	41.37	5.270	33.78
#1	.0005	-.0029	.0026	.0009	.0005	.0006	-.0003	.0055	.0003	.0006
#2	.0012	-.0006	.0009	.0015	.0006	.0007	.0025	.0022	.0003	.0006
#3	.0005	-.0090	-.0006	.0002	.0004	.0006	.0007	.0042	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0005**	**.0032**	**-.0391**	**.0026**	**.0007**	**.0012**	**.0327**	**-.0000**	**.0024**
Stddev	.0003	.0003	.0004	.0234	.0009	.0002	.0003	.0143	.0005	.0018
%RSD	94.33	46.72	11.58	59.92	36.26	25.93	21.13	43.86	965.9	75.81
#1	.0003	.0004	.0033	-.0640	.0035	.0006	.0011	.0485	.0003	.0045
#2	.0006	.0004	.0035	-.0174	.0017	.0009	.0011	.0205	.0001	.0015
#3	.0000	.0008	.0028	-.0360	.0025	.0006	.0015	.0291	-.0006	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**-.0009**	**.0004**	**.0033**	**.0004**	**.0005**	**-.0003**	**.0000**	**.0010**
Stddev	.0006	.0011	.0002	.0003	.0002	.0005	.0010	.0001	.0001
%RSD	15.59	125.3	59.53	9.436	59.61	117.0	387.8	375.6	9.733
#1	.0031	-.0019	.0007	.0037	.0006	.0011	-.0010	.0000	.0009
#2	.0038	.0003	.0004	.0032	.0005	.0003	-.0007	.0002	.0009
#3	.0042	-.0011	.0002	.0031	.0001	.0000	.0009	-.0001	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3952.2**	**64537.**	**5839.9**
Stddev	12.4	265.	16.8
%RSD	.31306	.41031	.28683
#1	3966.0	64320.	5845.4
#2	3948.4	64458.	5821.1
#3	3942.2	64832.	5853.2

Sample Name: WG1095834-8,T Acquired: 3/10/2018 11:31:40 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0359**	**.0011**	**.0215**	**.1080**	**-.0000**	**.0003**	**132.2**	**-.0000**	**.0008**
Stddev	.0006	.0090	.0023	.0007	.0037	.0000	.0007	4.3	.0000	.0001
%RSD	136.1	25.06	204.8	3.173	3.451	86.37	224.3	3.217	94.44	7.755
#1	-.0002	.0414	-.0012	.0220	.1043	-.0001	.0007	127.8	-.0000	.0008
#2	.0006	.0408	.0034	.0217	.1081	-.0000	-.0005	132.3	-.0000	.0009
#3	.0009	.0255	.0011	.0207	.1117	-.0000	.0008	136.3	-.0001	.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0014**	**.1160**	**2.165**	**37.44**	**.1414**	**.0005**	**64.11**	**.0011**	**.0010**
Stddev	.0004	.0002	.0056	.079	.99	.0036	.0002	2.17	.0005	.0009
%RSD	47.30	12.58	4.842	3.640	2.649	2.534	35.95	3.384	46.93	90.44
#1	.0006	.0012	.1114	2.097	36.31	.1378	.0003	61.98	.0007	.0018
#2	.0005	.0016	.1144	2.146	37.83	.1413	.0006	64.04	.0009	.0011
#3	.0011	.0015	.1222	2.251	38.17	.1450	.0006	66.32	.0017	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0030**	**-.0005**	**6.266**	**.0016**	**.2516**	**.0033**	**.0009**	**.0000**	**.0075**
Stddev	.0016	.0040	.021	.0005	.0082	.0002	.0020	.0004	.0000
%RSD	52.49	758.2	.3419	30.03	3.259	7.347	225.2	1418.	.4359
#1	.0036	-.0051	6.252	.0021	.2435	.0034	.0007	-.0000	.0075
#2	.0043	.0019	6.255	.0014	.2514	.0030	-.0010	-.0003	.0075
#3	.0012	.0016	6.291	.0012	.2599	.0035	.0030	.0004	.0075

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3882.4**	**63314.**	**5906.5**
Stddev	14.0	1082.	128.3
%RSD	.36129	1.7095	2.1717
#1	3891.4	64540.	6048.6
#2	3889.5	62913.	5871.7
#3	3866.2	62490.	5799.3

Sample Name: WG1095834-9,T Acquired: 3/10/2018 11:36:17 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0446**	**2.313**	**.1258**	**1.028**	**2.190**	**.0530**	**-.0012**	**146.6**	**.0493**	**.4484**
Stddev	.0013	.095	.0023	.005	.067	.0020	.0005	.8	.0001	.0012
%RSD	2.970	4.095	1.854	.4557	3.050	3.822	39.73	.5501	.1696	.2726
#1	.0461	2.392	.1274	1.023	2.249	.0548	-.0017	146.6	.0494	.4473
#2	.0436	2.339	.1231	1.028	2.202	.0535	-.0007	147.5	.0493	.4482
#3	.0442	2.208	.1268	1.033	2.118	.0508	-.0011	145.9	.0493	.4497

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1817**	**.2334**	**1.230**	**12.88**	**47.13**	**.6595**	**.9271**	**76.55**	**.4481**	**.4708**
Stddev	.0051	.0066	.034	.37	.13	.0176	.0007	.80	.0005	.0029
%RSD	2.802	2.808	2.752	2.860	.2795	2.674	.0763	1.039	.1146	.6107
#1	.1876	.2410	1.257	13.18	47.14	.6752	.9265	76.73	.4484	.4684
#2	.1788	.2299	1.242	13.00	47.25	.6630	.9279	77.23	.4475	.4701
#3	.1787	.2295	1.192	12.47	46.99	.6404	.9268	75.68	.4483	.4740

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4677**	**.1234**	**6.646**	**.9213**	**1.296**	**.9346**	**.1042**	**.4655**	**.4800**
Stddev	.0086	.0029	.039	.0008	.032	.0253	.0017	.0132	.0011
%RSD	1.840	2.378	.5881	.0898	2.475	2.705	1.647	2.839	.2354
#1	.4586	.1233	6.609	.9205	1.324	.9638	.1023	.4808	.4793
#2	.4688	.1205	6.643	.9213	1.302	.9197	.1056	.4579	.4795
#3	.4757	.1263	6.687	.9222	1.261	.9203	.1047	.4578	.4813

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3850.4**	**65001.**	**5760.5**
Stddev	10.3	913.	25.0
%RSD	.26835	1.4039	.43318
#1	3854.6	64037.	5782.0
#2	3858.0	65851.	5733.1
#3	3838.7	65117.	5766.4

Sample Name: L1807075-01,T Acquired: 3/10/2018 11:40:44 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.5626**	**.0028**	**.8264**	**.1581**	**-.0000**	**.0031**	**180.5**	**.0001**	**.0007**
Stddev	.0003	.0022	.0043	.0023	.0002	.0001	.0004	.3	.0000	.0002
%RSD	145.1	.3844	151.4	.2833	.1058	36500.	13.82	.1744	11.86	32.25
#1	.0000	.5624	-.0020	.8264	.1583	-.0001	.0031	180.3	.0001	.0009
#2	-.0001	.5648	.0060	.8241	.1580	-.0000	.0036	180.3	.0001	.0005
#3	-.0005	.5605	.0045	.8287	.1580	.0001	.0027	180.8	.0001	.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**.0221**	**1.365**	**9.662**	**21.35**	**.1493**	**.0041**	**100.8**	**.0022**	**.0091**
Stddev	.0001	.0006	.003	.026	.10	.0009	.0004	.3	.0005	.0007
%RSD	3.031	2.876	.2004	.2734	.4625	.5989	9.200	.2579	21.25	7.532
#1	.0034	.0222	1.363	9.679	21.44	.1501	.0043	100.8	.0019	.0099
#2	.0033	.0227	1.368	9.632	21.24	.1494	.0043	100.6	.0020	.0087
#3	.0035	.0215	1.365	9.676	21.38	.1483	.0037	101.1	.0027	.0086

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0123**	**.0048**	**3.385**	**.0069**	**5.760**	**.0108**	**.0017**	**.0017**	**.0742**
Stddev	.0035	.0022	.010	.0008	.080	.0003	.0012	.0002	.0003
%RSD	28.49	45.11	.3016	11.08	1.388	2.991	72.22	10.75	.4110
#1	.0155	.0057	3.376	.0077	5.683	.0105	.0004	.0017	.0739
#2	.0128	.0024	3.383	.0063	5.756	.0111	.0020	.0018	.0743
#3	.0086	.0064	3.396	.0066	5.843	.0107	.0028	.0015	.0745

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3841.9**	**62785.**	**6061.8**
Stddev	4.3	177.	17.5
%RSD	.11244	.28240	.28897
#1	3846.9	62919.	6062.9
#2	3839.3	62584.	6078.8
#3	3839.5	62852.	6043.8

Sample Name: L1807580-05,T Acquired: 3/10/2018 11:45:29 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.1495**	**.0019**	**.0325**	**.0279**	**-.0000**	**.0003**	**55.75**	**-.0001**	**.0002**
Stddev	.0001	.0069	.0028	.0004	.0002	.0001	.0009	.07	.0000	.0002
%RSD	38.11	4.629	151.4	1.255	.6283	262.3	277.7	.1270	59.60	111.1
#1	.0002	.1574	.0023	.0324	.0278	-.0001	-.0007	55.83	-.0001	.0004
#2	.0003	.1467	.0045	.0322	.0281	-.0000	.0011	55.69	-.0001	.0001
#3	.0004	.1445	-.0011	.0330	.0278	.0000	.0006	55.73	-.0000	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0693**	**.0164**	**.1106**	**3.784**	**13.64**	**.0122**	**.0045**	**121.1**	**.0004**	**.0013**
Stddev	.0006	.0002	.0041	.023	.07	.0005	.0003	.2	.0007	.0020
%RSD	.8652	1.234	3.709	.6086	.5200	3.953	7.532	.1551	160.0	153.6
#1	.0696	.0162	.1133	3.757	13.69	.0123	.0044	121.0	.0004	.0035
#2	.0697	.0166	.1059	3.799	13.56	.0126	.0048	121.0	.0011	.0005
#3	.0686	.0164	.1126	3.796	13.66	.0116	.0042	121.3	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**.0015**	**1.450**	**.0030**	**.2465**	**.0047**	**.0013**	**-.0000**	**.0321**
Stddev	.0042	.0007	.004	.0008	.0003	.0003	.0017	.0001	.0000
%RSD	120.3	47.40	.3093	27.32	.1211	5.769	131.2	619.7	.1237
#1	.0057	.0014	1.455	.0037	.2464	.0048	.0002	-.0001	.0321
#2	.0060	.0009	1.447	.0031	.2463	.0049	.0005	.0000	.0321
#3	-.0013	.0023	1.447	.0021	.2469	.0044	.0033	.0000	.0321

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3942.7**	**63541.**	**6053.4**
Stddev	6.7	263.	30.3
%RSD	.16999	.41368	.50132
#1	3935.7	63669.	6024.4
#2	3943.6	63238.	6084.9
#3	3949.0	63715.	6050.7

Sample Name: L1807636-02,T Acquired: 3/10/2018 11:50:06 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0770**	**.0024**	**.1380**	**.0343**	**.0000**	**.0014**	**88.60**	**-.0002**	**.0003**
Stddev	.0004	.0028	.0021	.0011	.0002	.0001	.0006	.21	.0000	.0001
%RSD	72.83	3.611	88.65	.8146	.5193	1873.	42.57	.2346	30.64	56.08
#1	-.0010	.0802	.0003	.1374	.0341	.0002	.0009	88.40	-.0002	.0004
#2	-.0002	.0751	.0023	.1373	.0344	-.0000	.0020	88.81	-.0002	.0001
#3	-.0004	.0758	.0045	.1393	.0344	-.0001	.0013	88.60	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0068**	**.1452**	**5.276**	**14.52**	**.0831**	**.0026**	**140.1**	**.0012**	**.0015**
Stddev	.0002	.0000	.0029	.021	.06	.0004	.0002	1.9	.0003	.0016
%RSD	15.62	.5183	2.030	.3904	.4119	.4227	6.074	1.379	23.64	107.7
#1	.0012	.0068	.1486	5.294	14.49	.0833	.0025	137.9	.0014	.0001
#2	.0009	.0069	.1432	5.281	14.59	.0833	.0027	141.5	.0011	.0011
#3	.0012	.0068	.1439	5.254	14.47	.0827	.0025	140.9	.0009	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**-.0028**	**4.600**	**.0013**	**.3316**	**.0048**	**.0006**	**.0009**	**.0099**
Stddev	.0017	.0018	.020	.0004	.0005	.0004	.0015	.0001	.0001
%RSD	52.61	65.91	.4421	33.57	.1428	7.595	240.7	5.643	1.154
#1	.0051	-.0033	4.588	.0008	.3311	.0046	.0022	.0010	.0098
#2	.0017	-.0007	4.589	.0016	.3320	.0045	-.0008	.0009	.0100
#3	.0030	-.0043	4.624	.0014	.3317	.0052	.0005	.0010	.0099

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3889.0**	**62553.**	**5971.3**
Stddev	7.7	32.	17.7
%RSD	.19895	.05045	.29690
#1	3895.8	62523.	5977.4
#2	3890.6	62551.	5951.4
#3	3880.6	62586.	5985.3

Sample Name: L1807636-04,T Acquired: 3/10/2018 11:54:46 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.2359**	**.0005**	**.1409**	**.0542**	**.0001**	**.0034**	**90.31**	**.0000**	**.0005**
Stddev	.0001	.0069	.0012	.0004	.0004	.0001	.0018	.13	.0000	.0003
%RSD	359.6	2.912	231.5	.2751	.6939	67.53	54.05	.1427	269.1	58.61
#1	.0000	.2416	-.0008	.1412	.0544	.0002	.0042	90.34	.0000	.0007
#2	-.0001	.2378	.0008	.1405	.0545	.0001	.0047	90.42	-.0000	.0002
#3	.0002	.2282	.0016	.1411	.0538	.0000	.0013	90.17	.0000	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0206**	**.7466**	**5.705**	**15.08**	**.0948**	**.0026**	**138.8**	**.0014**	**.0033**
Stddev	.0002	.0000	.0038	.052	.10	.0003	.0004	1.0	.0002	.0022
%RSD	10.34	.2184	.5149	.9122	.6610	.3060	15.51	.6942	10.86	66.19
#1	.0025	.0206	.7510	5.725	15.19	.0950	.0026	139.7	.0016	.0039
#2	.0021	.0207	.7443	5.745	15.04	.0945	.0021	138.9	.0014	.0052
#3	.0025	.0207	.7444	5.647	15.00	.0950	.0029	137.8	.0013	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**.0007**	**4.738**	**.0014**	**.3408**	**.0105**	**-.0007**	**.0011**	**.0346**
Stddev	.0016	.0034	.005	.0004	.0011	.0003	.0011	.0002	.0001
%RSD	50.12	457.6	.1044	27.47	.3230	2.649	147.0	15.53	.1500
#1	.0014	.0036	4.733	.0018	.3411	.0103	.0005	.0011	.0345
#2	.0044	.0017	4.738	.0011	.3418	.0108	-.0013	.0009	.0346
#3	.0039	-.0030	4.743	.0013	.3396	.0105	-.0014	.0013	.0346

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3896.7**	**62639.**	**5958.4**
Stddev	5.7	209.	31.9
%RSD	.14680	.33417	.53581
#1	3901.1	62845.	5922.8
#2	3898.8	62647.	5967.7
#3	3890.2	62426.	5984.6

Sample Name: L1807655-01,T Acquired: 3/10/2018 11:59:29 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**6.492**	**.0024**	**.0349**	**.0587**	**.0001**	**.0007**	**74.49**	**.0001**	**.0003**
Stddev	.0003	.007	.0011	.0002	.0002	.0001	.0021	.15	.0000	.0001
%RSD	119.4	.1142	44.36	.5971	.3773	137.0	316.7	.2002	6.842	41.57
#1	.0005	6.494	.0030	.0350	.0589	.0002	.0001	74.62	.0001	.0003
#2	.0003	6.498	.0032	.0347	.0587	.0000	.0030	74.33	.0001	.0003
#3	-.0001	6.484	.0012	.0351	.0585	.0000	-.0011	74.53	.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**.0075**	**.2202**	**29.62**	**16.21**	**.0892**	**.0043**	**636.6**	**.0058**	**.0025**
Stddev	.0004	.0002	.0029	.10	.07	.0006	.0000	2.0	.0001	.0005
%RSD	22.76	2.417	1.329	.3225	.4127	.7151	.9388	.3124	1.120	19.21
#1	.0021	.0075	.2189	29.71	16.28	.0894	.0044	634.3	.0059	.0031
#2	.0013	.0077	.2181	29.52	16.15	.0896	.0044	637.3	.0058	.0024
#3	.0017	.0074	.2235	29.63	16.20	.0884	.0043	638.1	.0058	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0020**	**1.963**	**.0020**	**.4506**	**.0052**	**.0016**	**.0000**	**.1244**
Stddev	.0019	.0031	.004	.0005	.0008	.0005	.0013	.0001	.0003
%RSD	354.8	153.0	.2133	23.84	.1675	10.41	77.97	560.7	.2521
#1	-.0026	-.0008	1.963	.0015	.4515	.0052	.0014	.0000	.1247
#2	.0011	-.0055	1.958	.0024	.4502	.0058	.0005	.0001	.1242
#3	-.0002	.0003	1.966	.0022	.4503	.0047	.0030	-.0001	.1241

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3765.9**	**59318.**	**5927.5**
Stddev	3.1	136.	22.9
%RSD	.08151	.22967	.38714
#1	3762.7	59373.	5910.6
#2	3768.8	59419.	5953.6
#3	3766.1	59163.	5918.2

Sample Name: L1807762-01,T Acquired: 3/10/2018 12:04:16 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0838**	**.0007**	**.0870**	**.0418**	**.0002**	**-.0003**	**95.94**	**-.0000**	**.0002**
Stddev	.0005	.0011	.0017	.0005	.0002	.0001	.0016	.18	.0000	.0001
%RSD	258.9	1.361	247.6	.6186	.5182	25.56	581.1	.1843	31.82	82.63
#1	-.0002	.0842	-.0005	.0873	.0420	.0002	-.0010	95.79	-.0000	.0003
#2	-.0008	.0825	-.0001	.0864	.0418	.0002	.0016	95.90	-.0000	.0002
#3	.0003	.0847	.0027	.0873	.0415	.0003	-.0014	96.14	-.0000	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065**	**.0022**	**.0789**	**2.680**	**26.31**	**.0065**	**.0015**	**18.84**	**.0059**	**.0020**
Stddev	.0003	.0000	.0017	.037	.17	.0004	.0002	.08	.0002	.0012
%RSD	4.571	1.297	2.217	1.392	.6271	6.721	15.96	.4405	4.022	59.81
#1	.0069	.0022	.0770	2.697	26.14	.0062	.0013	18.92	.0060	.0031
#2	.0064	.0022	.0794	2.637	26.46	.0063	.0017	18.75	.0060	.0022
#3	.0063	.0021	.0804	2.704	26.34	.0070	.0013	18.84	.0056	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**-.0017**	**3.428**	**.0009**	**.4713**	**.0044**	**.0024**	**.0002**	**.0104**
Stddev	.0012	.0017	.009	.0006	.0008	.0001	.0011	.0000	.0001
%RSD	94.07	99.51	.2701	65.22	.1799	3.015	44.29	11.52	1.383
#1	.0017	-.0000	3.423	.0015	.4720	.0043	.0012	.0002	.0106
#2	.0022	-.0035	3.422	.0010	.4704	.0046	.0030	.0002	.0103
#3	-.0001	-.0017	3.439	.0003	.4716	.0044	.0030	.0001	.0103

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3930.3**	**63255.**	**5948.3**
Stddev	12.4	122.	35.7
%RSD	.31678	.19265	.59941
#1	3935.3	63368.	5989.4
#2	3939.4	63272.	5926.7
#3	3916.1	63126.	5928.7

Sample Name: L1807762-02,T Acquired: 3/10/2018 12:08:55 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.1136**	**.0017**	**.0527**	**.0403**	**.0001**	**.0016**	**81.36**	**-.0001**	**.0003**
Stddev	.0002	.0096	.0020	.0014	.0002	.0001	.0007	.05	.0000	.0001
%RSD	1763.	8.445	113.3	2.655	.5304	46.02	46.32	.0658	3.227	22.25
#1	-.0003	.1205	.0017	.0515	.0400	.0002	.0014	81.33	-.0001	.0003
#2	.0002	.1175	-.0002	.0524	.0404	.0001	.0024	81.32	-.0001	.0003
#3	.0001	.1026	.0038	.0542	.0404	.0002	.0009	81.42	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**.0028**	**.0972**	**2.283**	**33.54**	**.0177**	**.0012**	**21.18**	**.0005**	**.0013**
Stddev	.0004	.0002	.0001	.033	.06	.0002	.0003	.03	.0002	.0002
%RSD	4.678	5.622	.1393	1.455	.1714	.9523	28.22	.1479	51.23	19.11
#1	.0080	.0028	.0972	2.294	33.50	.0176	.0009	21.15	.0007	.0011
#2	.0078	.0027	.0970	2.246	33.52	.0179	.0012	21.21	.0002	.0015
#3	.0085	.0030	.0973	2.310	33.61	.0177	.0016	21.19	.0005	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0010**	**2.518**	**.0005**	**.4249**	**.0056**	**.0013**	**.0000**	**.0222**
Stddev	.0016	.0014	.007	.0002	.0006	.0002	.0017	.0003	.0001
%RSD	143.6	144.3	.2883	33.78	.1525	3.220	131.5	674.0	.2322
#1	-.0007	.0005	2.509	.0005	.4247	.0054	.0011	.0001	.0222
#2	.0022	-.0011	2.521	.0007	.4256	.0056	-.0003	.0003	.0222
#3	.0019	-.0023	2.523	.0004	.4244	.0058	.0031	-.0002	.0223

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3922.3**	**63207.**	**5891.4**
Stddev	9.5	179.	14.3
%RSD	.24266	.28352	.24352
#1	3917.4	63404.	5906.0
#2	3933.3	63054.	5890.7
#3	3916.3	63163.	5877.3

Sample Name: L1807806-05,T Acquired: 3/10/2018 12:13:35 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0786**	**.0024**	**.0337**	**.0273**	**.0000**	**-.0011**	**51.67**	**-.0001**	**.0002**
Stddev	.0008	.0039	.0025	.0003	.0011	.0001	.0014	1.97	.0000	.0001
%RSD	1541.	4.977	104.2	1.037	3.949	379.1	130.2	3.821	31.88	63.58
#1	.0008	.0828	-.0003	.0339	.0280	.0000	-.0003	52.89	-.0001	.0002
#2	-.0003	.0778	.0029	.0333	.0278	.0001	-.0003	52.72	-.0001	.0002
#3	-.0007	.0751	.0046	.0339	.0260	-.0001	-.0027	49.39	-.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**.0143**	**.1151**	**3.842**	**13.69**	**.0163**	**.0032**	**117.8**	**.0004**	**.0015**
Stddev	.0002	.0009	.0032	.132	.51	.0004	.0002	4.6	.0000	.0009
%RSD	4.693	6.600	2.819	3.424	3.728	2.202	6.791	3.932	11.41	62.14
#1	.0036	.0153	.1176	3.909	14.13	.0163	.0034	120.7	.0004	.0025
#2	.0038	.0135	.1162	3.926	13.81	.0166	.0030	120.2	.0003	.0014
#3	.0034	.0140	.1114	3.690	13.13	.0159	.0031	112.5	.0004	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0032**	**1.710**	**.0003**	**.2388**	**.0029**	**.0005**	**.0001**	**.0271**
Stddev	.0015	.0019	.009	.0006	.0090	.0003	.0018	.0002	.0002
%RSD	67.12	59.10	.4978	201.2	3.761	8.834	382.0	122.8	.7023
#1	.0023	.0054	1.700	.0001	.2448	.0032	.0021	-.0001	.0269
#2	.0008	.0023	1.715	.0011	.2431	.0027	-.0014	.0002	.0272
#3	.0038	.0019	1.714	-.0002	.2285	.0028	.0007	.0002	.0272

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3924.3**	**63820.**	**6035.3**
Stddev	23.7	2258.	198.7
%RSD	.60328	3.5385	3.2926
#1	3951.2	61237.	5910.1
#2	3906.8	65423.	5931.3
#3	3914.9	64800.	6264.4

Sample Name: CCV Acquired: 3/10/2018 12:18:14 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4642**	**.5075**	**.4999**	**.4955**	**.4881**	**.4826**	**.4845**	**.5055**	**.4850**	**.4960**
Stddev	.0019	.0043	.0028	.0026	.0010	.0010	.0024	.0056	.0017	.0022
%RSD	.4107	.8385	.5567	.5287	.2018	.1985	.5037	1.103	.3496	.4377
#1	.4662	.5038	.5001	.4935	.4882	.4829	.4816	.5011	.4835	.4938
#2	.4640	.5064	.4970	.4944	.4891	.4834	.4857	.5118	.4845	.4961
#3	.4624	.5121	.5025	.4984	.4871	.4815	.4860	.5036	.4868	.4982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4870**	**.4948**	**.5022**	**4.716**	**.4736**	**.4834**	**.4869**	**9.097**	**.4871**	**.4970**
Stddev	.0009	.0008	.0029	.021	.0039	.0015	.0014	.011	.0022	.0025
%RSD	.1758	.1570	.5830	.4529	.8284	.3161	.2827	.1169	.4547	.5094
#1	.4877	.4954	.5053	4.734	.4713	.4823	.4856	9.106	.4852	.4954
#2	.4860	.4939	.5017	4.692	.4782	.4851	.4868	9.099	.4865	.4956
#3	.4871	.4951	.4995	4.722	.4714	.4828	.4883	9.085	.4895	.4999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4997**	**.4953**	**5.024**	**.4916**	**.4784**	**.4830**	**.4861**	**.4904**	**.4819**
Stddev	.0031	.0034	.025	.0021	.0012	.0004	.0039	.0013	.0013
%RSD	.6251	.6806	.4886	.4357	.2424	.0806	.8033	.2717	.2732
#1	.4969	.4914	5.005	.4897	.4791	.4831	.4832	.4919	.4809
#2	.4992	.4971	5.016	.4912	.4790	.4825	.4845	.4898	.4815
#3	.5031	.4975	5.052	.4939	.4771	.4833	.4905	.4894	.4834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4009.9**	**66282.**	**6145.1**
Stddev	11.8	138.	42.3
%RSD	.29549	.20783	.68791
#1	4020.1	66156.	6192.7
#2	4012.8	66429.	6112.0
#3	3996.9	66261.	6130.6

Sample Name: CCB Acquired: 3/10/2018 12:22:43 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0085**	**.0028**	**.0001**	**.0003**	**.0002**	**-.0001**	**.0113**	**.0001**	**.0003**
Stddev	.0004	.0057	.0008	.0004	.0002	.0001	.0013	.0061	.0000	.0002
%RSD	96.43	67.69	28.76	699.4	82.51	55.20	963.0	53.45	76.35	79.74
#1	.0004	.0040	.0019	.0003	.0000	.0002	-.0016	.0087	.0000	.0002
#2	.0009	.0149	.0033	-.0004	.0004	.0001	.0005	.0070	.0001	.0005
#3	.0000	.0064	.0033	.0003	.0004	.0003	.0007	.0182	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0010**	**-.0150**	**.0003**	**.0001**	**.0006**	**.0871**	**-.0003**	**.0006**
Stddev	.0004	.0002	.0014	.0180	.0010	.0001	.0001	.0263	.0003	.0014
%RSD	170.4	242.4	133.4	119.8	313.6	108.8	23.24	30.20	127.2	242.0
#1	.0006	-.0001	-.0005	-.0351	-.0001	.0000	.0006	.1163	-.0004	.0017
#2	.0001	.0003	.0022	-.0098	.0014	.0002	.0007	.0651	.0001	.0011
#3	-.0000	.0001	.0015	-.0002	-.0004	.0001	.0004	.0801	-.0005	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0014**	**-.0045**	**.0017**	**.0002**	**.0005**	**.0011**	**.0002**	**.0003**
Stddev	.0015	.0049	.0006	.0005	.0001	.0003	.0012	.0003	.0002
%RSD	345.7	346.6	13.68	30.76	51.91	66.79	112.4	116.8	56.10
#1	-.0017	-.0032	-.0045	.0016	.0001	.0001	.0013	.0006	.0001
#2	.0012	.0066	-.0040	.0012	.0003	.0007	-.0002	.0001	.0003
#3	-.0008	.0008	-.0052	.0022	.0002	.0005	.0022	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4043.9**	**66327.**	**6060.0**
Stddev	4.6	69.	10.5
%RSD	.11495	.10446	.17354
#1	4048.0	66399.	6055.4
#2	4045.0	66261.	6072.0
#3	4038.9	66321.	6052.5

Sample Name: L1807825-01,T Acquired: 3/10/2018 12:27:25 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0693**	**.0005**	**.0232**	**.0215**	**.0001**	**-.0005**	**33.91**	**-.0000**	**.0002**
Stddev	.0008	.0058	.0020	.0006	.0003	.0001	.0016	.07	.0001	.0001
%RSD	155.5	8.308	410.9	2.556	1.399	90.32	327.9	.1992	2239.	81.32
#1	.0012	.0759	.0001	.0227	.0213	.0001	-.0023	33.88	.0001	.0003
#2	-.0003	.0653	.0026	.0239	.0213	.0000	.0008	33.87	-.0000	.0002
#3	.0007	.0668	-.0013	.0232	.0218	.0001	.0001	33.99	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0052**	**.0880**	**1.453**	**8.522**	**.0037**	**.0013**	**11.36**	**.0008**	**.0014**
Stddev	.0004	.0001	.0030	.011	.057	.0001	.0001	.03	.0003	.0001
%RSD	37.13	1.393	3.436	.7828	.6728	2.057	10.29	.2281	35.87	9.312
#1	.0011	.0052	.0888	1.462	8.542	.0037	.0011	11.33	.0006	.0013
#2	.0016	.0051	.0847	1.440	8.458	.0038	.0013	11.35	.0007	.0013
#3	.0008	.0052	.0906	1.457	8.567	.0036	.0014	11.38	.0011	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**-.0008**	**.5600**	**.0016**	**.1464**	**.0021**	**.0030**	**.0003**	**.0055**
Stddev	.0017	.0015	.0025	.0005	.0004	.0005	.0004	.0002	.0000
%RSD	128.5	199.8	.4378	30.04	.2981	25.88	13.14	74.94	.4406
#1	.0008	.0003	.5581	.0021	.1459	.0024	.0025	.0002	.0056
#2	-.0001	-.0001	.5590	.0013	.1464	.0015	.0032	.0006	.0055
#3	.0031	-.0025	.5628	.0013	.1468	.0023	.0032	.0001	.0055

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4018.9**	**64762.**	**6003.8**
Stddev	14.9	156.	31.1
%RSD	.37188	.24116	.51753
#1	4034.1	64724.	5994.2
#2	4018.4	64628.	6038.5
#3	4004.2	64933.	5978.7

Sample Name: L1807825-02,T Acquired: 3/10/2018 12:32:04 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0511**	**.0025**	**.0197**	**.0211**	**.0001**	**.0006**	**32.84**	**-.0001**	**.0003**
Stddev	.0010	.0044	.0022	.0005	.0001	.0001	.0010	.08	.0001	.0001
%RSD	4092.	8.655	87.96	2.453	.4195	47.24	159.6	.2551	127.3	20.99
#1	-.0009	.0521	.0004	.0199	.0210	.0002	.0017	32.76	.0000	.0003
#2	.0010	.0463	.0048	.0201	.0212	.0001	-.0000	32.92	-.0002	.0003
#3	-.0002	.0549	.0023	.0192	.0212	.0001	.0001	32.83	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0025**	**.0736**	**1.415**	**8.447**	**.0030**	**.0010**	**11.07**	**.0012**	**.0018**
Stddev	.0003	.0002	.0016	.030	.076	.0001	.0001	.06	.0004	.0016
%RSD	24.77	7.606	2.108	2.098	.8948	2.402	12.50	.5191	33.27	86.53
#1	.0008	.0023	.0743	1.381	8.480	.0029	.0010	11.00	.0008	.0003
#2	.0010	.0026	.0747	1.435	8.502	.0031	.0012	11.11	.0016	.0034
#3	.0013	.0027	.0719	1.428	8.361	.0029	.0009	11.09	.0010	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0003**	**.5446**	**.0001**	**.1449**	**.0024**	**.0002**	**.0001**	**.0033**
Stddev	.0025	.0022	.0018	.0007	.0004	.0002	.0014	.0003	.0000
%RSD	517.3	848.2	.3237	593.5	.3060	8.970	596.2	254.5	.5630
#1	-.0010	-.0018	.5430	-.0004	.1444	.0023	.0017	-.0002	.0033
#2	.0023	.0000	.5465	.0009	.1450	.0023	.0001	.0001	.0033
#3	-.0027	.0026	.5442	-.0002	.1453	.0026	-.0011	.0005	.0033

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4004.4**	**64189.**	**5950.8**
Stddev	9.3	201.	52.3
%RSD	.23191	.31332	.87823
#1	4011.1	63957.	5924.5
#2	4008.3	64296.	5916.8
#3	3993.8	64313.	6010.9

Sample Name: L1807842-01,T Acquired: 3/10/2018 12:36:42 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.2634**	**.0025**	**.0173**	**.0246**	**.0001**	**.0008**	**33.79**	**.0001**	**.0005**
Stddev	.0005	.0133	.0017	.0005	.0001	.0001	.0008	.04	.0000	.0001
%RSD	745.4	5.036	67.08	2.959	.5397	77.69	98.93	.1240	20.77	19.84
#1	.0005	.2787	.0032	.0175	.0245	.0000	.0015	33.83	.0001	.0004
#2	-.0004	.2573	.0006	.0167	.0248	.0003	-.0001	33.75	.0001	.0006
#3	.0000	.2544	.0037	.0177	.0247	.0001	.0011	33.78	.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0034**	**3.454**	**2.516**	**5.791**	**.1080**	**.0004**	**131.2**	**.0011**	**.0049**
Stddev	.0002	.0000	.007	.018	.028	.0005	.0001	.4	.0000	.0006
%RSD	14.42	.6159	.2122	.6992	.4882	.4619	13.70	.3078	.3548	11.40
#1	.0017	.0034	3.462	2.510	5.769	.1075	.0004	130.9	.0011	.0055
#2	.0013	.0035	3.448	2.536	5.823	.1080	.0003	131.6	.0011	.0043
#3	.0017	.0034	3.452	2.503	5.782	.1085	.0004	130.9	.0011	.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0019**	**3.050**	**.0010**	**.1065**	**.0068**	**-.0003**	**.0012**	**.0231**
Stddev	.0018	.0020	.011	.0005	.0002	.0003	.0007	.0001	.0001
%RSD	218.1	109.1	.3429	49.24	.2066	3.771	236.1	8.054	.4517
#1	-.0010	-.0024	3.052	.0012	.1068	.0067	-.0010	.0012	.0230
#2	-.0025	-.0036	3.039	.0004	.1064	.0071	-.0000	.0013	.0232
#3	.0011	.0004	3.060	.0013	.1065	.0067	.0002	.0011	.0231

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3943.9**	**63116.**	**6061.5**
Stddev	14.7	159.	34.3
%RSD	.37210	.25231	.56667
#1	3950.4	63163.	6093.3
#2	3954.2	62939.	6025.1
#3	3927.1	63247.	6066.3

Sample Name: L1807867-02,T Acquired: 3/10/2018 12:41:20 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**1.134**	**.0083**	**.3165**	**.0247**	**.0001**	**.0016**	**53.42**	**.0001**	**.0007**
Stddev	.0004	.020	.0013	.0024	.0001	.0002	.0008	.04	.0000	.0001
%RSD	338.6	1.716	15.70	.7627	.5883	220.8	48.47	.0713	91.47	21.69
#1	.0003	1.113	.0083	.3139	.0245	.0000	.0019	53.38	.0001	.0008
#2	-.0004	1.152	.0070	.3172	.0248	.0003	.0007	53.41	.0001	.0007
#3	.0004	1.137	.0096	.3186	.0247	-.0001	.0021	53.46	-.0000	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0332**	**.0264**	**.9841**	**31.62**	**.4466**	**.0213**	**.1949**	**103.7**	**.0022**	**.0046**
Stddev	.0002	.0001	.0072	.07	.0021	.0001	.0017	.0	.0003	.0002
%RSD	.4747	.4322	.7336	.2300	.4591	.2913	.8957	.0200	13.21	4.109
#1	.0334	.0264	.9770	31.54	.4444	.0214	.1930	103.7	.0023	.0045
#2	.0331	.0265	.9840	31.69	.4473	.0213	.1953	103.8	.0019	.0048
#3	.0331	.0263	.9914	31.64	.4483	.0213	.1964	103.7	.0025	.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**.0226**	**7.836**	**.0001**	**.4152**	**.0394**	**-.0004**	**.0471**	**.0142**
Stddev	.0035	.0010	.058	.0004	.0013	.0001	.0006	.0004	.0001
%RSD	195.0	4.601	.7451	526.0	.3112	.3771	168.1	.8877	.7880
#1	.0032	.0238	7.772	.0003	.4138	.0393	-.0008	.0474	.0142
#2	.0044	.0221	7.853	-.0003	.4162	.0393	.0003	.0474	.0141
#3	-.0022	.0220	7.885	.0002	.4157	.0395	-.0006	.0467	.0143

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3975.8**	**63537.**	**5993.1**
Stddev	20.2	297.	50.3
%RSD	.50908	.46807	.83983
#1	3994.2	63196.	6022.6
#2	3979.1	63671.	6021.7
#3	3954.1	63744.	5935.0

Sample Name: L1807869-02,T Acquired: 3/10/2018 12:45:55 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0331**	**.0009**	**.0224**	**.1073**	**.0001**	**.0014**	**139.2**	**-.0001**	**.0001**
Stddev	.0009	.0081	.0016	.0002	.0003	.0001	.0002	.3	.0000	.0003
%RSD	873.5	24.38	183.2	.7855	.2399	113.4	17.25	.2353	36.31	323.2
#1	-.0008	.0369	-.0004	.0225	.1076	.0001	.0016	139.5	-.0002	.0004
#2	-.0005	.0238	.0004	.0222	.1072	.0003	.0014	139.2	-.0001	-.0001
#3	.0009	.0386	.0027	.0226	.1072	.0000	.0011	138.9	-.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0024**	**.0048**	**2.139**	**37.29**	**.0019**	**.0011**	**64.00**	**.0004**	**.0012**
Stddev	.0003	.0004	.0017	.041	.16	.0006	.0002	.13	.0003	.0029
%RSD	35.06	16.23	35.70	1.917	.4165	33.14	19.57	.2004	85.74	251.6
#1	.0010	.0023	.0030	2.158	37.12	.0019	.0008	64.11	.0008	.0035
#2	.0005	.0021	.0051	2.167	37.35	.0025	.0012	64.01	.0002	-.0022
#3	.0007	.0028	.0064	2.092	37.41	.0013	.0012	63.86	.0002	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0024**	**6.544**	**.0003**	**.2651**	**.0033**	**.0014**	**.0002**	**.0011**
Stddev	.0029	.0045	.025	.0012	.0007	.0003	.0021	.0001	.0000
%RSD	288.6	186.4	.3737	437.0	.2652	9.257	152.3	77.46	4.242
#1	.0034	.0014	6.539	-.0009	.2658	.0035	-.0009	.0001	.0011
#2	-.0022	.0073	6.522	.0003	.2650	.0035	.0033	.0003	.0010
#3	.0018	-.0015	6.571	.0014	.2644	.0030	.0017	.0000	.0010

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3860.9**	**63366.**	**6054.3**
Stddev	9.1	156.	24.2
%RSD	.23683	.24619	.39930
#1	3864.5	63202.	6081.2
#2	3867.8	63381.	6047.6
#3	3850.5	63513.	6034.2

Sample Name: L1807869-03,T Acquired: 3/10/2018 12:50:33 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0324**	**-.0010**	**.0214**	**.0862**	**-.0001**	**.0006**	**136.4**	**-.0001**	**-.0000**
Stddev	.0008	.0037	.0027	.0005	.0001	.0001	.0007	.5	.0000	.0001
%RSD	319.8	11.53	258.8	2.355	.1292	131.9	127.4	.3334	27.44	1680.
#1	.0006	.0349	.0016	.0216	.0862	.0000	.0009	136.9	-.0001	.0001
#2	-.0004	.0342	-.0010	.0217	.0861	-.0002	.0011	136.3	-.0001	-.0001
#3	-.0009	.0281	-.0037	.0208	.0863	-.0001	-.0003	136.0	-.0001	-.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0086**	**.0045**	**2.119**	**36.56**	**.0007**	**.0007**	**62.53**	**.0003**	**.0015**
Stddev	.0001	.0001	.0019	.018	.15	.0004	.0001	.26	.0004	.0010
%RSD	18.66	.6757	40.80	.8719	.4005	52.90	9.180	.4083	122.6	69.84
#1	.0008	.0085	.0062	2.101	36.72	.0003	.0007	62.24	.0004	.0022
#2	.0005	.0085	.0048	2.137	36.45	.0007	.0008	62.66	-.0001	.0003
#3	.0006	.0086	.0026	2.120	36.50	.0011	.0008	62.69	.0006	.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**-.0015**	**6.408**	**.0007**	**.2621**	**.0031**	**.0013**	**.0001**	**.0031**
Stddev	.0024	.0033	.007	.0002	.0015	.0002	.0018	.0005	.0000
%RSD	141.4	217.2	.1076	30.34	.5878	5.872	141.0	345.0	1.109
#1	-.0010	-.0002	6.415	.0005	.2631	.0032	.0008	.0003	.0031
#2	.0035	-.0053	6.402	.0007	.2628	.0029	.0032	.0005	.0031
#3	.0026	.0009	6.406	.0009	.2603	.0032	-.0002	-.0004	.0032

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3875.1**	**63080.**	**6060.2**
Stddev	6.4	67.	23.1
%RSD	.16557	.10670	.38144
#1	3867.7	63089.	6036.3
#2	3878.3	63009.	6061.8
#3	3879.2	63143.	6082.4

Sample Name: L1807869-04,T Acquired: 3/10/2018 12:55:11 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0324**	**.0014**	**.0215**	**.1063**	**.0001**	**.0004**	**137.1**	**-.0001**	**-.0001**
Stddev	.0005	.0018	.0015	.0003	.0002	.0001	.0005	.1	.0000	.0001
%RSD	170.4	5.623	110.1	1.215	.1557	119.0	134.6	.0805	18.97	131.9
#1	.0003	.0343	.0014	.0213	.1064	.0002	.0008	137.2	-.0001	.0000
#2	-.0006	.0307	.0029	.0213	.1061	.0001	-.0002	137.0	-.0001	-.0001
#3	-.0006	.0322	-.0002	.0218	.1063	-.0000	.0007	137.0	-.0001	-.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0010**	**.0102**	**2.163**	**37.87**	**.0013**	**.0005**	**66.83**	**.0008**	**.0002**
Stddev	.0004	.0003	.0013	.019	.10	.0003	.0000	.25	.0006	.0006
%RSD	56.41	28.76	13.02	.8944	.2696	21.46	5.435	.3736	75.90	268.5
#1	.0006	.0013	.0090	2.162	37.99	.0014	.0005	66.79	.0003	-.0002
#2	.0012	.0007	.0099	2.183	37.81	.0015	.0005	66.60	.0014	.0000
#3	.0004	.0010	.0116	2.144	37.82	.0010	.0005	67.09	.0006	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0032**	**6.385**	**-.0002**	**.2589**	**.0028**	**.0008**	**-.0003**	**.0092**
Stddev	.0018	.0011	.023	.0011	.0004	.0004	.0020	.0004	.0001
%RSD	422.6	35.42	.3669	574.6	.1693	13.73	254.4	116.8	1.065
#1	.0019	.0044	6.366	-.0002	.2593	.0028	.0030	-.0006	.0092
#2	.0010	.0031	6.377	.0009	.2589	.0032	-.0004	.0001	.0091
#3	-.0016	.0021	6.411	-.0013	.2584	.0025	-.0004	-.0005	.0092

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3888.5**	**62632.**	**5937.9**
Stddev	8.2	189.	7.6
%RSD	.20976	.30147	.12877
#1	3889.4	62850.	5931.2
#2	3896.1	62538.	5946.2
#3	3879.9	62510.	5936.3

Sample Name: L1807869-05,T Acquired: 3/10/2018 12:59:50 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0350**	**.0003**	**.0213**	**.1031**	**.0001**	**.0008**	**134.0**	**-.0001**	**.0001**
Stddev	.0005	.0072	.0008	.0006	.0001	.0001	.0006	.1	.0000	.0003
%RSD	776.9	20.62	240.8	2.737	.1403	71.93	78.07	.1040	23.23	280.4
#1	-.0006	.0384	.0007	.0207	.1030	.0002	.0004	134.1	-.0000	.0003
#2	-.0000	.0267	.0009	.0216	.1033	.0001	.0005	133.9	-.0001	.0003
#3	.0005	.0399	-.0006	.0217	.1031	.0001	.0015	134.1	-.0001	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0009**	**.0070**	**2.159**	**36.88**	**.0007**	**.0002**	**65.73**	**.0056**	**.0016**
Stddev	.0010	.0003	.0001	.031	.23	.0003	.0002	.11	.0001	.0016
%RSD	101.2	32.69	2.098	1.435	.6263	42.05	110.5	.1733	2.640	102.1
#1	.0015	.0006	.0070	2.195	37.15	.0006	-.0000	65.60	.0056	.0024
#2	.0015	.0012	.0071	2.141	36.76	.0005	.0004	65.77	.0058	-.0003
#3	-.0002	.0009	.0068	2.141	36.74	.0011	.0002	65.82	.0055	.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0005**	**6.314**	**.0000**	**.2527**	**.0032**	**.0011**	**.0001**	**.0023**
Stddev	.0026	.0008	.020	.0007	.0002	.0001	.0011	.0002	.0002
%RSD	199.1	148.2	.3211	1559.	.0653	3.335	100.3	166.0	7.355
#1	-.0017	.0011	6.332	-.0005	.2525	.0032	.0004	.0003	.0023
#2	.0026	-.0004	6.292	-.0003	.2528	.0030	.0024	.0002	.0025
#3	.0031	.0009	6.317	.0008	.2527	.0032	.0006	-.0001	.0022

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3874.4**	**62895.**	**5981.0**
Stddev	14.2	559.	35.9
%RSD	.36552	.88891	.59979
#1	3866.3	62738.	5945.7
#2	3890.7	62431.	6017.5
#3	3866.1	63516.	5979.7

Sample Name: L1807881-01,T Acquired: 3/10/2018 13:04:29 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.2405**	**.0015**	**.0321**	**.0357**	**.0002**	**-.0010**	**54.09**	**-.0001**	**.0004**
Stddev	.0002	.0090	.0016	.0001	.0003	.0001	.0006	.07	.0000	.0002
%RSD	274.8	3.758	106.6	.2723	.8898	79.35	55.15	.1387	38.15	37.92
#1	.0001	.2320	.0027	.0322	.0355	.0002	-.0007	54.06	-.0001	.0003
#2	-.0001	.2500	-.0003	.0321	.0356	.0003	-.0007	54.17	-.0002	.0006
#3	.0002	.2396	.0022	.0320	.0361	.0000	-.0017	54.04	-.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0045**	**.0487**	**2.924**	**12.90**	**.0035**	**.0017**	**161.9**	**.0016**	**.0024**
Stddev	.0005	.0002	.0026	.049	.03	.0003	.0001	1.9	.0004	.0007
%RSD	46.64	3.368	5.422	1.673	.2587	7.262	8.183	1.189	25.32	29.92
#1	.0011	.0044	.0516	2.869	12.90	.0032	.0015	164.0	.0012	.0021
#2	.0005	.0047	.0464	2.963	12.94	.0037	.0018	161.3	.0017	.0019
#3	.0015	.0044	.0481	2.939	12.87	.0034	.0016	160.4	.0020	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**-.0002**	**1.075**	**.0006**	**.2321**	**.0151**	**.0002**	**.0010**	**.0144**
Stddev	.0008	.0021	.002	.0005	.0004	.0002	.0006	.0001	.0002
%RSD	46.57	964.4	.2047	76.62	.1938	1.556	260.5	12.55	1.052
#1	.0027	-.0005	1.075	.0003	.2320	.0150	.0000	.0011	.0143
#2	.0012	.0020	1.073	.0012	.2318	.0154	-.0002	.0009	.0145
#3	.0014	-.0022	1.078	.0004	.2327	.0150	.0009	.0011	.0146

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3926.3**	**62427.**	**5986.3**
Stddev	13.4	100.	23.5
%RSD	.34144	.16045	.39297
#1	3941.5	62314.	5978.5
#2	3920.8	62461.	5967.6
#3	3916.4	62506.	6012.7

Sample Name: L1807902-03,T Acquired: 3/10/2018 13:09:16 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0616**	**.0017**	**.3962**	**.0369**	**.0002**	**-.0004**	**155.0**	**-.0001**	**.0015**
Stddev	.0004	.0040	.0002	.0010	.0000	.0001	.0013	.5	.0000	.0001
%RSD	167.2	6.417	14.55	.2463	.1229	72.61	339.0	.3216	40.29	7.681
#1	.0007	.0641	.0017	.3960	.0368	.0003	.0011	155.5	-.0001	.0014
#2	.0002	.0638	.0014	.3953	.0369	.0001	-.0015	154.5	-.0002	.0015
#3	-.0001	.0571	.0019	.3972	.0369	.0001	-.0007	155.0	-.0001	.0016

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0022**	**.0804**	**5.487**	**26.55**	**.4469**	**.0049**	**51.60**	**.0083**	**-.0001**
Stddev	.0005	.0001	.0017	.034	.19	.0016	.0001	.26	.0005	.0003
%RSD	40.38	5.714	2.096	.6214	.7063	.3550	2.235	.5130	6.009	250.8
#1	.0006	.0021	.0822	5.522	26.60	.4476	.0049	51.80	.0078	-.0004
#2	.0016	.0023	.0789	5.453	26.34	.4451	.0048	51.30	.0084	-.0001
#3	.0012	.0021	.0802	5.486	26.71	.4481	.0050	51.70	.0088	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0018**	**7.002**	**.0001**	**.6398**	**.0037**	**.0033**	**-.0001**	**.0289**
Stddev	.0013	.0012	.029	.0005	.0021	.0004	.0026	.0004	.0001
%RSD	118.5	67.18	.4201	553.5	.3225	10.78	78.29	362.4	.3279
#1	.0014	.0015	6.991	-.0004	.6415	.0041	.0039	-.0003	.0288
#2	.0021	.0008	6.979	-.0001	.6375	.0037	.0005	-.0003	.0290
#3	-.0003	.0032	7.035	.0007	.6403	.0033	.0056	.0003	.0290

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3893.7**	**62561.**	**5894.9**
Stddev	6.2	124.	39.8
%RSD	.15927	.19741	.67562
#1	3899.6	62576.	5882.4
#2	3894.2	62677.	5939.5
#3	3887.2	62431.	5862.8

Sample Name: CCV Acquired: 3/10/2018 13:13:54 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4936**	**.5324**	**.5129**	**.4961**	**.5030**	**.5010**	**.4843**	**.5136**	**.4937**	**.4967**
Stddev	.0029	.0116	.0031	.0018	.0006	.0006	.0017	.0095	.0010	.0023
%RSD	.5922	2.186	.6137	.3671	.1278	.1169	.3443	1.857	.2065	.4598
#1	.4903	.5405	.5099	.4970	.5032	.5015	.4853	.5120	.4939	.4963
#2	.4948	.5190	.5126	.4940	.5035	.5011	.4824	.5238	.4926	.4947
#3	.4957	.5376	.5162	.4973	.5023	.5004	.4853	.5049	.4947	.4992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4954**	**.4968**	**.5176**	**5.024**	**.5040**	**.5142**	**.4950**	**10.00**	**.4932**	**.5034**
Stddev	.0024	.0022	.0017	.028	.0047	.0013	.0018	.01	.0019	.0022
%RSD	.4920	.4386	.3275	.5601	.9304	.2472	.3689	.0681	.3826	.4422
#1	.4928	.4943	.5162	5.049	.5013	.5129	.4947	10.00	.4934	.5013
#2	.4977	.4982	.5195	4.993	.5094	.5154	.4933	9.998	.4913	.5032
#3	.4959	.4980	.5171	5.029	.5013	.5143	.4969	10.01	.4951	.5058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5083**	**.4908**	**5.068**	**.4984**	**.4813**	**.4914**	**.4920**	**.5100**	**.4836**
Stddev	.0017	.0017	.011	.0020	.0010	.0024	.0018	.0026	.0011
%RSD	.3318	.3462	.2253	.3948	.2007	.4874	.3580	.5091	.2185
#1	.5095	.4910	5.070	.4985	.4812	.4892	.4917	.5071	.4843
#2	.5064	.4890	5.055	.4963	.4824	.4940	.4904	.5118	.4824
#3	.5091	.4923	5.078	.5003	.4805	.4910	.4939	.5113	.4841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4007.2**	**64718.**	**5904.4**
Stddev	9.5	285.	8.3
%RSD	.23829	.44106	.14102
#1	4003.3	64950.	5895.3
#2	4018.1	64399.	5906.2
#3	4000.2	64805.	5911.7

Sample Name: CCB Acquired: 3/10/2018 13:18:24 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0065**	**.0013**	**.0003**	**.0002**	**.0004**	**-.0009**	**.0080**	**.0003**	**.0003**
Stddev	.0002	.0055	.0009	.0006	.0001	.0002	.0009	.0086	.0000	.0001
%RSD	17.33	84.47	67.60	225.2	48.17	44.05	102.1	107.4	8.850	47.14
#1	.0008	.0053	.0024	.0009	.0001	.0006	-.0014	-.0019	.0002	.0001
#2	.0010	.0017	.0010	-.0004	.0003	.0003	-.0014	.0128	.0003	.0004
#3	.0011	.0124	.0007	.0003	.0002	.0003	.0002	.0132	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0006**	**.0017**	**.0220**	**.0039**	**.0006**	**.0007**	**.0832**	**-.0003**	**.0005**
Stddev	.0002	.0005	.0008	.0380	.0007	.0002	.0003	.0045	.0001	.0008
%RSD	67.98	87.29	49.22	172.6	18.48	27.61	49.19	5.398	42.68	169.5
#1	.0005	.0009	.0007	.0251	.0032	.0004	.0008	.0862	-.0002	.0014
#2	.0004	.0008	.0021	-.0174	.0046	.0008	.0009	.0780	-.0004	.0001
#3	.0001	-.0000	.0022	.0583	.0037	.0006	.0003	.0853	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0033**	**-.0027**	**.0025**	**.0003**	**.0006**	**.0010**	**.0001**	**.0004**
Stddev	.0018	.0035	.0004	.0010	.0002	.0002	.0017	.0002	.0002
%RSD	154.0	105.6	14.25	40.44	68.05	36.07	182.2	225.5	44.61
#1	-.0001	.0071	-.0022	.0036	.0005	.0007	-.0009	-.0000	.0003
#2	.0003	.0003	-.0028	.0017	.0005	.0006	.0013	-.0000	.0006
#3	.0033	.0025	-.0030	.0021	.0001	.0003	.0025	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3923.5**	**63669.**	**5726.9**
Stddev	3.5	143.	22.4
%RSD	.08807	.22501	.39079
#1	3922.5	63592.	5710.4
#2	3927.3	63580.	5717.8
#3	3920.6	63834.	5752.3

Sample Name: L1806872-02,C Acquired: 3/10/2018 13:23:05 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0235**	**.0042**	**.0271**	**.0139**	**.0002**	**.0012**	**77.97**	**-.0000**	**.0003**
Stddev	.0005	.0039	.0033	.0007	.0001	.0001	.0017	.38	.0000	.0003
%RSD	2272.	16.56	79.85	2.439	.6127	55.88	135.9	.4812	290.4	94.15
#1	.0005	.0228	.0079	.0270	.0139	.0001	.0022	77.72	.0000	.0003
#2	-.0003	.0201	.0031	.0278	.0138	.0001	.0021	77.80	.0000	.0005
#3	-.0003	.0278	.0015	.0265	.0139	.0002	-.0007	78.40	-.0001	-.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.0432**	**.0041**	**3.142**	**2.358**	**.0025**	**.0099**	**146.2**	**.0013**	**.0002**
Stddev	.0004	.0001	.0006	.056	.012	.0009	.0001	.8	.0006	.0011
%RSD	17.24	.1414	13.72	1.780	.5263	35.63	.6355	.5794	45.32	696.2
#1	.0024	.0433	.0042	3.171	2.345	.0025	.0099	145.7	.0009	-.0007
#2	.0017	.0432	.0045	3.078	2.359	.0034	.0100	145.7	.0019	.0015
#3	.0020	.0432	.0035	3.178	2.370	.0016	.0099	147.1	.0010	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0041**	**.0035**	**3.680**	**.0031**	**.2677**	**.0020**	**-.0014**	**.0187**	**.0003**
Stddev	.0016	.0017	.015	.0009	.0007	.0008	.0013	.0004	.0001
%RSD	38.97	49.17	.4030	28.97	.2707	39.17	90.78	1.913	25.24
#1	.0038	.0019	3.683	.0030	.2670	.0012	.0001	.0190	.0003
#2	.0027	.0054	3.664	.0041	.2678	.0020	-.0021	.0188	.0003
#3	.0058	.0034	3.694	.0023	.2684	.0027	-.0023	.0183	.0004

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3705.4**	**60660.**	**5846.5**
Stddev	9.2	250.	37.5
%RSD	.24705	.41142	.64133
#1	3708.6	60471.	5880.7
#2	3712.6	60943.	5852.5
#3	3695.1	60567.	5806.4

Sample Name: L1806872-03,C Acquired: 3/10/2018 13:27:51 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0292**	**.0045**	**.0206**	**.0116**	**.0001**	**.0005**	**81.92**	**-.0001**	**.0005**
Stddev	.0002	.0078	.0013	.0002	.0002	.0000	.0006	.63	.0000	.0000
%RSD	41.16	26.63	27.97	1.192	1.648	37.31	117.8	.7680	9.740	9.342
#1	-.0007	.0237	.0050	.0208	.0115	.0001	.0011	81.36	-.0001	.0005
#2	-.0003	.0381	.0031	.0203	.0118	.0001	-.0001	82.60	-.0001	.0005
#3	-.0005	.0259	.0055	.0207	.0116	.0000	.0005	81.79	-.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.0578**	**.0021**	**3.487**	**1.403**	**.0007**	**.0120**	**145.5**	**.0028**	**.0014**
Stddev	.0004	.0002	.0037	.026	.012	.0002	.0003	2.7	.0002	.0017
%RSD	16.63	.2669	177.0	.7371	.8176	30.90	2.788	1.880	8.133	121.1
#1	.0023	.0576	-.0018	3.499	1.391	.0005	.0123	142.4	.0028	.0011
#2	.0028	.0579	.0025	3.506	1.413	.0010	.0117	147.6	.0031	.0032
#3	.0020	.0578	.0055	3.458	1.406	.0007	.0120	146.5	.0027	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**.0037**	**2.058**	**.0022**	**.3084**	**.0029**	**-.0003**	**.0201**	**.0001**
Stddev	.0003	.0013	.005	.0014	.0015	.0001	.0006	.0003	.0001
%RSD	17.62	33.80	.2474	62.19	.4890	2.732	194.2	1.449	109.1
#1	.0022	.0042	2.052	.0022	.3071	.0029	-.0006	.0200	.0002
#2	.0018	.0046	2.058	.0037	.3100	.0028	-.0007	.0204	-.0000
#3	.0015	.0023	2.063	.0009	.3080	.0029	.0004	.0198	.0002

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3730.4**	**60572.**	**5880.8**
Stddev	12.9	203.	60.8
%RSD	.34491	.33482	1.0347
#1	3716.6	60697.	5934.1
#2	3742.1	60680.	5814.5
#3	3732.5	60338.	5893.7

Sample Name: L1806872-04,C Acquired: 3/10/2018 13:32:37 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0402**	**.0007**	**.0406**	**.0089**	**.0001**	**.0007**	**61.99**	**.0043**	**.0016**
Stddev	.0006	.0056	.0019	.0005	.0001	.0001	.0011	.07	.0000	.0001
%RSD	349.8	13.88	256.5	1.333	1.169	94.43	166.2	.1083	.5709	9.163
#1	.0003	.0362	.0029	.0401	.0091	.0001	.0014	62.05	.0043	.0015
#2	.0007	.0465	-.0003	.0412	.0089	.0001	-.0006	62.01	.0043	.0017
#3	-.0005	.0378	-.0004	.0405	.0089	-.0000	.0013	61.92	.0043	.0018

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0073**	**.0168**	**.0115**	**2.042**	**3.824**	**.0625**	**.0039**	**153.0**	**.0101**	**.0022**
Stddev	.0003	.0001	.0029	.025	.015	.0009	.0002	1.6	.0002	.0003
%RSD	4.454	.8138	25.13	1.243	.3934	1.458	4.492	1.050	2.292	15.77
#1	.0073	.0170	.0124	2.020	3.835	.0632	.0039	152.9	.0099	.0019
#2	.0070	.0167	.0138	2.070	3.807	.0615	.0041	154.6	.0100	.0026
#3	.0076	.0168	.0083	2.037	3.829	.0629	.0038	151.4	.0103	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0034**	**3.473**	**.0010**	**.0870**	**.0028**	**-.0001**	**.0078**	**.2058**
Stddev	.0023	.0016	.008	.0002	.0001	.0001	.0015	.0001	.0006
%RSD	309.5	47.05	.2201	21.05	.1378	4.693	1023.	1.615	.3130
#1	-.0003	.0030	3.471	.0011	.0871	.0027	-.0015	.0076	.2054
#2	-.0008	.0020	3.466	.0008	.0872	.0027	-.0005	.0078	.2054
#3	.0034	.0052	3.481	.0013	.0869	.0029	.0015	.0078	.2065

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3751.0**	**60276.**	**5750.0**
Stddev	4.3	92.	20.7
%RSD	.11583	.15320	.35955
#1	3752.3	60219.	5728.6
#2	3754.5	60382.	5769.9
#3	3746.1	60226.	5751.6

Sample Name: L1806872-05,C Acquired: 3/10/2018 13:37:23 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0336**	**.0006**	**.0450**	**.0115**	**.0001**	**.0016**	**102.7**	**.0002**	**.0005**
Stddev	.0001	.0015	.0005	.0001	.0002	.0001	.0010	.1	.0000	.0001
%RSD	37.81	4.516	78.14	.3003	1.974	158.3	61.03	.1369	22.20	15.59
#1	-.0002	.0333	.0001	.0449	.0113	.0000	.0011	102.7	.0001	.0004
#2	-.0005	.0352	.0009	.0450	.0115	.0002	.0010	102.6	.0002	.0006
#3	-.0004	.0322	.0009	.0452	.0117	-.0000	.0027	102.9	.0002	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0040**	**.0831**	**.0197**	**2.647**	**3.361**	**.0155**	**.0069**	**178.1**	**.0032**	**.0022**
Stddev	.0004	.0005	.0029	.017	.010	.0007	.0003	4.1	.0002	.0018
%RSD	9.859	.5430	14.61	.6533	.2912	4.737	4.213	2.285	6.696	81.88
#1	.0040	.0826	.0214	2.664	3.352	.0160	.0067	176.5	.0031	.0005
#2	.0036	.0833	.0214	2.630	3.359	.0159	.0068	182.7	.0035	.0041
#3	.0044	.0835	.0164	2.646	3.371	.0147	.0073	175.1	.0031	.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.0014**	**4.382**	**.0018**	**.1236**	**.0022**	**-.0020**	**.0143**	**.0029**
Stddev	.0008	.0023	.004	.0005	.0002	.0001	.0014	.0002	.0001
%RSD	17.87	160.5	.0943	25.22	.1591	4.238	68.44	1.611	1.710
#1	.0041	.0039	4.378	.0021	.1236	.0023	-.0032	.0141	.0030
#2	.0052	.0010	4.382	.0020	.1234	.0021	-.0023	.0146	.0029
#3	.0038	-.0006	4.387	.0013	.1238	.0021	-.0005	.0142	.0030

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3701.9**	**59476.**	**5733.1**
Stddev	4.8	204.	9.0
%RSD	.12854	.34318	.15676
#1	3705.4	59466.	5740.7
#2	3703.7	59277.	5735.4
#3	3696.4	59685.	5723.2

Sample Name: L1806872-06,C Acquired: 3/10/2018 13:42:11 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0449**	**.0017**	**.0332**	**.0092**	**.0000**	**.0005**	**85.00**	**.0001**	**.0003**
Stddev	.0004	.0074	.0022	.0004	.0001	.0001	.0009	.17	.0000	.0002
%RSD	111.2	16.56	129.9	1.183	.7913	1209.	171.1	.1981	21.79	62.20
#1	.0008	.0445	.0014	.0336	.0093	.0001	.0004	84.87	.0002	.0003
#2	-.0000	.0377	-.0004	.0328	.0092	-.0001	.0014	85.19	.0001	.0006
#3	.0004	.0525	.0040	.0332	.0092	.0001	-.0003	84.94	.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.0638**	**.0147**	**2.203**	**2.958**	**.0125**	**.0059**	**151.0**	**.0027**	**.0007**
Stddev	.0002	.0001	.0034	.045	.020	.0003	.0003	.9	.0001	.0010
%RSD	5.320	.2085	23.31	2.047	.6582	2.413	4.394	.6182	3.244	151.1
#1	.0033	.0640	.0110	2.170	2.941	.0125	.0061	151.3	.0027	.0018
#2	.0031	.0638	.0152	2.255	2.954	.0122	.0058	149.9	.0028	.0004
#3	.0035	.0637	.0178	2.186	2.980	.0128	.0056	151.7	.0027	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0001**	**3.619**	**.0009**	**.1013**	**.0027**	**.0001**	**.0120**	**.0018**
Stddev	.0008	.0014	.017	.0014	.0003	.0003	.0011	.0005	.0002
%RSD	334.2	1434.	.4754	162.9	.3108	12.48	900.4	4.233	12.66
#1	-.0001	.0008	3.610	.0012	.1010	.0026	.0013	.0118	.0019
#2	.0012	-.0017	3.609	-.0007	.1016	.0023	-.0009	.0126	.0015
#3	-.0003	.0006	3.639	.0021	.1012	.0030	.0000	.0117	.0020

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3742.4**	**59733.**	**5674.6**
Stddev	7.9	147.	35.4
%RSD	.21058	.24639	.62376
#1	3749.4	59876.	5705.7
#2	3743.8	59582.	5682.0
#3	3733.8	59742.	5636.1

Sample Name: L1806872-07,C Acquired: 3/10/2018 13:46:58 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.3640**	**.0002**	**.0447**	**.0146**	**.0001**	**.0003**	**42.09**	**.0042**	**.0016**
Stddev	.0007	.0028	.0027	.0003	.0001	.0000	.0014	.05	.0001	.0001
%RSD	439.4	.7793	1448.	.6262	.7869	44.24	478.9	.1180	1.525	6.317
#1	-.0010	.3664	-.0022	.0444	.0145	.0001	-.0013	42.05	.0041	.0017
#2	.0001	.3609	-.0004	.0450	.0147	.0000	.0010	42.08	.0042	.0015
#3	.0004	.3647	.0032	.0447	.0146	.0001	.0012	42.15	.0042	.0017

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0144**	**.0419**	**.1216**	**2.195**	**2.865**	**.0963**	**.0042**	**152.3**	**.0108**	**.0045**
Stddev	.0002	.0001	.0011	.042	.019	.0005	.0002	1.4	.0002	.0005
%RSD	1.440	.2020	.8772	1.928	.6613	.4869	4.983	.9365	1.628	11.50
#1	.0146	.0419	.1229	2.238	2.855	.0967	.0044	152.5	.0110	.0041
#2	.0142	.0419	.1210	2.153	2.854	.0958	.0040	150.7	.0107	.0051
#3	.0145	.0420	.1210	2.194	2.887	.0965	.0041	153.6	.0108	.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0001**	**7.511**	**.0019**	**.1494**	**.0117**	**.0008**	**.0078**	**.2093**
Stddev	.0019	.0028	.019	.0003	.0002	.0003	.0020	.0005	.0009
%RSD	4406.	3897.	.2533	16.35	.1520	2.739	246.4	6.435	.4222
#1	.0002	-.0025	7.499	.0017	.1496	.0115	.0026	.0075	.2084
#2	-.0019	-.0005	7.501	.0017	.1492	.0121	.0012	.0075	.2094
#3	.0019	.0031	7.533	.0022	.1495	.0116	-.0014	.0084	.2102

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3765.9**	**59825.**	**5698.7**
Stddev	7.7	261.	28.6
%RSD	.20524	.43615	.50196
#1	3774.8	59531.	5714.0
#2	3761.3	60029.	5716.4
#3	3761.6	59916.	5665.7

Sample Name: L1806872-08,C Acquired: 3/10/2018 13:51:46 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.3198**	**.0033**	**.0438**	**.0157**	**-.0000**	**.0003**	**64.03**	**.0006**	**.0006**
Stddev	.0005	.0110	.0009	.0010	.0001	.0002	.0011	.09	.0000	.0001
%RSD	1268.	3.447	29.13	2.293	.3389	1084.	324.9	.1411	7.582	10.88
#1	.0005	.3322	.0041	.0427	.0158	.0002	-.0008	64.11	.0006	.0006
#2	-.0003	.3112	.0035	.0441	.0157	-.0001	.0005	64.04	.0005	.0005
#3	-.0004	.3160	.0022	.0446	.0157	-.0001	.0013	63.93	.0006	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0111**	**.0191**	**.1657**	**2.376**	**2.918**	**.0553**	**.0075**	**135.4**	**.0015**	**.0026**
Stddev	.0004	.0004	.0018	.035	.017	.0007	.0001	.1	.0004	.0007
%RSD	3.168	2.035	1.103	1.465	.5904	1.251	1.518	.1041	23.18	26.73
#1	.0107	.0190	.1650	2.381	2.938	.0545	.0074	135.5	.0011	.0020
#2	.0111	.0188	.1678	2.408	2.908	.0555	.0074	135.3	.0017	.0033
#3	.0114	.0195	.1643	2.339	2.907	.0559	.0076	135.3	.0018	.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.0015**	**6.729**	**.0013**	**.1949**	**.0129**	**-.0008**	**.0100**	**.0039**
Stddev	.0011	.0021	.027	.0008	.0002	.0005	.0015	.0002	.0001
%RSD	55.80	141.2	.4062	63.07	.0922	3.722	178.6	2.138	2.423
#1	.0033	.0004	6.714	.0021	.1949	.0134	.0007	.0097	.0038
#2	.0012	.0039	6.713	.0005	.1951	.0127	-.0009	.0102	.0040
#3	.0015	.0002	6.761	.0012	.1947	.0125	-.0022	.0100	.0038

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3763.3**	**60369.**	**5693.2**
Stddev	6.3	58.	21.6
%RSD	.16752	.09565	.37953
#1	3765.4	60433.	5668.3
#2	3768.3	60353.	5705.0
#3	3756.2	60321.	5706.4

Sample Name: L1806872-09,C Acquired: 3/10/2018 13:56:23 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0279**	**.0016**	**.0314**	**.0134**	**.0002**	**.0011**	**76.78**	**-.0001**	**.0002**
Stddev	.0006	.0114	.0011	.0001	.0001	.0000	.0007	.09	.0000	.0001
%RSD	245.3	40.93	65.93	.3484	.4396	19.80	59.88	.1232	9.447	61.95
#1	-.0002	.0380	.0028	.0314	.0134	.0002	.0003	76.69	-.0001	.0001
#2	.0009	.0301	.0007	.0315	.0134	.0002	.0014	76.77	-.0001	.0002
#3	-.0000	.0155	.0015	.0313	.0135	.0002	.0015	76.88	-.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**.0237**	**.0058**	**2.667**	**2.629**	**.0082**	**.0092**	**149.0**	**.0011**	**.0019**
Stddev	.0003	.0005	.0023	.029	.008	.0004	.0001	.9	.0004	.0019
%RSD	13.96	1.978	39.06	1.080	.3045	4.848	1.315	.6073	37.59	101.1
#1	.0017	.0237	.0047	2.693	2.638	.0080	.0091	149.9	.0007	.0040
#2	.0016	.0233	.0043	2.670	2.627	.0079	.0091	149.1	.0012	.0013
#3	.0021	.0242	.0084	2.636	2.623	.0087	.0093	148.1	.0015	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**.0033**	**3.148**	**.0012**	**.2390**	**.0020**	**-.0006**	**.0181**	**.0008**
Stddev	.0015	.0021	.009	.0001	.0006	.0004	.0017	.0003	.0001
%RSD	41.78	63.19	.2865	12.30	.2363	19.14	294.2	1.494	7.006
#1	.0035	.0029	3.138	.0011	.2388	.0016	.0014	.0183	.0008
#2	.0052	.0055	3.148	.0011	.2385	.0023	-.0016	.0178	.0008
#3	.0022	.0014	3.156	.0014	.2396	.0022	-.0015	.0182	.0007

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3722.5**	**60533.**	**5696.3**
Stddev	10.2	220.	10.9
%RSD	.27490	.36264	.19146
#1	3724.0	60439.	5685.3
#2	3731.8	60375.	5696.7
#3	3711.5	60783.	5707.1

Sample Name: L1806872-10,C Acquired: 3/10/2018 14:01:08 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0748**	**.0022**	**.0410**	**.0080**	**.0001**	**.0016**	**43.98**	**.0026**	**.0012**
Stddev	.0006	.0084	.0011	.0003	.0000	.0001	.0007	.05	.0001	.0002
%RSD	968.5	11.21	50.50	.7099	.5011	68.82	47.75	.1111	2.334	17.75
#1	-.0001	.0836	.0015	.0407	.0080	.0001	.0021	43.98	.0025	.0010
#2	-.0005	.0739	.0016	.0411	.0079	.0000	.0019	43.93	.0025	.0014
#3	.0007	.0669	.0034	.0412	.0080	.0001	.0007	44.03	.0026	.0013

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0068**	**.0106**	**.0307**	**1.612**	**2.867**	**.0616**	**.0027**	**140.5**	**.0070**	**.0019**
Stddev	.0005	.0001	.0012	.034	.029	.0006	.0003	1.9	.0003	.0008
%RSD	7.017	1.348	3.777	2.099	1.030	.9888	10.02	1.326	4.581	44.20
#1	.0071	.0108	.0320	1.616	2.855	.0619	.0030	142.5	.0066	.0010
#2	.0062	.0105	.0297	1.644	2.845	.0609	.0027	138.9	.0070	.0020
#3	.0071	.0106	.0304	1.576	2.900	.0620	.0025	140.1	.0073	.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.0007**	**2.596**	**.0007**	**.0735**	**.0034**	**-.0006**	**.0078**	**.1712**
Stddev	.0021	.0024	.010	.0006	.0002	.0001	.0029	.0002	.0004
%RSD	109.6	365.3	.3946	90.72	.3041	2.839	503.0	3.068	.2177
#1	.0028	.0029	2.589	.0014	.0737	.0034	.0014	.0081	.1712
#2	-.0005	-.0018	2.593	.0002	.0733	.0033	-.0039	.0076	.1709
#3	.0036	.0008	2.608	.0005	.0734	.0035	.0008	.0079	.1716

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3750.6**	**61152.**	**5904.9**
Stddev	13.8	175.	58.5
%RSD	.36850	.28602	.98999
#1	3750.7	60961.	5928.3
#2	3764.3	61305.	5948.1
#3	3736.7	61189.	5838.4

Sample Name: L1806872-11,C Acquired: 3/10/2018 14:05:52 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment: 10

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.2021**	**.0013**	**.0410**	**.0093**	**.0002**	**-.0001**	**72.71**	**.0026**	**.0011**
Stddev	.0006	.0104	.0001	.0009	.0002	.0001	.0013	.08	.0000	.0002
%RSD	968.4	5.121	8.115	2.079	2.261	82.89	1185.	.1086	.8527	18.15
#1	.0006	.2083	.0014	.0412	.0094	.0002	-.0008	72.77	.0026	.0009
#2	-.0006	.2079	.0014	.0400	.0090	.0003	-.0009	72.74	.0026	.0012
#3	-.0001	.1902	.0012	.0417	.0094	.0000	.0014	72.62	.0026	.0012

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**.0171**	**.0886**	**1.744**	**3.129**	**.0480**	**.0049**	**150.5**	**.0071**	**.0028**
Stddev	.0006	.0003	.0048	.034	.028	.0003	.0001	1.4	.0001	.0018
%RSD	5.446	1.585	5.369	1.968	.8799	.6922	1.916	.9103	2.035	64.70
#1	.0109	.0172	.0839	1.775	3.156	.0482	.0048	151.9	.0070	.0019
#2	.0101	.0174	.0883	1.707	3.101	.0482	.0050	149.1	.0072	.0050
#3	.0098	.0168	.0934	1.750	3.130	.0476	.0050	150.4	.0070	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0015**	**5.751**	**.0024**	**.0872**	**.0093**	**-.0008**	**.0124**	**.0934**
Stddev	.0014	.0018	.014	.0007	.0005	.0002	.0009	.0001	.0002
%RSD	60.38	120.1	.2426	28.77	.5714	2.613	121.3	1.060	.2423
#1	.0007	.0025	5.752	.0027	.0877	.0096	-.0011	.0125	.0935
#2	.0030	-.0006	5.737	.0016	.0867	.0091	-.0015	.0123	.0931
#3	.0034	.0026	5.765	.0029	.0872	.0092	.0003	.0125	.0936

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3749.5**	**60123.**	**5718.0**
Stddev	11.3	82.	51.0
%RSD	.30081	.13696	.89249
#1	3749.6	60191.	5675.8
#2	3760.8	60148.	5774.8
#3	3738.2	60031.	5703.5

Sample Name: CCV Acquired: 3/10/2018 14:10:38 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5038**	**.5440**	**.5273**	**.5124**	**.5137**	**.5119**	**.4971**	**.5413**	**.5110**	**.5139**
Stddev	.0011	.0061	.0048	.0018	.0016	.0014	.0021	.0086	.0019	.0027
%RSD	.2196	1.112	.9058	.3556	.3132	.2702	.4236	1.592	.3806	.5232
#1	.5028	.5376	.5223	.5108	.5119	.5103	.4947	.5382	.5097	.5114
#2	.5035	.5497	.5318	.5120	.5151	.5126	.4984	.5510	.5101	.5137
#3	.5050	.5446	.5279	.5144	.5141	.5128	.4983	.5346	.5132	.5167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5088**	**.5080**	**.5260**	**5.176**	**.5171**	**.5235**	**.5105**	**10.19**	**.5097**	**.5205**
Stddev	.0017	.0009	.0012	.015	.0067	.0008	.0035	.04	.0029	.0024
%RSD	.3248	.1803	.2352	.2965	1.289	.1513	.6767	.3697	.5654	.4563
#1	.5070	.5072	.5267	5.191	.5191	.5232	.5075	10.21	.5076	.5180
#2	.5102	.5079	.5267	5.160	.5097	.5229	.5098	10.15	.5086	.5207
#3	.5092	.5090	.5246	5.178	.5226	.5244	.5143	10.22	.5130	.5227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5224**	**.5032**	**5.239**	**.5156**	**.4928**	**.5054**	**.5076**	**.5234**	**.5013**
Stddev	.0022	.0047	.023	.0030	.0020	.0008	.0027	.0011	.0022
%RSD	.4210	.9314	.4364	.5902	.4110	.1569	.5256	.2123	.4476
#1	.5205	.4993	5.219	.5123	.4905	.5053	.5048	.5224	.4997
#2	.5219	.5020	5.235	.5161	.4945	.5047	.5081	.5233	.5003
#3	.5248	.5084	5.264	.5184	.4933	.5063	.5101	.5246	.5039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3943.5**	**64176.**	**5854.5**
Stddev	11.2	297.	75.2
%RSD	.28374	.46308	1.2840
#1	3949.4	64515.	5770.2
#2	3950.5	63959.	5914.5
#3	3930.6	64054.	5879.0

Sample Name: CCB Acquired: 3/10/2018 14:15:08 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0020**	**.0043**	**.0001**	**.0005**	**.0006**	**.0003**	**.0140**	**.0003**	**.0005**
Stddev	.0003	.0122	.0023	.0002	.0001	.0000	.0016	.0076	.0000	.0000
%RSD	34.31	600.3	53.17	161.4	23.19	5.008	525.4	54.08	6.739	6.291
#1	.0009	-.0110	.0067	.0002	.0005	.0005	.0020	.0197	.0004	.0006
#2	.0005	.0040	.0040	.0004	.0005	.0006	-.0012	.0169	.0003	.0005
#3	.0011	.0132	.0022	-.0001	.0003	.0006	.0001	.0054	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0003**	**.0017**	**.0319**	**.0025**	**.0006**	**.0008**	**.1053**	**.0001**	**.0007**
Stddev	.0002	.0002	.0028	.0202	.0022	.0000	.0003	.0165	.0002	.0010
%RSD	29.11	68.88	168.8	63.26	87.28	5.852	42.69	15.70	159.0	140.5
#1	.0009	.0002	.0048	.0401	.0025	.0007	.0011	.0863	-.0001	.0019
#2	.0009	.0002	.0008	.0089	.0003	.0006	.0008	.1134	.0002	-.0001
#3	.0005	.0006	-.0006	.0466	.0046	.0006	.0004	.1162	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0004**	**-.0016**	**.0023**	**.0006**	**.0004**	**.0004**	**.0002**	**.0005**
Stddev	.0001	.0010	.0006	.0009	.0001	.0005	.0016	.0005	.0000
%RSD	4.849	233.1	38.17	39.99	10.87	119.3	376.3	241.0	7.545
#1	.0012	-.0001	-.0010	.0031	.0005	-.0001	-.0009	-.0001	.0005
#2	.0013	.0016	-.0022	.0024	.0006	.0005	.0022	.0008	.0005
#3	.0012	-.0002	-.0016	.0013	.0005	.0010	.0000	-.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3946.5**	**63807.**	**5767.7**
Stddev	7.1	137.	44.4
%RSD	.18095	.21462	.76917
#1	3941.7	63859.	5818.9
#2	3954.7	63910.	5740.4
#3	3943.0	63651.	5743.9

Sample Name: L1806872-12,C Acquired: 3/10/2018 14:19:50 Type: Unk
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.3126**	**.0009**	**.0422**	**.0105**	**.0000**	**.0007**	**77.11**	**.0019**	**.0009**
Stddev	.0006	.0034	.0017	.0002	.0001	.0001	.0002	.20	.0000	.0002
%RSD	185.1	1.080	186.3	.4834	1.092	101.3	24.04	.2558	2.173	22.09
#1	-.0003	.3116	.0017	.0419	.0104	.0001	.0007	77.08	.0019	.0011
#2	.0009	.3164	-.0010	.0423	.0106	.0001	.0009	77.33	.0020	.0010
#3	.0005	.3099	.0020	.0423	.0106	-.0000	.0006	76.94	.0019	.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0139**	**.0215**	**.1384**	**1.832**	**3.382**	**.0492**	**.0051**	**153.2**	**.0062**	**.0053**
Stddev	.0002	.0006	.0024	.063	.009	.0004	.0002	1.5	.0003	.0005
%RSD	1.404	2.657	1.728	3.443	.2567	.8482	3.761	.9862	4.102	10.07
#1	.0140	.0221	.1389	1.896	3.390	.0491	.0051	153.1	.0063	.0056
#2	.0141	.0210	.1358	1.770	3.373	.0497	.0053	154.7	.0059	.0056
#3	.0137	.0214	.1405	1.830	3.384	.0488	.0049	151.7	.0064	.0047

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0031**	**7.070**	**.0032**	**.0881**	**.0121**	**-.0027**	**.0143**	**.0515**
Stddev	.0010	.0015	.017	.0007	.0003	.0002	.0009	.0003	.0002
%RSD	73.52	48.57	.2367	21.31	.3708	1.741	33.50	2.256	.4011
#1	.0024	.0018	7.060	.0040	.0879	.0121	-.0036	.0146	.0513
#2	.0015	.0028	7.061	.0026	.0884	.0119	-.0018	.0139	.0515
#3	.0003	.0048	7.090	.0031	.0879	.0123	-.0027	.0143	.0517

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3742.1**	**59632.**	**5654.2**
Stddev	4.1	158.	12.9
%RSD	.10973	.26544	.22883
#1	3744.0	59743.	5641.8
#2	3744.9	59451.	5667.6
#3	3737.4	59703.	5653.3

Sample Name: 0.005 Acquired: 3/10/2018 14:24:35 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.0083**	**.0050**	**.0049**	**.0047**	**.0052**	**.0052**	**.0170**	**.0049**	**.0051**
Stddev	.0003	.0108	.0026	.0003	.0002	.0001	.0013	.0042	.0001	.0001
%RSD	6.029	130.6	51.41	6.281	3.892	2.125	23.85	24.76	1.151	1.686
#1	.0053	-.0034	.0076	.0046	.0050	.0052	.0067	.0216	.0049	.0050
#2	.0048	.0178	.0025	.0052	.0046	.0053	.0047	.0159	.0049	.0051
#3	.0048	.0104	.0049	.0050	.0046	.0051	.0044	.0134	.0050	.0052
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	None	None	Chk Pass	None
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.0051**	**.0028**	**.0758**	**.0068**	**.0048**	**.0050**	**.1099**	**.0046**	**.0062**
Stddev	.0006	.0002	.0017	.0390	.0007	.0001	.0002	.0167	.0003	.0010
%RSD	11.45	4.644	59.85	51.46	9.767	2.063	3.726	15.15	7.340	16.54
#1	.0053	.0050	.0039	.0309	.0075	.0048	.0051	.1018	.0042	.0064
#2	.0044	.0050	.0009	.0960	.0062	.0049	.0048	.0989	.0049	.0051
#3	.0054	.0054	.0035	.1007	.0068	.0048	.0050	.1291	.0047	.0071
Check ?	None	None	None	None	None	None	None	None	None	None
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0059**	**.0074**	**-.0032**	**.0052**	**.0049**	**.0050**	**.0045**	**.0049**	**.0052**
Stddev	.0010	.0016	.0010	.0002	.0002	.0004	.0009	.0002	.0000
%RSD	17.35	21.20	31.19	4.770	4.473	7.452	18.91	4.263	.7541
#1	.0062	.0092	-.0021	.0049	.0051	.0052	.0039	.0051	.0053
#2	.0067	.0063	-.0035	.0052	.0047	.0053	.0055	.0047	.0052
#3	.0047	.0068	-.0041	.0054	.0049	.0046	.0042	.0048	.0053
Check ?	None	None	None	None	None	None	None	None	None
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4081.3**	**65965.**	**5897.9**
Stddev	24.3	549.	46.2
%RSD	.59500	.83204	.78324
#1	4107.8	65529.	5949.0
#2	4076.1	66581.	5859.3
#3	4060.1	65785.	5885.3

Sample Name: 0.01 Acquired: 3/10/2018 14:29:15 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0108**	**.0114**	**.0109**	**.0105**	**.0101**	**.0102**	**.0093**	**.0120**	**.0102**	**.0103**
Stddev	.0006	.0034	.0021	.0005	.0001	.0001	.0007	.0070	.0001	.0002
%RSD	5.241	29.66	18.99	4.344	.5113	.5654	7.668	58.45	.7659	2.285
#1	.0111	.0076	.0104	.0105	.0101	.0102	.0094	.0052	.0103	.0103
#2	.0101	.0140	.0132	.0101	.0101	.0102	.0085	.0192	.0102	.0100
#3	.0112	.0125	.0091	.0110	.0100	.0103	.0099	.0116	.0101	.0105
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass
Value										
Range										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0105**	**.0104**	**.0102**	**.1099**	**.0097**	**.0104**	**.0102**	**.0971**	**.0098**	**.0112**
Stddev	.0006	.0002	.0020	.0103	.0013	.0002	.0003	.0114	.0005	.0013
%RSD	5.378	2.079	19.30	9.337	13.72	2.094	2.853	11.77	4.882	11.87
#1	.0099	.0102	.0117	.0989	.0100	.0104	.0105	.0866	.0103	.0122
#2	.0105	.0104	.0080	.1117	.0109	.0106	.0099	.1093	.0093	.0116
#3	.0110	.0106	.0111	.1192	.0083	.0101	.0102	.0953	.0098	.0097
Check ?	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value										
Range										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0097**	W **.0078**	**-.0036**	**.0098**	**.0101**	**.0102**	**.0104**	**.0099**	**.0102**
Stddev	.0017	.0042	.0012	.0007	.0003	.0001	.0015	.0004	.0001
%RSD	17.89	53.22	32.60	7.332	2.639	.5592	14.18	3.624	1.078
#1	.0080	.0030	-.0050	.0096	.0100	.0102	.0088	.0096	.0102
#2	.0097	.0101	-.0032	.0106	.0099	.0102	.0105	.0103	.0101
#3	.0115	.0103	-.0027	.0093	.0104	.0101	.0117	.0100	.0103
Check ?	None	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value		.0121							
Range		.0080							

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4009.4**	**65610.**	**5845.3**
Stddev	1.9	849.	18.6
%RSD	.04647	1.2947	.31780
#1	4008.2	66579.	5861.7
#2	4011.5	65254.	5849.0
#3	4008.4	64996.	5825.1

Sample Name: 0.05 Acquired: 3/10/2018 14:33:54 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1096137 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0505**	**.0511**	**.0518**	**.0496**	**.0500**	**.0510**	**.0490**	**.0537**	**.0500**	**.0504**
Stddev	.0002	.0063	.0007	.0010	.0003	.0003	.0005	.0104	.0002	.0001
%RSD	.3686	12.41	1.411	2.106	.6541	.6728	.9443	19.37	.4435	.2802
#1	.0503	.0523	.0519	.0485	.0502	.0514	.0495	.0648	.0500	.0503
#2	.0505	.0442	.0526	.0497	.0501	.0507	.0490	.0521	.0498	.0504
#3	.0507	.0567	.0511	.0506	.0496	.0509	.0485	.0442	.0502	.0506
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None	None
Value										
Range										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0509**	**.0514**	**.0501**	**2.582**	**.0508**	**.0514**	**.0498**	**2.269**	**.0502**	**.0498**
Stddev	.0004	.0004	.0017	.017	.0022	.0003	.0004	.026	.0006	.0005
%RSD	.7200	.7424	3.386	.6605	4.335	.6235	.8784	1.158	1.260	.9649
#1	.0505	.0517	.0516	2.591	.0528	.0512	.0495	2.299	.0508	.0498
#2	.0511	.0515	.0505	2.562	.0484	.0513	.0496	2.253	.0495	.0503
#3	.0511	.0510	.0482	2.592	.0510	.0518	.0503	2.254	.0503	.0494
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	None	None
Value										
Range										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0511**	**.0511**	**.4958**	**.0501**	**.0490**	**.0505**	**.0509**	**.0500**	**.0499**
Stddev	.0001	.0020	.0045	.0004	.0002	.0006	.0010	.0004	.0003
%RSD	.2558	3.961	.9080	.7778	.4495	1.148	2.010	.7768	.5853
#1	.0510	.0525	.4943	.0505	.0492	.0510	.0512	.0502	.0499
#2	.0513	.0521	.4923	.0499	.0489	.0499	.0498	.0503	.0496
#3	.0511	.0488	.5009	.0499	.0488	.0505	.0517	.0496	.0502
Check ?	Chk Pass	None	Chk Pass	None	None	None	None	Chk Pass	Chk Pass
Value									
Range									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4039.7**	**65291.**	**5895.0**
Stddev	17.5	87.	32.3
%RSD	.43218	.13309	.54825
#1	4051.2	65295.	5857.8
#2	4048.3	65202.	5910.9
#3	4019.6	65375.	5916.2

Sample Name: ICSA Acquired: 3/10/2018 14:38:29 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**290.1**	**-.0003**	**.0075**	**.0006**	**.0001**	**.0124**	**279.7**	**.0028**	**-.0002**
Stddev	.0003	.5	.0046	.0007	.0001	.0001	.0006	.5	.0000	.0003
%RSD	49.08	.1749	1561.	9.266	17.27	114.7	4.782	.1944	1.356	146.7
#1	.0006	290.7	-.0055	.0079	.0005	.0002	.0125	280.3	.0028	-.0002
#2	.0003	289.8	.0033	.0067	.0005	.0001	.0129	279.4	.0028	-.0005
#3	.0008	289.8	.0013	.0079	.0007	.0000	.0117	279.3	.0028	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**-.0073**	**107.6**	**.0298**	**258.7**	**.0032**	**-.0013**	**.1280**	**-.0075**	**-.0009**
Stddev	.0001	.0003	.1	.0208	1.0	.0002	.0003	.0077	.0007	.0005
%RSD	3.080	4.314	.0928	69.88	.4046	5.937	19.92	6.004	9.552	55.50
#1	.0018	-.0070	107.6	.0102	259.9	.0031	-.0013	.1235	-.0072	-.0015
#2	.0018	-.0074	107.5	.0277	257.9	.0031	-.0011	.1369	-.0070	-.0008
#3	.0017	-.0076	107.7	.0517	258.4	.0034	-.0016	.1236	-.0083	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0115**	**-.0049**	**-.0058**	**-.0017**	**.0094**	**.0054**	**.0007**	**-.0101**	**.0041**
Stddev	.0030	.0027	.0019	.0019	.0002	.0004	.0022	.0002	.0002
%RSD	26.35	56.06	32.19	106.6	1.989	6.788	307.4	2.211	5.218
#1	-.0088	-.0068	-.0076	-.0020	.0094	.0057	.0015	-.0103	.0041
#2	-.0148	-.0061	-.0039	.0002	.0096	.0050	.0024	-.0101	.0043
#3	-.0110	-.0018	-.0058	-.0034	.0092	.0056	-.0017	-.0098	.0039
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3594.0**	**58576.**	**5684.9**
Stddev	12.5	109.	25.4
%RSD	.34891	.18664	.44656
#1	3596.7	58550.	5656.7
#2	3605.0	58696.	5692.2
#3	3580.4	58482.	5705.9

Sample Name: ICSAB Acquired: 3/10/2018 14:43:16 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3132**	**9.900**	**1.115**	**.5585**	**.3157**	**.1086**	**1.091**	**50.68**	**.3273**	**.3312**
Stddev	.0013	.033	.007	.0018	.0003	.0003	.004	.19	.0008	.0016
%RSD	.4083	.3300	.5909	.3159	.0884	.2806	.3524	.3740	.2317	.4722
#1	.3142	9.898	1.108	.5576	.3161	.1088	1.088	50.52	.3271	.3304
#2	.3118	9.868	1.117	.5574	.3156	.1082	1.089	50.63	.3268	.3302
#3	.3137	9.933	1.120	.5606	.3155	.1087	1.095	50.89	.3282	.3330
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3306**	**.3361**	**40.94**	**20.79**	**23.41**	**.2098**	**.3405**	**7.541**	**.3207**	**1.063**
Stddev	.0010	.0006	.14	.06	.10	.0003	.0016	.040	.0010	.003
%RSD	.2888	.1817	.3522	.2697	.4335	.1579	.4733	.5254	.3076	.3226
#1	.3317	.3361	40.93	20.84	23.35	.2095	.3389	7.583	.3211	1.061
#2	.3298	.3355	40.79	20.73	23.35	.2098	.3405	7.534	.3196	1.061
#3	.3304	.3367	41.08	20.80	23.53	.2102	.3422	7.505	.3214	1.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.094**	**.5652**	**1.329**	**1.090**	**1.068**	**1.111**	**1.075**	**.3227**	**.3325**
Stddev	.017	.0044	.005	.007	.001	.001	.003	.0005	.0006
%RSD	1.537	.7701	.3956	.6167	.1058	.1216	.2655	.1608	.1673
#1	1.078	.5603	1.324	1.086	1.068	1.110	1.078	.3222	.3329
#2	1.092	.5666	1.327	1.088	1.066	1.112	1.073	.3228	.3318
#3	1.112	.5686	1.334	1.098	1.069	1.112	1.074	.3232	.3327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3876.7**	**63803.**	**6009.1**
Stddev	5.3	114.	27.0
%RSD	.13569	.17944	.44967
#1	3876.8	63900.	6027.8
#2	3881.9	63677.	6021.4
#3	3871.4	63832.	5978.1

Sample Name: CRI Acquired: 3/10/2018 14:47:42 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0214**	F **4.589**	F **.0261**	**.1129**	**.0427**	**.0114**	**.0238**	F **.5543**	**.0112**	**.1093**
Stddev	.0003	.026	.0009	.0007	.0000	.0001	.0008	.0052	.0000	.0003
%RSD	1.387	.5607	3.475	.6354	.1092	.6248	3.328	.9360	.2349	.2921
#1	.0215	4.584	.0266	.1137	.0426	.0113	.0247	.5488	.0111	.1095
#2	.0217	4.566	.0268	.1123	.0427	.0113	.0235	.5590	.0112	.1089
#3	.0211	4.617	.0251	.1128	.0427	.0114	.0232	.5552	.0112	.1095
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit		.5219	.0261					.5219		
Low Limit		.2781	.0139					.2781		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0234**	**.0573**	F **.2855**	**5.272**	W **.4956**	**.0310**	**.1098**	**5.137**	**.0852**	**.0504**
Stddev	.0006	.0001	.0030	.045	.0027	.0004	.0008	.047	.0006	.0009
%RSD	2.753	.1390	1.055	.8533	.5496	1.189	.7062	.9229	.6634	1.784
#1	.0237	.0574	.2879	5.228	.4970	.0309	.1094	5.111	.0855	.0511
#2	.0227	.0572	.2821	5.269	.4925	.0307	.1094	5.108	.0846	.0494
#3	.0239	.0574	.2864	5.318	.4974	.0314	.1107	5.192	.0856	.0508
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.2610		.4819					
Low Limit			.1390		.3181					

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.1239**	**.0219**	**1.078**	F **.0279**	**.0222**	**.0238**	W **.0241**	**.1080**	F **.0527**
Stddev	.0008	.0023	.003	.0006	.0001	.0003	.0015	.0005	.0001
%RSD	.6574	10.67	.3046	2.204	.4827	1.262	6.207	.4261	.2449
#1	.1237	.0193	1.079	.0277	.0221	.0239	.0256	.1075	.0529
#2	.1232	.0238	1.075	.0285	.0224	.0241	.0243	.1080	.0528
#3	.1248	.0227	1.081	.0273	.0222	.0235	.0226	.1084	.0526
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail
High Limit	.1205			.0261			.0241		.0522
Low Limit	.0795			.0139			.0159		.0278

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**4038.1**	**66577.**	**6128.5**
Stddev	11.3	101.	17.5
%RSD	.27912	.15097	.28636
#1	4031.6	66499.	6114.6
#2	4051.1	66690.	6148.2
#3	4031.5	66542.	6122.7

Sample Name: CCV Acquired: 3/10/2018 14:52:18 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4974**	**.5313**	**.5255**	**.5092**	**.5058**	**.5066**	**.4931**	**.5387**	**.5065**	**.5105**
Stddev	.0025	.0039	.0049	.0015	.0010	.0015	.0006	.0082	.0015	.0017
%RSD	.5104	.7255	.9259	.3038	.1912	.3015	.1144	1.525	.2958	.3392
#1	.4946	.5296	.5289	.5088	.5058	.5066	.4934	.5298	.5052	.5089
#2	.4978	.5358	.5200	.5078	.5068	.5081	.4924	.5459	.5061	.5103
#3	.4996	.5286	.5277	.5109	.5049	.5051	.4934	.5404	.5081	.5124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5051**	**.5044**	**.5270**	**4.922**	**.5115**	**.5153**	**.5063**	**9.814**	**.5053**	**.5172**
Stddev	.0012	.0006	.0015	.020	.0015	.0021	.0020	.024	.0013	.0029
%RSD	.2348	.1192	.2813	.4061	.2958	.4167	.3928	.2449	.2476	.5569
#1	.5049	.5047	.5257	4.945	.5099	.5170	.5048	9.827	.5046	.5139
#2	.5064	.5037	.5286	4.913	.5129	.5160	.5056	9.828	.5045	.5185
#3	.5041	.5048	.5266	4.908	.5118	.5129	.5086	9.786	.5067	.5192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5283**	**.5011**	**5.199**	**.5134**	**.4884**	**.5019**	**.5022**	**.5189**	**.4957**
Stddev	.0026	.0021	.018	.0011	.0016	.0007	.0024	.0009	.0015
%RSD	.4937	.4151	.3402	.2097	.3262	.1358	.4797	.1716	.2977
#1	.5287	.5007	5.191	.5129	.4872	.5025	.4995	.5187	.4941
#2	.5255	.4994	5.186	.5126	.4902	.5012	.5030	.5181	.4962
#3	.5307	.5034	5.219	.5146	.4878	.5019	.5041	.5198	.4969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3954.2**	**64397.**	**5931.3**
Stddev	5.9	328.	23.0
%RSD	.14867	.50949	.38749
#1	3960.7	64393.	5951.3
#2	3952.8	64072.	5906.2
#3	3949.2	64728.	5936.3

Sample Name: CCB Acquired: 3/10/2018 14:56:47 Type: QC
Method: Trace_5_E200.7_SW6010(v105) Mode: CONC Corr. Factor: 1.000000
User: AB Custom ID1: WG1095825 Custom ID2: Trace5 Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3158	Cd2144	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0140**	**.0026**	**.0013**	**.0006**	**.0006**	**.0008**	**.0141**	**.0004**	**.0005**
Stddev	.0003	.0038	.0025	.0010	.0001	.0002	.0011	.0038	.0001	.0000
%RSD	26.97	27.37	97.58	77.16	19.99	39.61	129.4	26.90	20.41	5.482
#1	.0008	.0113	-.0003	.0025	.0005	.0008	-.0003	.0101	.0005	.0005
#2	.0014	.0123	.0044	.0010	.0006	.0006	.0019	.0147	.0005	.0006
#3	.0011	.0184	.0038	.0005	.0007	.0003	.0009	.0176	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576R	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0004**	**.0080**	**-.0231**	**.0104**	**.0004**	**.0011**	**.0517**	**.0000**	**.0010**
Stddev	.0002	.0003	.0026	.0289	.0020	.0002	.0002	.0085	.0003	.0011
%RSD	51.10	89.78	32.73	125.1	18.73	44.45	18.78	16.41	1477.	112.7
#1	.0002	.0007	.0050	-.0551	.0118	.0005	.0013	.0601	.0002	.0021
#2	.0005	.0003	.0098	.0012	.0082	.0005	.0011	.0431	.0002	.0010
#3	.0007	.0001	.0092	-.0155	.0113	.0002	.0009	.0518	-.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4215	Ti3349A	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0027**	**-.0007**	**-.0025**	**.0028**	**.0007**	**.0004**	**-.0005**	**.0006**	**.0005**
Stddev	.0010	.0005	.0023	.0001	.0002	.0001	.0011	.0002	.0001
%RSD	37.78	73.32	93.33	2.338	25.58	28.45	222.4	42.00	16.58
#1	.0036	-.0010	-.0000	.0029	.0006	.0006	-.0010	.0003	.0006
#2	.0031	-.0010	-.0029	.0029	.0009	.0004	-.0013	.0008	.0004
#3	.0016	-.0001	-.0046	.0028	.0006	.0003	.0008	.0007	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**3941.8**	**64031.**	**5797.4**
Stddev	12.5	199.	28.8
%RSD	.31746	.31077	.49660
#1	3955.6	63925.	5765.5
#2	3938.5	64261.	5805.2
#3	3931.2	63908.	5821.4

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.
Metals Batch Report - TCLP Metals (Connecticut) - (CT-MET-C) Batch WG1094000 for dept. 5
Mar 14, 2018 16:03

Sample No.	Client No.	Sample I.D.	Mat	Due	Pr	Sb As	Be Ba	Cd Cr	Cu Pb	Se Ag	Ni Tl	Zn V
L1806872-01		SDT-DS-BFT-PC03	3	0314		X	X	X X X	X	X X		
L1806872-02		SDT-DS-BFT-PC06	3	0314		X	X	X X X	X	X X		
L1806872-03		SDT-DS-BFT-PC08	3	0314		X	X	X X X	X	X X		
L1806872-04		SDT-DS-BFT-CC03	3	0314		X	X	X X X	X	X X		
L1806872-05		SDT-DS-BFT-CC06	3	0314		X	X	X X X	X	X X		
L1806872-06		SDT-DS-BFT-CC08	3	0314		X	X	X X X	X	X X		
L1806872-07		SDT-DS-GVT-PC02	3	0314		X	X	X X X	X	X X		
L1806872-08		SDT-DS-GVT-PC04	3	0314		X	X	X X X	X	X X		
L1806872-09		SDT-DS-GVT-PC05	3	0314		X	X	X X X	X	X X		
L1806872-10		SDT-DS-GVT-CC02	3	0314		X	X	X X X	X	X X		
L1806872-11		SDT-DS-GVT-CC04	3	0314		X	X	X X X	X	X X		
L1806872-12		SDT-DS-GVT-CC05	3	0314		X	X	X X X	X	X X		
WG1094000-1		Laboratory Method	3			X	X	X X X	X	X X		
WG1094000-2		Laboratory Contro	3			X	X	X X X	X	X X		

Sample Preparation

METALS ELN REPORT

Workgroup: WG1094000

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3015	HNO3	C799058	HCl	C800677	METALS	METSPIKE2	IPS,FPS,MIX	METSPIKE2	IPS,FPS,MIX	142, 235

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Microwave Unit	Stop Date/Time	Final Vol	Tclp Extract Date	Comments
L1806872-01 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-02 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-03 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-04 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-05 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-06 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-07 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-08 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-09 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-10 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-11 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
L1806872-12 SOIL	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	
WG1094000-1 BLANK	03/02/18 16:33	Alp Demiroz	5		03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	IPS1805021120KA; FPS1805021050KA; MIX1808221315AD

Reported: 14-MAR-18 04:59 PM

METALS ELN REPORT

Workgroup: WG1094000

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Microwave Unit	Stop Date/Time	Final Vol	Tclp Extract Date	Comments
WG1094000-2 LCS	03/02/18 16:33	Alp Demiroz	5	.5	03/02/18 16:33	2039	03/02/18 17:05	50	03/01/18 05:08	

Reagent	Actual Volume	Units
Nitric Acid (HNO3)	2.5	ml
Hydrochloric Acid (HCl)	2	ml

Reported: 14-MAR-18 04:59 PM

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806996-01	3/1/18	02:01	TW	5.0	96.5	7.5	3.5mL	410021018	<5	1	
-02	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-03											
-04											
L1805099-02									↓	↓	
-03									>5	2	
-04									<5	1	
-09									>5	2	
-23									>5	2	
-24									<5	1	
-25									>5	2	
L1806568-02									<5	1	
L1806669-01											
L1806666-01											
-02											
-03											
L1806738-01											
L1806832-01											
-02											
-03											
-04	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

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Initials: TW

Date: 3/1/18

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806832-05	3/1/18	02:01	TW	5.0	96.5	>5	3.5mL	HCL032017	<5	1	
-06	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-03											
-02											
-09											
-10											
-11											
-12											
L1807015-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

3/1/18

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Initials: TW

Date: 3/1/18

WG#: 1093318 & 1093351

TCLP Fluid Lot #:	1:1 HNO3	Temp(° C)	Unit ID#: 2	TCLP Fluid ID
Prep Date: 2-27-18/3-22-18 pH on Date Used: 4.91/2.93	Lot#: 1246302009	Max: 23.9 Min: 22.9	Acceptable Temp Range: 20°-25°C	(circle one) #3 #2 DI

Sample Type (Check Column) Organic	Inorganic	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	2	3/1/18	05:08	23.4	TW	3/1/18	21:05	23.6	ETH	4.92	2.5mL	TW	
			Fluid 1 Blank	—											3.28			
			L1806916-01	10.0											4.91			Blank
			-02												4.96			
			-03												4.94			
			-04												4.91			
			L1805059-02												4.90			
			-03												4.95			Fluid 2
			-06			8									4.90			
			-09												5.42			Fluid 1
			-23												5.00			↓
			-24												4.93			
			-25												4.99			Fluid
			L1806111-01												5.60			
			-02												6.45			
			-03												6.56			
			-04			6									5.79			
	↓		-05	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	6.82	↓	↓	↓

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Initials: TW

Date: 3/2/18

WG#: 1097318

TCLP Fluid Lot #: FTCLP0227435	1:1 HNO3 Lot#: 1H0302207	Temp(° C) Max: 23.9	Unit ID#: 266	TCLP Fluid ID (circle one) #3 #2 DI
Prep Date: 3-12-18 pH on Date Used: 4.91		Min: 22.4	Acceptable Temp Range: 21°-25°C	

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	6	3/1/18	15:08	23.4	TW	3/1/18	21:08	23.6	CM	4.92	2.5mL	TW	
			L1806873-06	100											5.40			Rush
			-04												5.35			
			-05												6.21			
			-09												6.46			
			-10			↓									5.48			
			-11			10									6.20			
			-12	↓	↓										6.29			↓
			L1806568-02	32	640										4.91			
			L1806664-01	100	2000										4.89			
			L1806666-01												5.15			
			-02												5.17			
			-03	↓	↓										5.58			
			L1806778-01	20	400										5.00			
	V		L1807015-01	100	2000	↓	↓	↓	↓	↓	↓	↓	↓	↓	4.95	↓	↓	
			3/1/18 TW															

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Initials: TW
Date: 3/2/18

WG#: 1093528

SPLP Fluid Lot #: SPLP02-180213	1:1 HNO3 Lot#: 180402A018	Temp(°C) Unit ID: 267 Max: 33.9 Min: 22.6	SPLP Fluid ID (circle one) #1 DI
prep. date: 02-27-18 pH: 4-21			

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	SPLP Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
X	X		PBSP (Prep Blank SPLP)	—	2000	13	3/1/18	17:42	23.6	EYA	3/2/18	9:42	23.3	LF	4.65	2.5mL	LF	Run Extr. this one before filtering
			L1806832-01	100											10.24			Rush
			-02												10.57			
			-03												10.42			
			-04												9.71			
			-05												10.24			
			-06												10.38			
			-07												9.67			
			-08												9.87			
			-09												10.84			
			-10												9.96			
			-11			↓									9.59			
↓			-12			5									10.17			↓
			L1806936-02												10.30			
	↓		L1805999-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	10.12	↓	↓	

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Initials: _____

Date: _____

True Values

QC True Values: Trace 4,5,6,7

	Element	True Value (mg/L)
ICV/CCV	All	0.50
	K	5.00
	Na	10.00
	Si	5.25
ICSA	Al	250
	Ca	250
	Fe	100
	Mg	250
ICSB	Al	9.00
	Sb	1.00
	As	1.00
	Ba	0.30
	Be	0.10
	Bi	1.00
	B	0.50
	Cd	0.30
	Ca	45.00
	Cr	0.30
	Co	0.30
	Cu	0.30
	Fe	37.50
	Pb	1.00
	Mg	22.50
	Mn	0.20
	Mo	0.30
	Ni	0.30
	K	20.00
	Se	0.50
	Si	1.23
	Ag	0.30
	Na	7.50
	Sr	1.00
	Tl	1.00
	Sn	1.00
	Ti	1.00
	V	0.30
	Zn	0.30

	Element	True Value (mg/L)
CRI	Al	0.40
	Sb	0.10
	As	0.02
	Ba	0.04
	Be	0.01
	Bi	0.02
	B	0.10
	Cd	0.01
	Ca	0.40
	Cr	0.02
	Co	0.10
	Cu	0.05
	Fe	0.20
	Pb	0.05
	Mg	0.40
	Mn	0.03
	Mo	0.10
	Ni	0.08
	K	5.00
	Se	0.02
	Si	1.00
	Ag	0.02
	Na	5.00
	Sr	0.02
	Tl	0.02
	Sn	0.02
	Ti	0.02
	V	0.10
	Zn	0.04

LCS & MS Spike Concentrations

Element	Liquid concentrations (mg/L)	Soil concentrations (mg/kg)
Al	2.00	100
Sb	0.50	25.0
As	0.12	6.0
Ba	2.00	100
Be	0.05	2.5
Bi	1.00	50.0
B	1.00	50.0
Cd	0.05	2.55
Ca	10.00	500
Cr	0.20	10.0
Co	0.50	25.0
Cu	0.25	12.5
Fe	1.00	50.0
Pb	0.51	25.5
Mg	10.00	500
Mn	0.50	25.0
Mo	1.00	50.0
Ni	0.50	25.0
K	10.00	500
Se	0.12	6.0
Si	1.00	50.0
Ag	0.05	2.5
Na	10.00	500
Sr	1.00	50.0
Tl	0.12	6.0
Sn	1.00	50.0
Ti	1.00	50.0
V	0.50	25.0
Zn	0.50	25.0

LCS and MS Spike Concentrations—As of 08/09/2011

Element	Liquid Concentration(mg/L)	Soil Concentration (mg/kg)
Al	2.00	160
Sb	0.50	40
As	0.12	9.6
Ba	2.00	160
Be	0.05	4.0
Bi	1.00	80
B	1.00	80
Cd	0.051	4.08
Ca	10.0	800
Cr	0.20	16
Co	0.50	40
Cu	0.25	20
Fe	1.00	80
Pb	0.51	40.8
Mg	10.0	800
Mn	0.50	40
Mo	1.00	80
Ni	0.50	40
K	10.0	800
Se	0.12	9.6
Si	1.00	80
Ag	0.05	24
Na	10.0	800
Sr	1.00	80
Tl	0.12	9.6
Sn	1.00	80
Ti	1.00	80
V	0.50	40
Zn	0.50	40

Revised 8/9/11 Soil spike is based on (2x water spike)x(50/1.25), where 50 is the final volume of soil digestate and 1.25 is the nominal digestion weight of 1.25g, except in the case of Ag, where additional Ag is added to the spike.

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Reference Materials

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Product:
Catalog Number:
Lot No.
Certificate Issue Date:
Expiration Date:
Revision Number:
Revision Date: May 23, 2017

Convert to %

Parameter	Certified Value[1]	Reference Value[1]	Uncertainty[1]	QC Performance Acceptance Limits[1]	PT Performance Acceptance Limits[1]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	5670	8770	2.08	4785 - 12900	3450 - 12900
Antimony	245	117	3.49	21 - 236	24.5 - 295
Arsenic	31.5	29.6	47.6	20.8 - 38.5	18.3 - 57.9
Barium	213	198	3.05	164 - 237	145 - 251
Beryllium	97.5	92.0	5.26	76.3 - 108	68.5 - 116
Boron	147	122	4.08	87.8 - 150	72.0 - 166
Cadmium	76.6	71.5	5.50	59.4 - 83.6	52.3 - 140.5
Calcium	12400	6010	0.498	4230 - 7430	3470 - 7960
Chromium	102	102	5.10	81.5 - 122	70.8 - 139
Cobalt	54.2	51.4	5.25	43.2 - 59.5	39.2 - 64.6
Copper	164	153	8.22	125 - 180	115 - 190
Iron	29800	15200	5.39	7170 - 23200	5660 - 24700
Lead	156	139	8.13	114 - 163	101 - 176
Magnesium	4550	2760	1.81	2120 - 5410	1790 - 3730
Manganese	476	270	6.15	370 - 590	209 - 640
Mercury	6.55	6.56	3.97	4.82 - 8.53	3.41 - 9.91
Molybdenum	45.1	39.7	6.35	30.8 - 47.3	26.2 - 59.9
Nickel	144	129	3.50	107 - 151	94.2 - 164
Potassium	29200	2420	3.22	1720 - 3110	1460 - 3370
Selenium	67.0	62.6	5.60	47.4 - 73.9	36.8 - 84.5
Silver	38.0	35.4	8.26	27.6 - 45.2	23.9 - 48.9
Sodium	14400	819	7.50	588 - 1050	475 - 1160
Strontium	264	88.4	7.51	72.0 - 105	62.1 - 115

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Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
[illegible]	[illegible]	101	7.96	80.0 - 122	67.6 - 134
Tin	96.4	85.8	6.46	56.3 - 105	47.4 - 124
[illegible]	2240	477	4.50	155 - 500	157 - 797
[illegible]	63.1	60.1	3.32	42.5 - [illegible]	[illegible] - 83.9
Vanadium	[illegible]	87.1	[illegible]	[illegible] - 99.1	50.4 - 112
Zinc	247	220	6.16	185 - 20[illegible]	157 - 289

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	59700	8770	88.2	152	-	-
Antimony	246	117	47.8	163	-	-
Arsenic	31.6	29.6	96.4	191	-	-
Barium	813	768	96.8	181	-	-
Beryllium	97.5	92.0	95.5	172	-	-
Boron	147	120	79.0	115	-	-
Cadmium	76.8	71.5	90.7	198	-	-
Calcium	[illegible]2700	6310	98.3	139	-	-
Chromium	192	107	91.8	185	-	-
Cobalt	54.2	51.4	96.9	170	-	-
Copper	164	153	91.8	183	-	-
Iron	29800	[illegible]5200	90.2	154	-	-
Lead	159	152	95.0	202	-	-
Magnesium	4550	2760	91.7	144	-	-
Manganese	475	2[illegible]5	96.0	172	-	-
Mercury	6.05	6.86	100	129	-	-
Molybdenum	46.9	39.1	98.6	171	-	-
Nickel	144	128	91.6	192	-	-
Potassium	2[illegible]200	2420	91.8	143	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[2]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Selenium	6.70	6.46	96.5	131	-	-
Silver	38.0	36.4	95.8	173	-	-
Sodium	7440	6739	92.7	142	-	-
Strontium	264	238.4	121	115	-	-
Thallium	111	107	96.1	171	-	-
Tin	96.4	86.8	91.0	125	-	
Titanium	2640	477	90.9	119	-	-
Uranium	63.1	60.1	1.53	25	-	-
Vanadium	129	81.3	92.3	146	-	-
Zinc	247	223	135	130	-	-

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1. The Certified Value and Expanded Uncertainty are calculated in accordance with ISO Guide 35:2017 Reference Materials – Guidance for Characterization and Assessment of Homogeneity and Stability. The Certified Value is the weighted mean of the results reported by participating laboratories. The Expanded Uncertainty is calculated using a coverage factor of 2 which corresponds to a confidence level of approximately 95%.

2. The Uncertainty of the Mean (UM) is calculated in accordance with ISO 13528:2015 Statistical methods for use in proficiency testing by interlaboratory comparisons. The UM is based on the dispersion of results submitted by participating laboratories for a particular analyte. The UM is used to evaluate the significance of the difference between the Certified Value and the laboratory's result. If the difference is less than the UM, then the laboratory's result is not significantly different from the Certified Value.

3. The QC Performance Acceptance Limits (QC PALs) are established using historical data collected from participants in ERA's proficiency testing programs. The QC PALs are calculated as the 95% confidence interval around the median value. The laboratory's result for a QC analyte must fall within the QC PAL range in order to be considered acceptable. The QC PALs are intended to help laboratories evaluate their performance against the broader laboratory community using the same test method.

4. The PT Performance Acceptance Limits (PT PALs) are established using the same statistical approach as the QC PALs. PT PALs are used by ERA to determine whether laboratories successfully pass proficiency testing studies. Laboratories must meet the PT PAL criteria to demonstrate acceptable performance. Failure to meet the PT PAL criteria may result in regulatory action, loss of certification, or other consequences depending on the governing program.

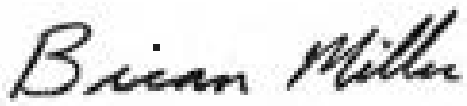
5. The PT Data Traceability Code indicates the metrological traceability of the assigned value for each analyte in the PT sample. Values assigned by reference laboratories using methods with documented traceability to the International System of Units (SI) are coded as SI traceable. Values assigned by consensus of participating laboratories are coded as consensus. Traceability codes help laboratories understand the basis for the assigned values and how they relate to recognized measurement standards.

6. The Reference Values are not used in the calculation of the statistical parameters and are provided for informational purposes only. The Reference Values may be derived from gravimetric preparation, analysis by a single expert laboratory, or other reference information. Please refer to the specific Reference Value section for details.

For assistance or information on the data contained in this report, please contact ERA technical support.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Lawson





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Reference Materials

• Certificate of Analysis •

Product:	[illegible]
Catalog Number:	5[illegible]
Lot No:	[illegible]
Certificate Issue Date:	June 25, 2007
Expiration Date:	January 31, 2[illegible]
Revision Number:	Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

[illegible]

Parameter	Certified Value¹	Reference Value²	Uncertainty³	QC Performance Acceptance Limits⁴	PT Performance Acceptance Limits⁴
	mg/kg	mg/kg	%	mg/kg	mg/kg
[illegible]	10100	7900	n/c	3690 - 12100	3070 - 12700
Antimony	184	98.5	1.04	6.37 - 191	18.4 - 253
Arsenic	178	166	7.65	138 - 194	117 - 215
[illegible]	228	213	9.52	175 - 251	156 - 270
Beryllium	67.3	58.6	8.37	48.0 - 57.7	42.5 - 73.5
Boron	91.7	89.1	3.22	45.0 - 89.3	41.5 - 131
[illegible]	143	129	6.88	106 - 151	94.2 - 152
Calcium	5190	4720	6.87	3840 - 5590	3420 - 6010
Chromium	107	101	3.09	83.4 - 120	70.5 - 132
Cobalt	77.4	68.4	5.06	57.4 - 79.5	50.9 - 86.0
Copper	116	110	2.37	91.9 - 128	81.9 - 138
Iron	35000	34100	10.5	31[illegible] - 37[illegible]	29[illegible] - 39[illegible]
Lead	210	200	8.96	167 - 238	151 - 254
Magnesium	2370	2240	4.87	1730 - 2850	1420 - 3160
Manganese	363	370	5.74	304 - 436	280 - 460
Mercury	13.7	12.8	7.50	6.40 - 19.1	6.56 - 26.1
Molybdenum	32.8	32.4	n/a	25.5 - 39.2	20.3 - 44.4
Nickel	94.4	87.1	8.32	71.8 - 102	62.8 - 112
Potassium	2420	1990	6.19	1380 - 2010	1140 - 2630
Selenium	130	117	6.86	91.2 - 141	77.3 - 156
Silver	91.4	88.5	8.20	69.3 - 104	58.4 - 115
Sodium	590	620	6.19	458 - 785	338 - 904
Strontium	59.1	59.6	1.20	48.9 - 70.3	41.5 - 77.6
Thallium	156	142	9.14	114 - 169	96.8 - 187

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Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	151	135	6.93	100 - 203	80.1 - 191
Titanium	450	336	3.79	65.5 - 606	63.9 - 601
Tungsten	113	109	7.77	82.0 - 136	75.4 - 143
Vanadium	104	97.5	5.44	76.9 - 117	63.7 - 131
Zinc	254	240	4.89	194 - 286	170 - 311

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	13100	7900	78.2	149	-	-
Antimony	184	98.5	52.5	158	-	-
Arsenic	178	166	93.3	192	-	-
Barium	228	213	93.4	165	-	-
Beryllium	61.3	58.0	94.6	165	-	-
Boron	91.7	69.1	75.4	108	-	-
Cadmium	143	129	89.9	189	-	-
Calcium	5190	4720	90.9	131	-	-
Chromium	137	131	94.9	184	-	-
Cobalt	71.4	68.4	95.9	154	-	-
Copper	116	110	94.6	151	-	-
Iron	15000	14100	93.9	144	-	-
Lead	213	203	96.5	256	-	-
Magnesium	2570	2290	89.1	137	-	-
Manganese	383	370	96.6	158	-	-
Mercury	20.7	12.8	58.8	128	-	-
Molybdenum	38.8	32.4	83.5	154	-	-
Nickel	96.4	87.1	91.3	184	-	-
Potassium	2420	1990	82.4	137	-	-
Selenium	130	117	89.7	179	-	-

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Parameter	Certified Value*	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery†	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	97.4	88.6	94.8	158	-	-
Sodium	690	621	90.3	125	-	
Strontium	58.1	54.6	101	93	-	-
Thallium	156	148	90.8	161	-	-
Tin	157	135	89.6	109	-	-
Titanium	450	336	74.6	134	-	-
Uranium	116	109	99.2	31	-	-
Vanadium	134	97.0	93.3	150	-	-
Zinc	254	240	94.6	182	-	-

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[illegible]

[illegible]

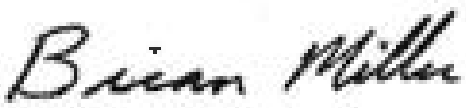
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If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Larson





[illegible]

ICPMS
Analysis

Sequence Logs

Sample List Summary

3/8/2018 7:25:31 AM

QTEGRA

Instrument Name:	Serial Number:
iCAP Q	ICAPQ01717

Labbook:	Labbook Path
WG1095175_MSQ2030718.imexp	_Application Data\Workspace\LabBooks

Index	Label	Rack	Vial	Main Runs	Survey Runs	Start Time
1	Rinse	0	1	3	1	3/7/2018 7:48:11 AM
2	Rinse	0	1	3	1	3/7/2018 7:52:02 AM
3	Blank AM ICPMSQ2	4	49	3	1	3/7/2018 7:55:54 AM
4	0.2/20 Cal	0	2	3	1	3/7/2018 7:59:50 AM
5	1.0/100 Cal	0	3	3	1	3/7/2018 8:03:42 AM
6	10/1000 Cal	0	4	3	1	3/7/2018 8:07:34 AM
7	120/12000	0	5	3	1	3/7/2018 8:11:27 AM
8	250/25000	0	6	3	1	3/7/2018 8:15:20 AM
9	500/50000	0	7	3	1	3/7/2018 8:19:14 AM
10	Rinse	0	1	3	1	3/7/2018 8:23:08 AM
11	Sr 100ppb	4	57	3	1	3/7/2018 8:26:59 AM
12	ICV	0	9	3	1	3/7/2018 8:30:55 AM
13	ICB	0	10	3	1	3/7/2018 8:34:50 AM
14	LLICV	4	51	3	1	3/7/2018 8:38:46 AM
15	ICSA	4	53	3	1	3/7/2018 8:42:42 AM
16	ICSAB	4	55	3	1	3/7/2018 8:46:38 AM
17	Rinse	0	1	3	1	3/7/2018 8:50:33 AM
18	CCV	0	9	3	1	3/7/2018 8:54:25 AM
19	CCB	0	10	3	1	3/7/2018 8:58:20 AM
20	WG1094621-1D10 CT-6020TS	1	1	3	1	3/7/2018 9:02:16 AM
21	WG1094621-2D10 CT-6020TS	1	2	3	1	3/7/2018 9:06:07 AM
22	L1806577-07D10 A2-6020T	1	8	3	1	3/7/2018 9:09:59 AM
23	L1806577-08D10 A2-6020T	1	9	3	1	3/7/2018 9:13:52 AM
24	L1806577-09D10 A2-6020T	1	10	3	1	3/7/2018 9:17:45 AM
25	L1806577-10D10 A2-6020T	1	11	3	1	3/7/2018 9:21:39 AM
26	L1806577-11D10 A2-6020T	1	12	3	1	3/7/2018 9:25:33 AM
27	L1806577-12D10 A2-6020T	1	13	3	1	3/7/2018 9:29:28 AM
28	L1806577-13D10 A2-6020T	1	14	3	1	3/7/2018 9:33:18 AM
29	L1807335-01D10 CT-6020TS	1	3	3	1	3/7/2018 9:37:09 AM
30	CCV	0	9	3	1	3/7/2018 9:41:01 AM
31	CCB	0	10	3	1	3/7/2018 9:44:56 AM
32	WG1094941-1 2008TL	1	15	3	1	3/7/2018 10:08:49 AM
33	WG1094941-2D5 2008TL	1	16	3	1	3/7/2018 10:12:40 AM
34	L1807335-02D10 CT-6020TS	1	4	3	1	3/7/2018 10:16:31 AM
35	L1807335-03D10 CT-6020TS	1	5	3	1	3/7/2018 10:20:23 AM
36	L1807335-04D10 CT-6020TS	1	6	3	1	3/7/2018 10:24:15 AM
37	L1807335-05D10 CT-6020TS	1	7	3	1	3/7/2018 10:28:08 AM
38	WG1094941-3D10 2008TL	1	17	3	1	3/7/2018 10:32:01 AM
39	WG1094941-4 2008TL	1	18	3	1	3/7/2018 10:35:53 AM
40	L1807566-02 2008TL	1	19	3	1	3/7/2018 10:39:45 AM
41	L1807567-01 2008TL	1	20	3	1	3/7/2018 10:43:37 AM
42	CCV	0	9	3	1	3/7/2018 10:47:29 AM
43	CCB	0	10	3	1	3/7/2018 10:51:24 AM
44	WG1094930-1 2008TL	1	22	3	1	3/7/2018 10:55:54 AM
45	WG1094930-2D5 2008TL	1	23	3	1	3/7/2018 10:59:47 AM
46	WG1094930-3D10 2008TL	1	24	3	1	3/7/2018 11:03:41 AM
47	WG1094930-4 2008TL	1	25	3	1	3/7/2018 11:07:34 AM
48	L1807334-02 2008TL	1	26	3	1	3/7/2018 11:11:25 AM
49	L1807597-08 6020TL	1	32	3	1	3/7/2018 11:15:16 AM
50	L1807332-01 2008TL	1	27	3	1	3/7/2018 11:19:08 AM
51	L1807332-02 2008TL	1	28	3	1	3/7/2018 11:22:59 AM

Sample List Summary

3/8/2018 7:25:31 AM

QTEGRA

Index	Label	Rack	Vial	Main Runs	Survey Runs	Start Time
52	L1807332-03 2008TL	1	29	3	1	3/7/2018 11:26:50 AM
53	L1807568-01 2008TL	1	21	3	1	3/7/2018 11:30:41 AM
54	CCV	0	9	3	1	3/7/2018 11:34:34 AM
55	XCCB	0	10	3	1	3/7/2018 11:38:30 AM
56	CCB	0	10	3	1	3/7/2018 11:44:22 AM
57	WG1095262-1D10 CT-SPLP-6020TL	1	33	3	1	3/7/2018 11:48:18 AM
58	WG1095262-2D10 CT-SPLP-6020TL	1	34	3	1	3/7/2018 11:52:11 AM
59	L1807334-01 2008TL	1	30	3	1	3/7/2018 11:56:04 AM
60	L1807477-21 2008TL	1	31	3	1	3/7/2018 11:59:55 AM
61	L1805926-18D10 CT-SPLP-6020TL	1	35	3	1	3/7/2018 12:03:47 PM
62	L1805656-06D10 CT-SPLP-6020TL	1	36	3	1	3/7/2018 12:07:41 PM
63	L1805915-03D10 CT-SPLP-6020TL	1	37	3	1	3/7/2018 12:11:34 PM
64	L1805915-05D10 CT-SPLP-6020TL	1	38	3	1	3/7/2018 12:15:25 PM
65	L1805915-12D10 CT-SPLP-6020TL	1	39	3	1	3/7/2018 12:19:16 PM
66	L1805915-22D10 CT-SPLP-6020TL	1	40	3	1	3/7/2018 12:23:07 PM
67	CCV	0	9	3	1	3/7/2018 12:26:58 PM
68	CCB	0	10	3	1	3/7/2018 12:30:54 PM
69	WG1095278-1D10 CT-SPLP-6020TL	1	42	3	1	3/7/2018 12:36:05 PM
70	WG1095170-1 6020TL	1	47	3	1	3/7/2018 12:39:57 PM
71	WG1095170-2D5 6020TL	1	48	3	1	3/7/2018 12:43:50 PM
72	WG1095278-2D10 CT-SPLP-6020TL	1	43	3	1	3/7/2018 12:47:44 PM
73	L1807395-03 6020TL	1	49	3	1	3/7/2018 12:51:36 PM
74	L1807553-01 6020TL	1	50	3	1	3/7/2018 12:55:27 PM
75	L1805915-25D10 CT-SPLP-6020TL	1	41	3	1	3/7/2018 12:59:19 PM
76	L1805656-03D10 CT-SPLP-6020TL	1	44	3	1	3/7/2018 1:03:10 PM
77	L1805656-09D10 CT-SPLP-6020TL	1	45	3	1	3/7/2018 1:07:02 PM
78	L1805656-13D10 CT-SPLP-6020TL	1	46	3	1	3/7/2018 1:10:55 PM
79	CCV	0	9	3	1	3/7/2018 1:14:48 PM
80	CCB	0	10	3	1	3/7/2018 1:18:43 PM
81	L1807597-01 6020TL	1	51	3	1	3/7/2018 1:22:39 PM
82	WG1095170-4 6020TL	1	52	3	1	3/7/2018 1:26:30 PM
83	WG1095170-3D10 6020TL	1	53	3	1	3/7/2018 1:30:22 PM
84	WG1095170-5D10 6020TL	1	54	3	1	3/7/2018 1:34:13 PM
85	L1807553-02 6020TL	1	56	3	1	3/7/2018 1:38:05 PM
86	L1807553-03 6020TL	1	57	3	1	3/7/2018 1:41:57 PM
87	L1807553-04 6020TL	1	58	3	1	3/7/2018 1:45:50 PM
88	L1807597-02 6020TL	1	59	3	1	3/7/2018 1:49:43 PM
89	L1807597-03 6020TL	1	60	3	1	3/7/2018 1:53:36 PM
90	WG1095170-6D5 6020TL	1	55	3	1	3/7/2018 1:57:30 PM
91	CCV	0	9	3	1	3/7/2018 2:01:22 PM
92	CCB	0	10	3	1	3/7/2018 2:05:17 PM
93	WG1095244-1 6020TL	2	5	3	1	3/7/2018 2:10:56 PM
94	WG1095244-2D5 6020TL	2	6	3	1	3/7/2018 2:14:48 PM
95	WG1095244-3D10 6020TL	2	7	3	1	3/7/2018 2:20:18 PM
96	WG1095244-5D10 6020TL	2	8	3	1	3/7/2018 2:24:10 PM
97	WG1095244-4 6020TL	2	9	3	1	3/7/2018 2:28:02 PM
98	L1807540-01 6020TL	2	10	3	1	3/7/2018 2:31:55 PM
99	L1807597-04 6020TL	2	1	3	1	3/7/2018 2:35:48 PM
100	L1807597-05 6020TL	2	2	3	1	3/7/2018 2:39:39 PM
101	L1807597-06 6020TL	2	3	3	1	3/7/2018 2:43:31 PM
102	L1807597-07 6020TL	2	4	3	1	3/7/2018 2:47:23 PM
103	CCV	0	9	3	1	3/7/2018 2:51:15 PM
104	CCB	0	10	3	1	3/7/2018 2:55:11 PM
105	L1807327-04 6020TL	2	15	3	1	3/7/2018 3:00:42 PM
106	L1807544-27 6020TL	2	22	3	1	3/7/2018 3:04:34 PM
107	L1807540-02 6020TL	2	21	3	1	3/7/2018 3:08:27 PM
108	L1807749-01 6020TL	2	23	3	1	3/7/2018 3:12:20 PM
109	WG1095247-3D10 2008TL	2	24	3	1	3/7/2018 3:16:13 PM
110	WG1095247-4 2008TL	2	25	3	1	3/7/2018 3:20:06 PM
111	L1807343-01 2008TL	2	26	3	1	3/7/2018 3:23:59 PM
112	L1807343-02 2008TL	2	27	3	1	3/7/2018 3:27:52 PM

Sample List Summary

3/8/2018 7:25:31 AM

QTEGRA

Index	Label	Rack	Vial	Main Runs	Survey Runs	Start Time
113	L1807327-01 6020TL	2	12	3	1	3/7/2018 3:31:44 PM
114	WG1095244-6D5 6020TL	2	11	3	1	3/7/2018 3:35:38 PM
115	CCV	0	9	3	1	3/7/2018 3:39:31 PM
116	CCB	0	10	3	1	3/7/2018 3:43:27 PM
117	WG1094297-1D10 CT-SPLP-6020TL	2	28	3	1	3/7/2018 3:47:23 PM
118	WG1094297-2D10 CT-SPLP-6020TL	2	29	3	1	3/7/2018 3:51:15 PM
119	L1807327-02 6020TL	2	13	3	1	3/7/2018 3:55:08 PM
120	L1807327-03 6020TL	2	14	3	1	3/7/2018 3:59:00 PM
121	L1807338-01 6020TL	2	16	3	1	3/7/2018 4:02:52 PM
122	L1807338-02 6020TL	2	17	3	1	3/7/2018 4:06:45 PM
123	L1807338-04 6020TL	2	18	3	1	3/7/2018 4:10:37 PM
124	L1807338-05 6020TL	2	19	3	1	3/7/2018 4:14:29 PM
125	XL1807338-07 6020TL	2	20	3	1	3/7/2018 4:18:22 PM
126	L1806872-01D10 CT-SPLP-6020TL	2	30	3	1	3/7/2018 4:22:14 PM
127	CCV	0	9	3	1	3/7/2018 4:26:07 PM
128	CCB	0	10	3	1	3/7/2018 4:30:02 PM
129	L1806872-02D10 CT-SPLP-6020TL	2	31	3	1	3/7/2018 4:33:58 PM
130	L1806872-03D10 CT-SPLP-6020TL	2	32	3	1	3/7/2018 4:37:51 PM
131	L1806872-04D10 CT-SPLP-6020TL	2	33	3	1	3/7/2018 4:41:44 PM
132	L1806872-05D10 CT-SPLP-6020TL	2	34	3	1	3/7/2018 4:45:36 PM
133	L1806872-06D10 CT-SPLP-6020TL	2	35	3	1	3/7/2018 4:49:30 PM
134	L1806872-07D10 CT-SPLP-6020TL	2	36	3	1	3/7/2018 4:53:23 PM
135	L1806872-08D10 CT-SPLP-6020TL	2	37	3	1	3/7/2018 4:57:17 PM
136	L1806872-09D10 CT-SPLP-6020TL	2	38	3	1	3/7/2018 5:01:10 PM
137	L1806872-10D10 CT-SPLP-6020TL	2	39	3	1	3/7/2018 5:05:02 PM
138	L1806872-11D10 CT-SPLP-6020TL	2	40	3	1	3/7/2018 5:08:55 PM
139	CCV	0	9	3	1	3/7/2018 5:12:48 PM
140	CCB	0	10	3	1	3/7/2018 5:16:44 PM
141	WG1093817-1D2 A2-6020T	2	42	3	1	3/7/2018 5:20:40 PM
142	WG1093817-2D10 A2-6020T	2	43	3	1	3/7/2018 5:24:33 PM
143	WG1093817-3D10 A2-6020T	2	44	3	1	3/7/2018 5:28:26 PM
144	WG1093817-5D10 A2-6020T	2	45	3	1	3/7/2018 5:32:19 PM
145	WG1093817-4D2 A2-6020T	2	46	3	1	3/7/2018 5:36:12 PM
146	L1807187-01D2 A2-6020T	2	47	3	1	3/7/2018 5:40:05 PM
147	L1807187-02D2 A2-6020T	2	49	3	1	3/7/2018 5:43:58 PM
148	L1807187-03D2 A2-6020T	2	50	3	1	3/7/2018 5:47:51 PM
149	WG1093817-6D10 A2-6020T	2	48	3	1	3/7/2018 5:51:45 PM
150	L1806872-12D10 CT-SPLP-6020TL	2	41	3	1	3/7/2018 5:55:38 PM
151	CCV	0	9	3	1	3/7/2018 5:59:31 PM
152	CCB	0	10	3	1	3/7/2018 6:03:27 PM
153	L1807187-04D2 A2-6020T	2	51	3	1	3/7/2018 6:07:23 PM
154	L1807187-05D2 A2-6020T	2	52	3	1	3/7/2018 6:11:16 PM
155	L1807187-06D2 A2-6020T	2	53	3	1	3/7/2018 6:15:10 PM
156	L1807187-07D2 A2-6020T	2	54	3	1	3/7/2018 6:19:03 PM
157	L1807187-08D2 A2-6020T	2	55	3	1	3/7/2018 6:22:56 PM
158	048-45 SCAN	2	56	3	1	3/7/2018 6:26:50 PM
159	CCV	0	9	3	1	3/7/2018 6:30:43 PM
160	CCB	0	10	3	1	3/7/2018 6:34:39 PM
161	CCV	0	9	3	1	3/7/2018 6:38:35 PM
162	LLCCV	4	51	3	1	3/7/2018 6:42:30 PM
163	CCB	0	10	3	1	3/7/2018 6:46:27 PM
164	Rinse	0	1	3	1	3/7/2018 6:50:23 PM
165	Rinse	0	1	3	1	3/7/2018 6:54:15 PM

User name
ALPHALAB\metals-instrument
ALPHALAB\metals-instrument
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ALPHALAB\metals-instrument

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.
Metals Batch Report -SPLP Metals (Connecticut) - CT-SPLP-6020TL Batch WG1094297 for dept. 5
Mar 14, 2018 16:03

Sample No.	Client No.	Sample I.D.	Mat	Due	As	Be	Cr	Pb	Ni	Ag	Zn	Sb	Ba	Cd	Cu	Mo	Se	Tl
L1806872-01		SDT-DS-BFT-PC03	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-02		SDT-DS-BFT-PC06	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-03		SDT-DS-BFT-PC08	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-04		SDT-DS-BFT-CC03	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-05		SDT-DS-BFT-CC06	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-06		SDT-DS-BFT-CC08	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-07		SDT-DS-GVT-PC02	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-08		SDT-DS-GVT-PC04	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-09		SDT-DS-GVT-PC05	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-10		SDT-DS-GVT-CC02	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-11		SDT-DS-GVT-CC04	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
L1806872-12		SDT-DS-GVT-CC05	3	0314	X		X	X	X	X	X	X		X	X	X	X	X
WG1094297-1		Laboratory Method	3		X		X	X	X	X	X	X		X	X	X	X	X
WG1094297-2		Laboratory Contro	3		X		X	X	X	X	X	X		X	X	X	X	X

Tune

Performance Report

QTEGRA

System

Time	3/7/2018 7:30:19 AM
Instrument id	iCAP Q
Operator	ALPHALAB\metals-instrument
Template	STD AGD
Serial number	N/A
Last Autotune	Autotune-Source Autotune Alpha No Neb-20180301-082900699.imatdat
Solution	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
7Li	Passed	18,914.0 CPS	Greater than	500.0 CPS
59Co	Passed	78,199.0 CPS	Greater than	1,000.0 CPS
238U	Passed	131,189.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.005	Less than	0.025
137Ba++/137Ba	Passed	0.0321	Less than	0.034
115In	Passed	102,068.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	1.5 %	5
59Co	0.6 %	5
238U	1.2 %	5
115In	0.9 %	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid	Offset	Peak Width	Peak Width Min	Peak Width Max
7Li	Passed	7.0107	0.0053	0.690	0.600	0.900
59Co	Passed	58.9095	0.0237	0.723	0.600	0.900
115In	Passed	114.8754	0.0285	0.749	0.600	0.900
238U	Passed	238.0009	0.0499	0.792	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	53.85
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-274.99
Auxilliary Flow	0.80
CCT Bias	-2.00
CCT Entry Lens	-73.99
CCT Exit Lens	-160.01
CCT Focus Lens	4.36
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-189.99
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-264.00
Focus Lens	14.80
Nebulizer Flow	0.36
Peristaltic Pump Speed	20.00
Plasma Power	1550.00
Pole Bias	-1.00
Quad Entry Lens	-21.00
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.42
Torch Vertical Position	-0.90
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-185.00

Vacuum Check

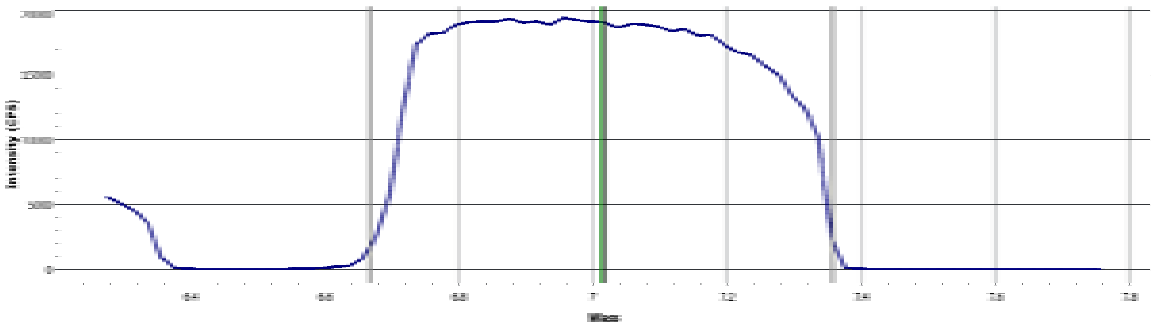
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	4.314e-7
Interface Pressure		1.810e+0

Detector Voltages

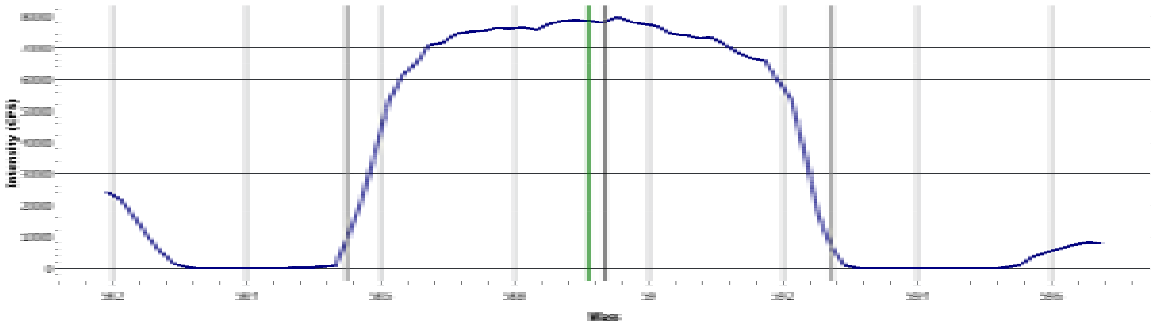
Analog	Counting
-1850.00	1275.00

Mass Calibration Peaks

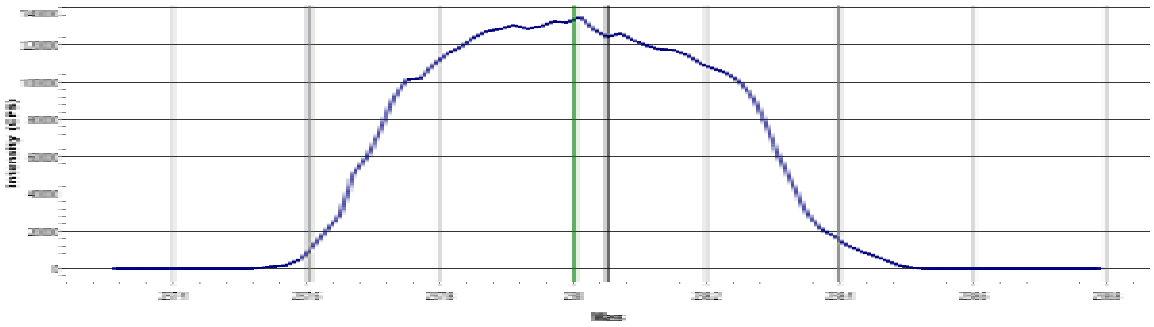
7Li



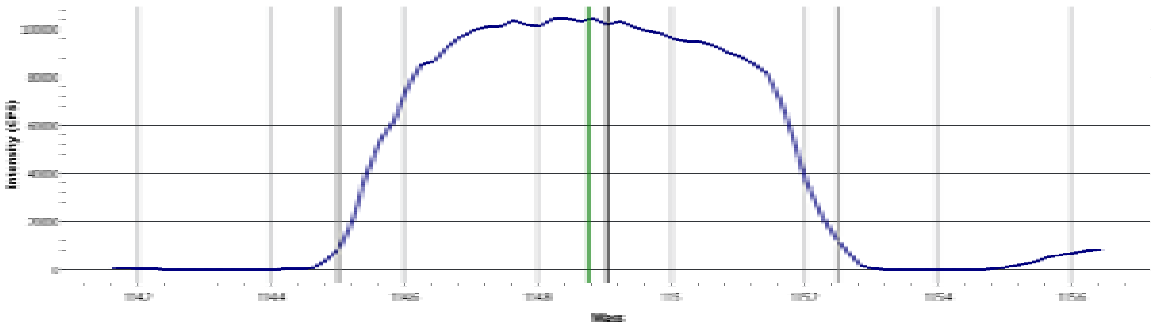
59Co



238U



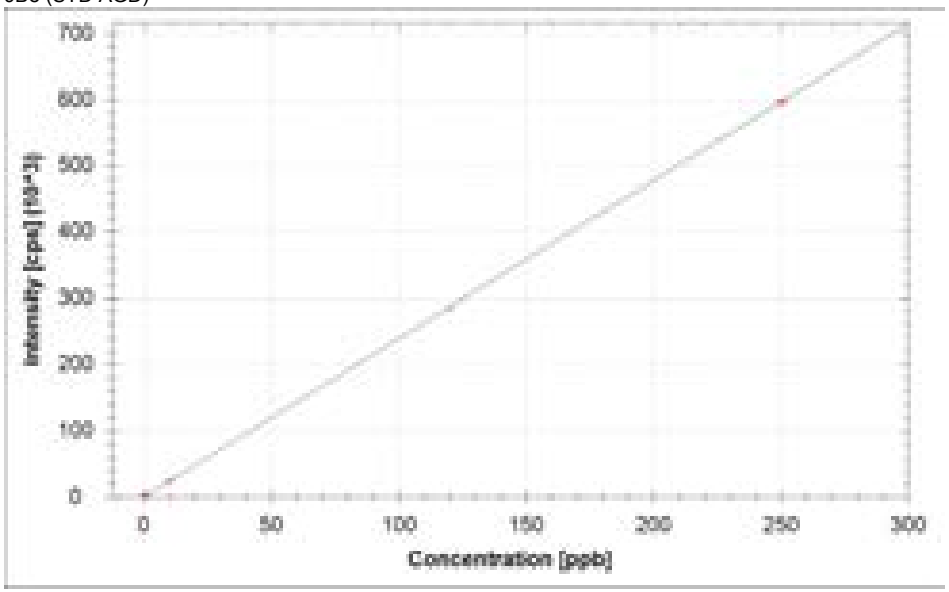
115In



Sample Raw Data

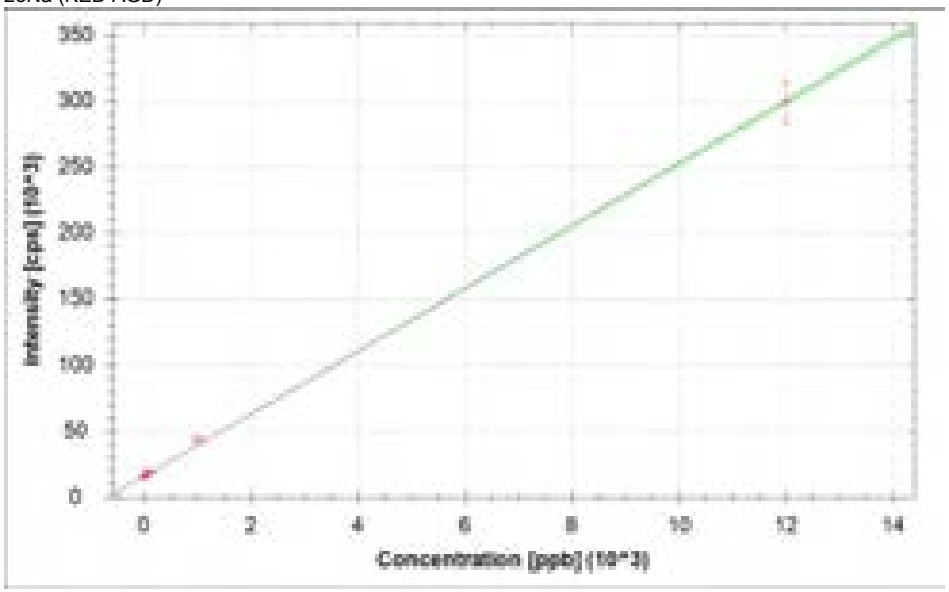
Calibration Curves

9Be (STD AGD)



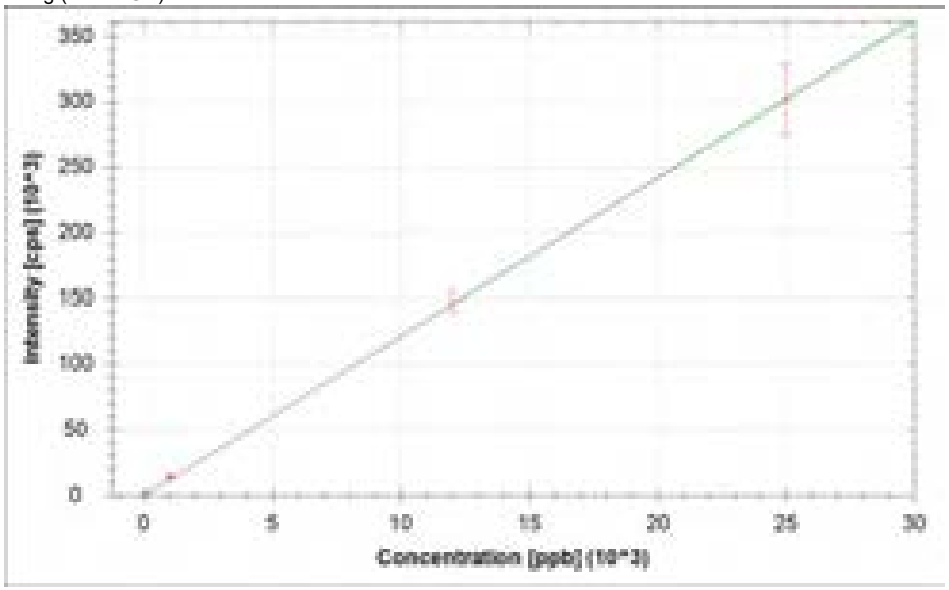
f(x) = 2384.9113*x + 13.7004
R^2 = 1.0000
BEC = 0.006 ppb
LoD = 0.0035 ppb

23Na (KED AGD)



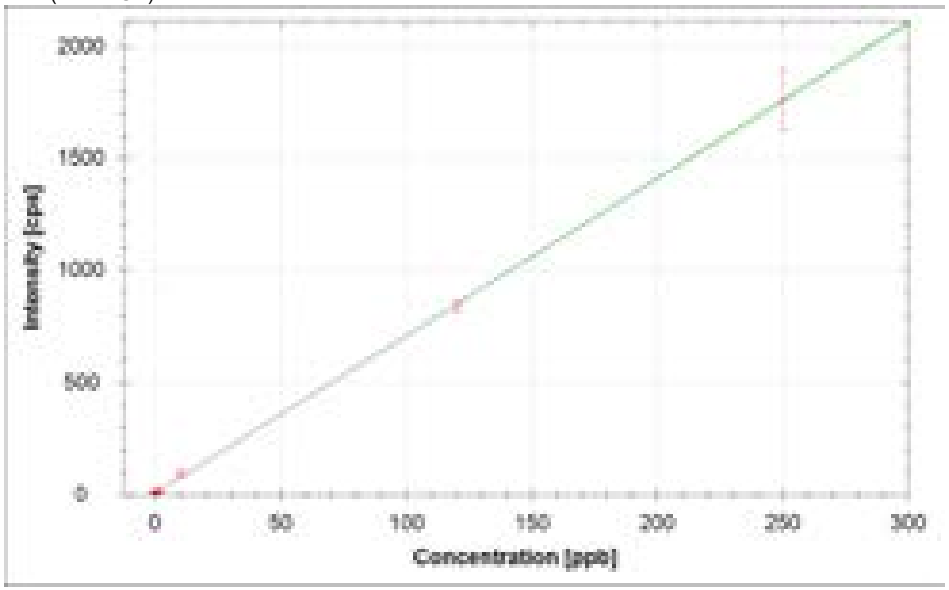
f(x) = 23.6450*x + 15812.2938
R^2 = 0.9997
BEC = 668.737 ppb
LoD = 51.1590 ppb

24Mg (KED AGD)



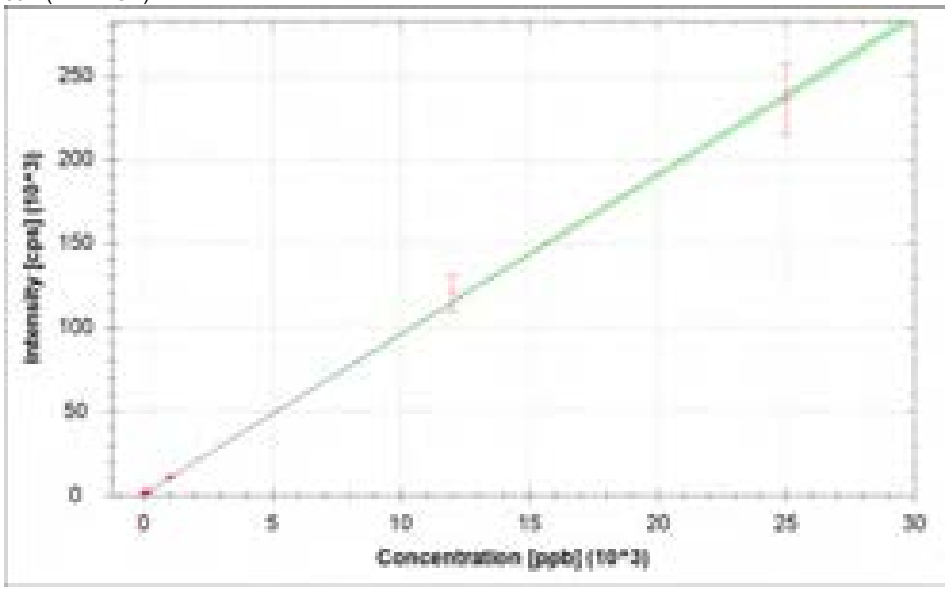
f(x) = 12.0767*x + 8.9071
R^2 = 0.9999
BEC = 0.738 ppb
LoD = 1.9166 ppb

27Al (KED AGD)



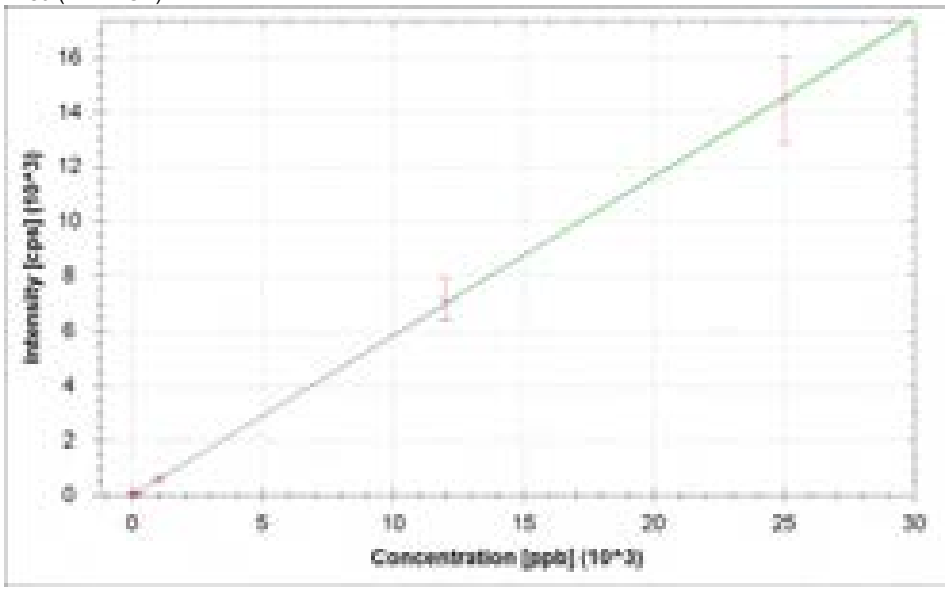
f(x) = 7.0000*x + 9.5619
R^2 = 0.9999
BEC = 1.366 ppb
LoD = 0.6165 ppb

39K (KED AGD)



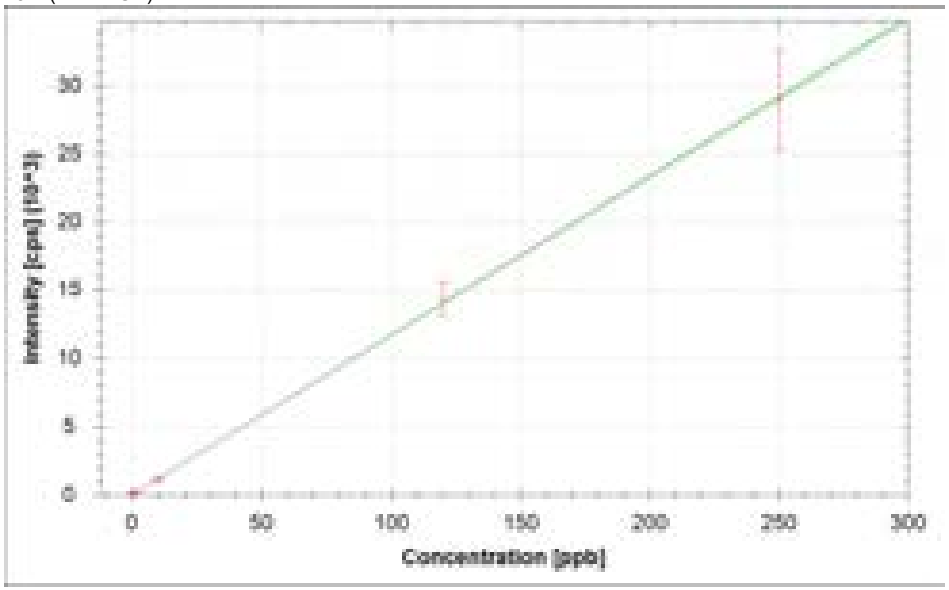
f(x) = 9.4842*x + 1050.0467
R^2 = 0.9993
BEC = 110.715 ppb
LoD = 35.7519 ppb

44Ca (KED AGD)



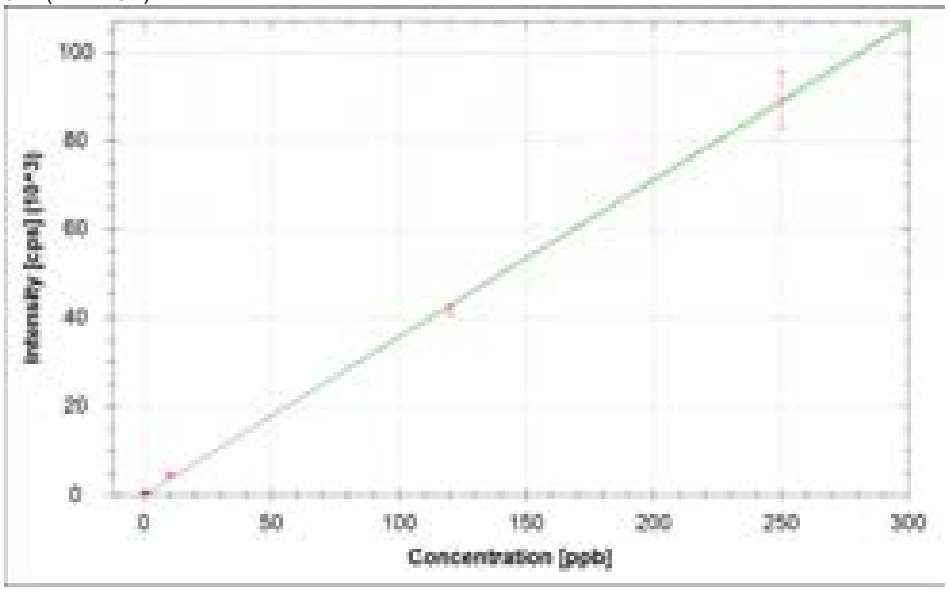
f(x) = 0.5816*x + 6.6692
R^2 = 0.9998
BEC = 11.467 ppb
LoD = 17.4365 ppb

48Ti (KED AGD)



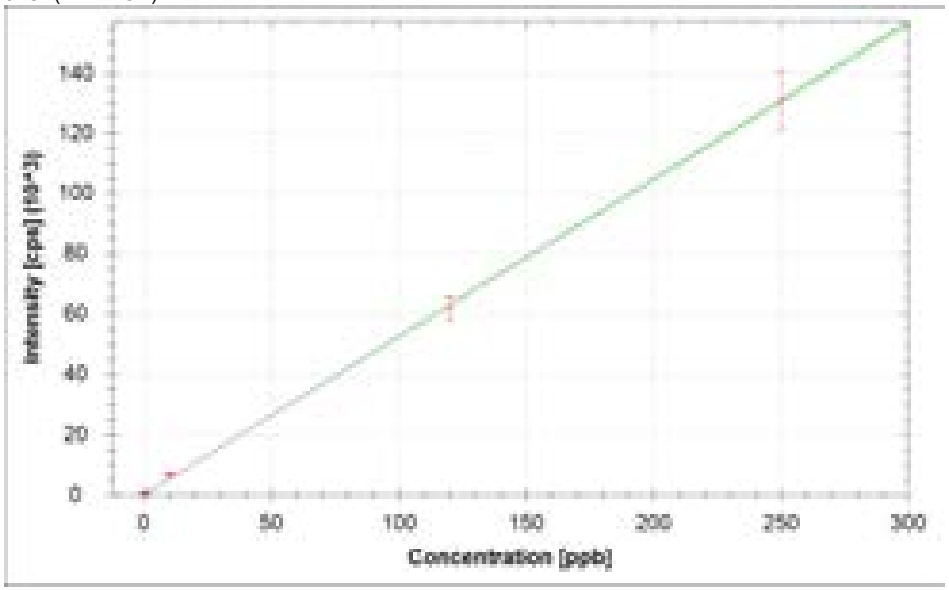
f(x) = 116.4243*x + 43.9285
R^2 = 0.9998
BEC = 0.377 ppb
LoD = 1.7358 ppb

51V (KED AGD)



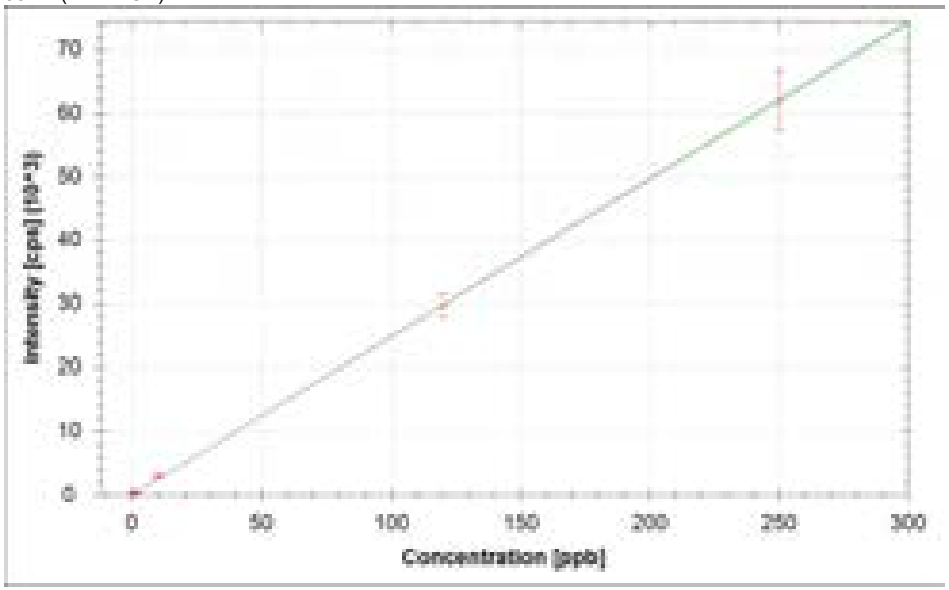
f(x) = 355.3872*x + 4.4310
R^2 = 0.9997
BEC = 0.012 ppb
LoD = 0.0648 ppb

52Cr (KED AGD)



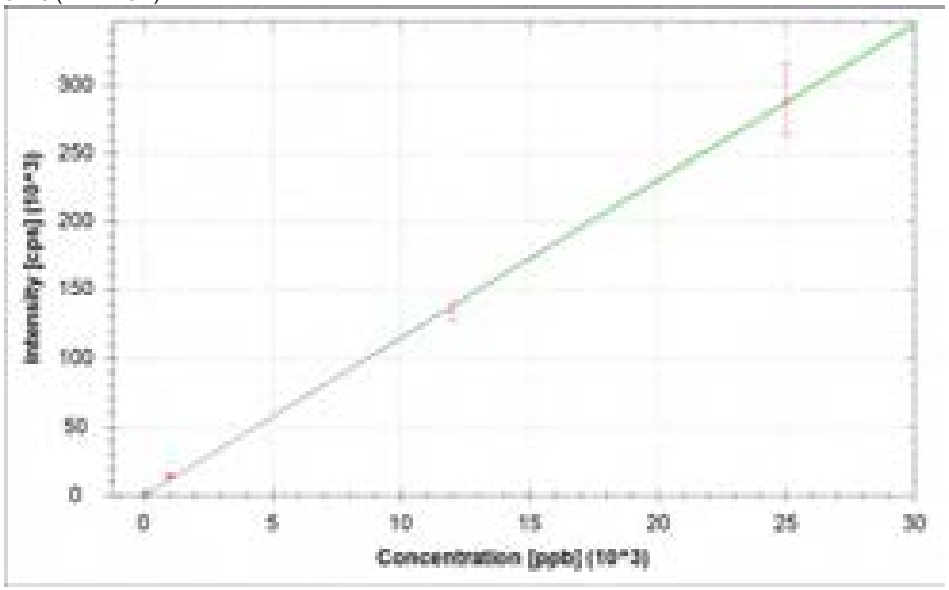
f(x) = 522.3630*x + 195.5260
R^2 = 0.9997
BEC = 0.374 ppb
LoD = 0.0278 ppb

55Mn (KED AGD)



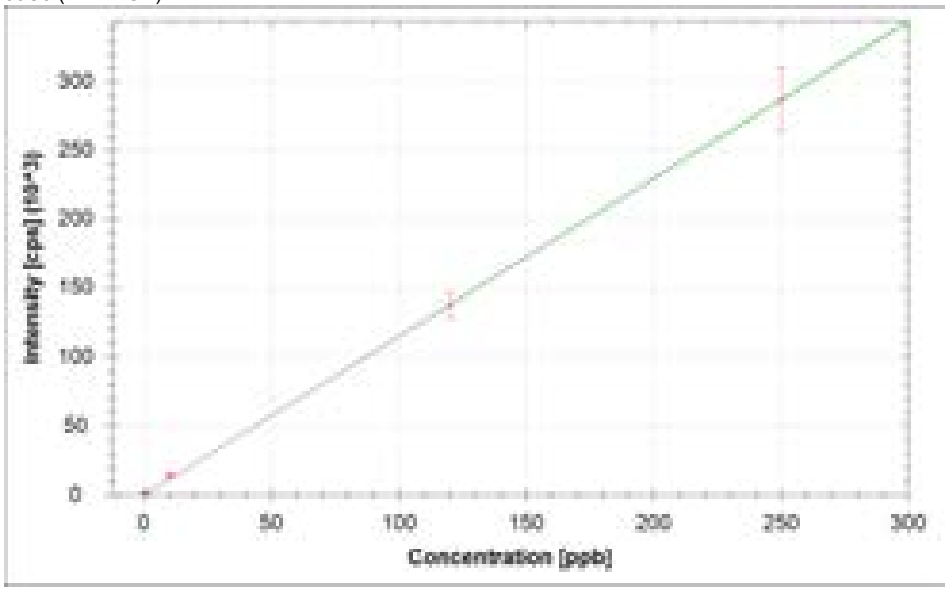
f(x) = 247.9615*x + 22.1605
R^2 = 0.9999
BEC = 0.089 ppb
LoD = 0.0905 ppb

57Fe (KED AGD)



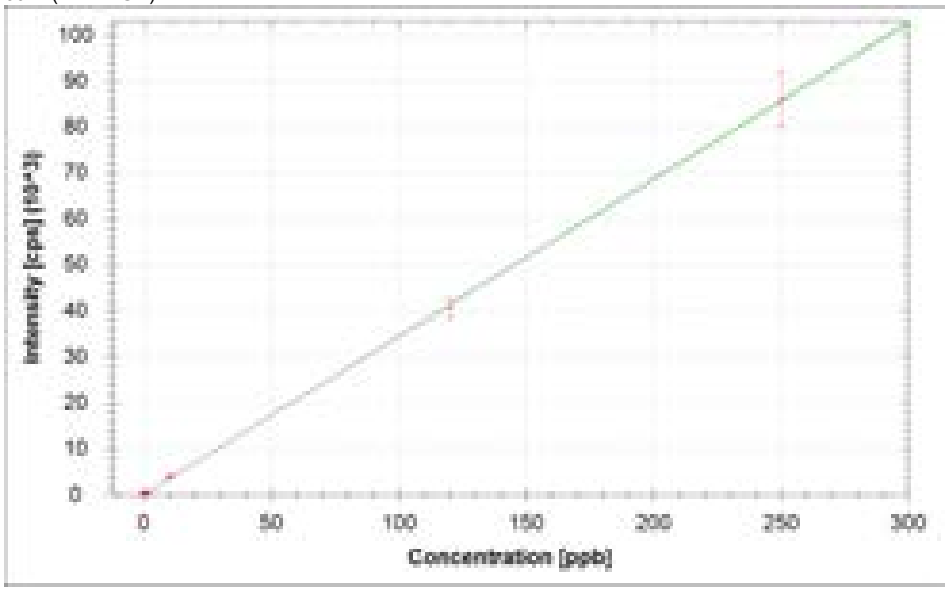
f(x) = 11.4931*x + 22.3253
R^2 = 0.9997
BEC = 1.942 ppb
LoD = 2.7528 ppb

59Co (KED AGD)



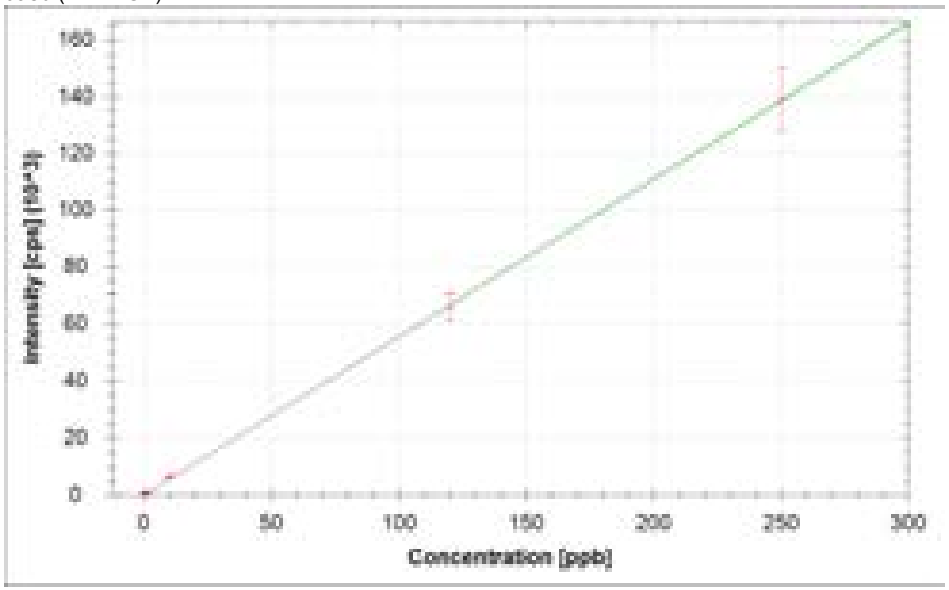
f(x) = 1147.7218*x + 4.4444
R^2 = 0.9999
BEC = 0.004 ppb
LoD = 0.0101 ppb

60Ni (KED AGD)



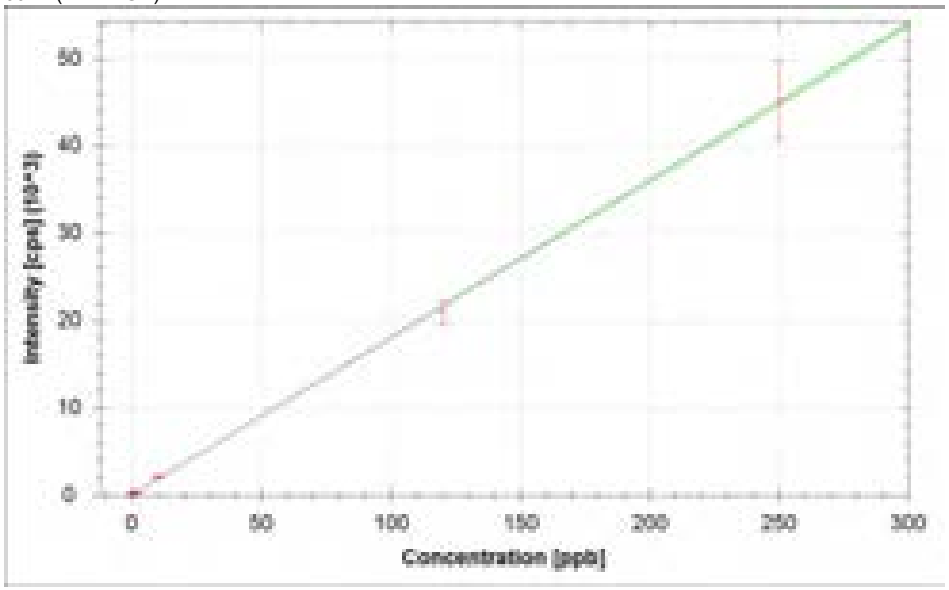
f(x) = 342.2354*x + 189.2282
R^2 = 0.9999
BEC = 0.553 ppb
LoD = 0.3496 ppb

65Cu (KED AGD)



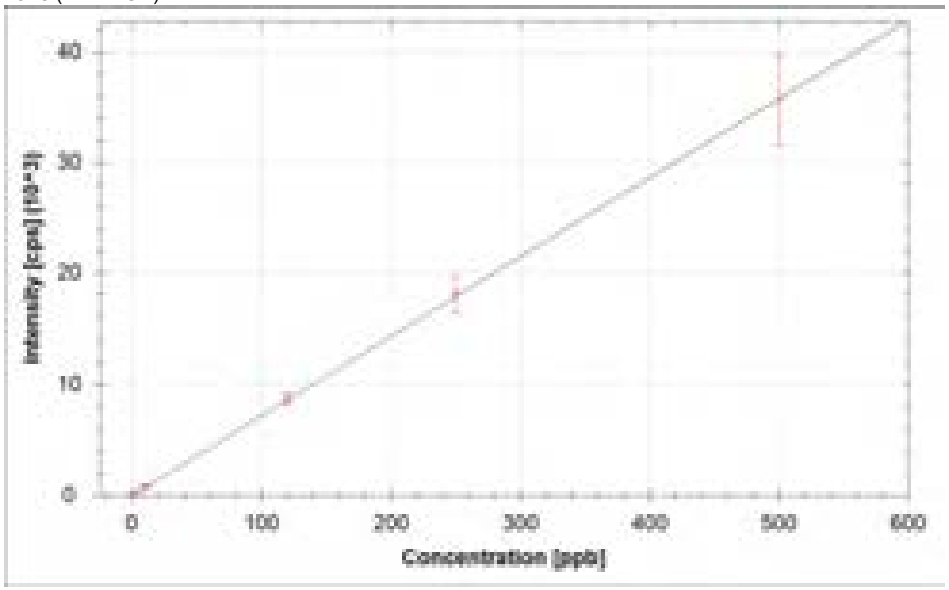
f(x) = 553.6537*x + 68.8289
R^2 = 0.9999
BEC = 0.124 ppb
LoD = 0.0368 ppb

66Zn (KED AGD)



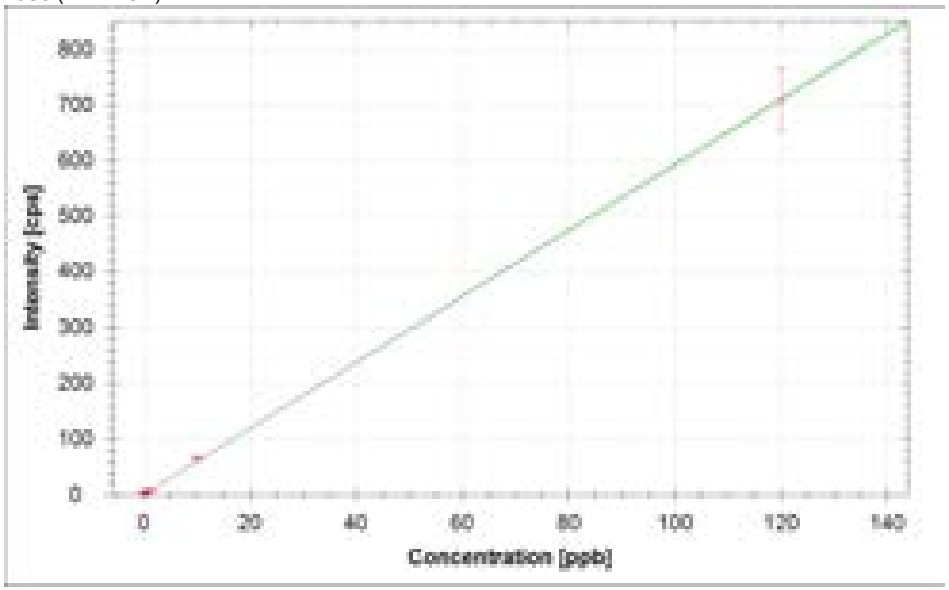
f(x) = 179.4207*x + 94.6174
R^2 = 0.9996
BEC = 0.527 ppb
LoD = 0.2031 ppb

75As (KED AGD)



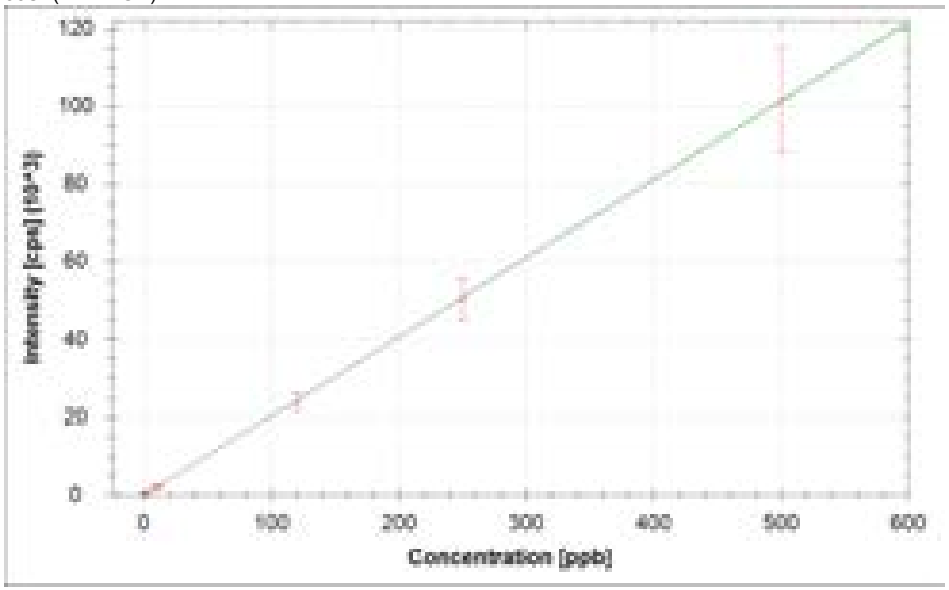
f(x) = 71.5590*x + 0.2833
R^2 = 1.0000
BEC = 0.004 ppb
LoD = 0.0206 ppb

78Se (KED AGD)



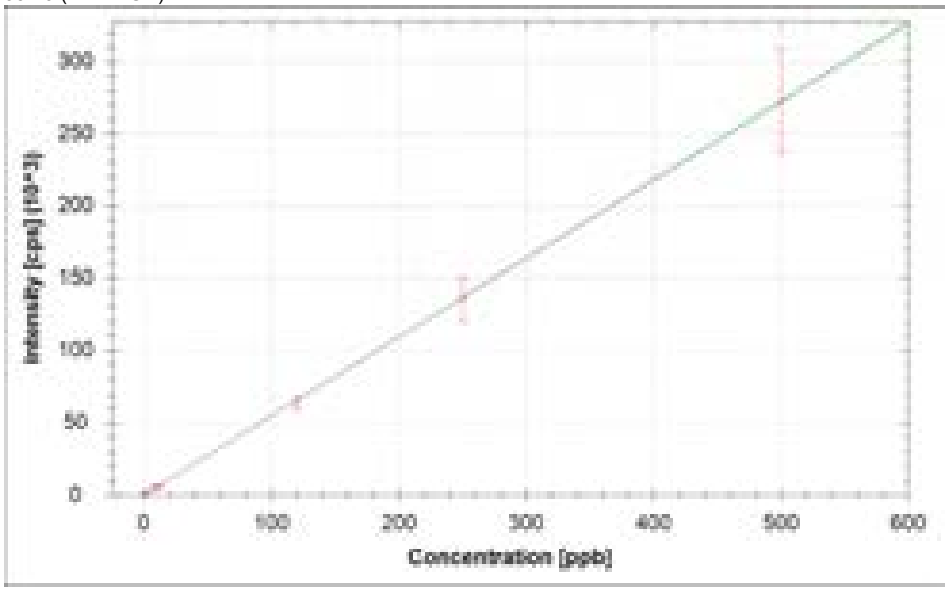
f(x) = 5.9137*x + 1.1047
R^2 = 0.9999
BEC = 0.187 ppb
LoD = 0.2441 ppb

88Sr (KED AGD)



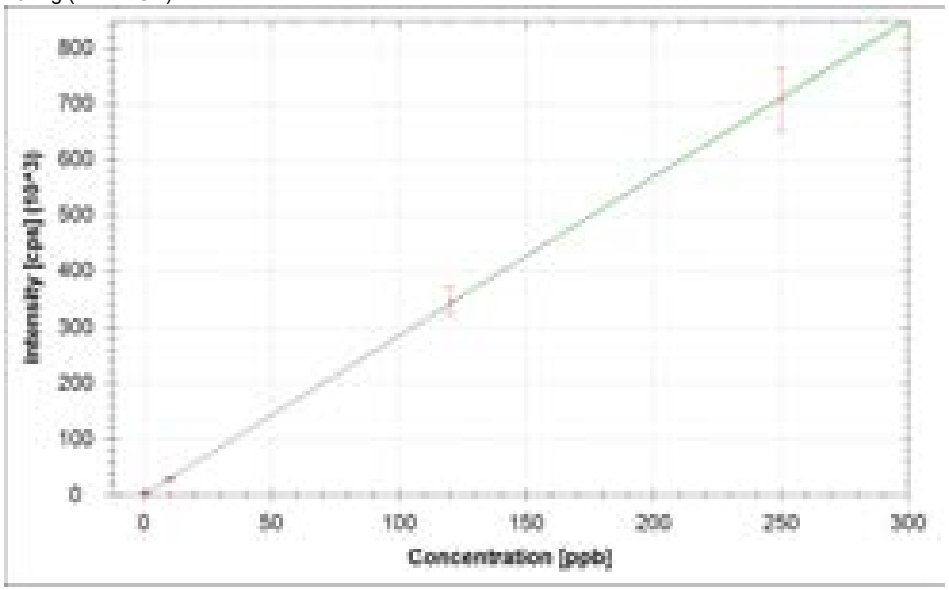
f(x) = 202.6409*x + 18.9969
R^2 = 0.9999
BEC = 0.094 ppb
LoD = 0.1218 ppb

95Mo (KED AGD)



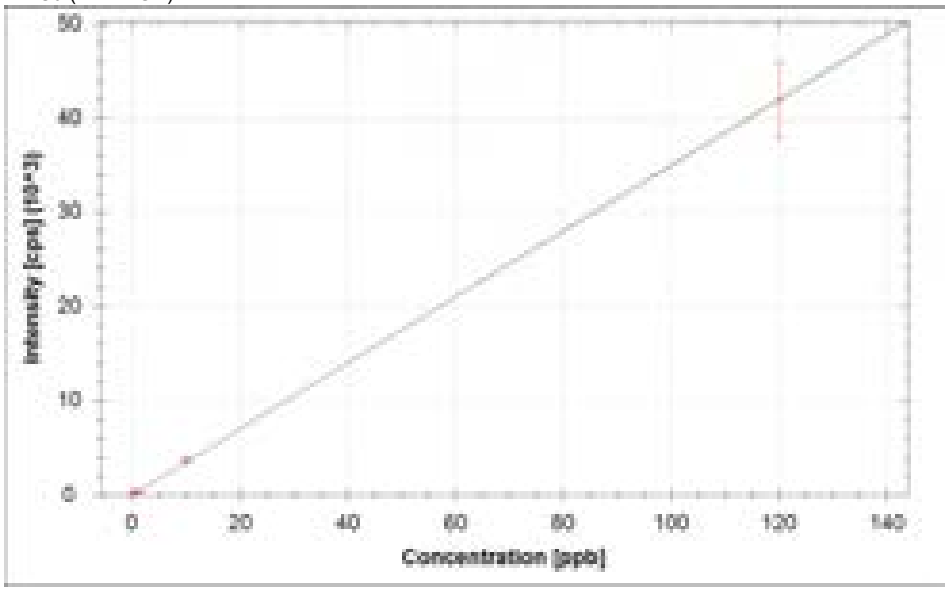
f(x) = 544.5489*x + 17.7535
R^2 = 0.9999
BEC = 0.033 ppb
LoD = 0.0203 ppb

107Ag (KED AGD)



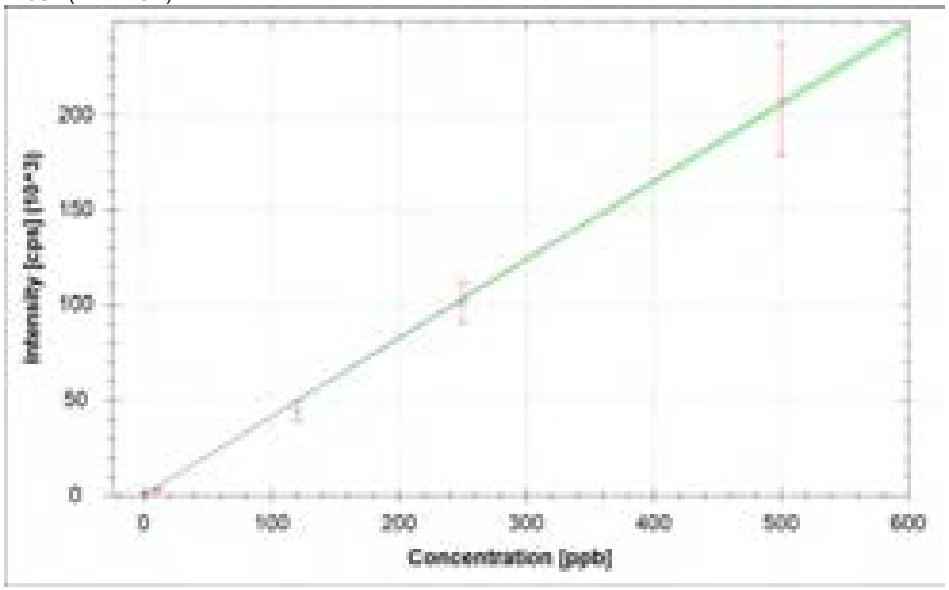
f(x) = 2845.1930*x + 17.7938
R^2 = 0.9999
BEC = 0.006 ppb
LoD = 0.0022 ppb

111Cd (KED AGD)



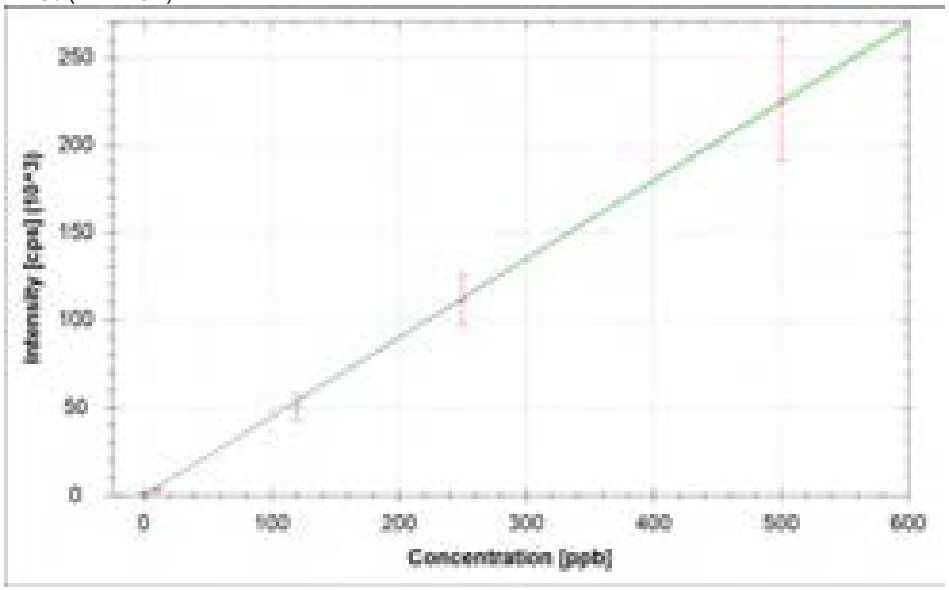
f(x) = 349.4565*x + 2.6821
R^2 = 1.0000
BEC = 0.008 ppb
LoD = 0.0118 ppb

118Sn (KED AGD)



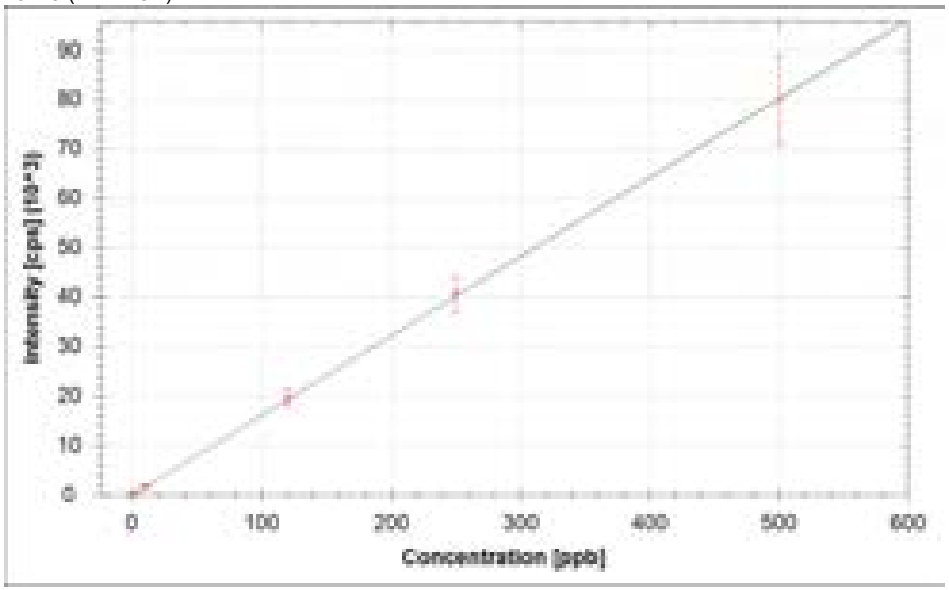
f(x) = 411.2496*x + 179.2425
R^2 = 0.9991
BEC = 0.436 ppb
LoD = 0.2900 ppb

121Sb (KED AGD)



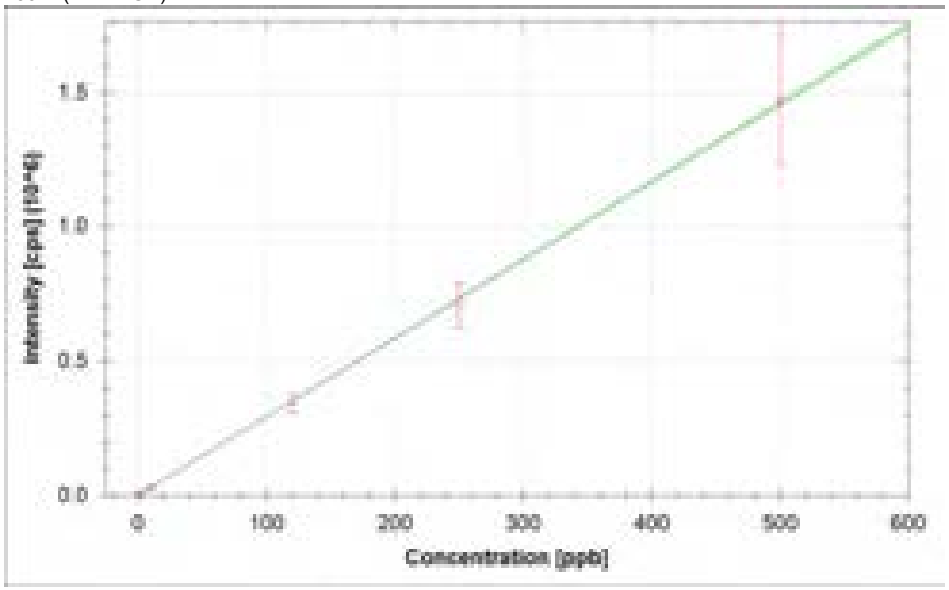
f(x) = 448.7845*x + 25.8357
R^2 = 0.9996
BEC = 0.058 ppb
LoD = 0.0362 ppb

137Ba (KED AGD)



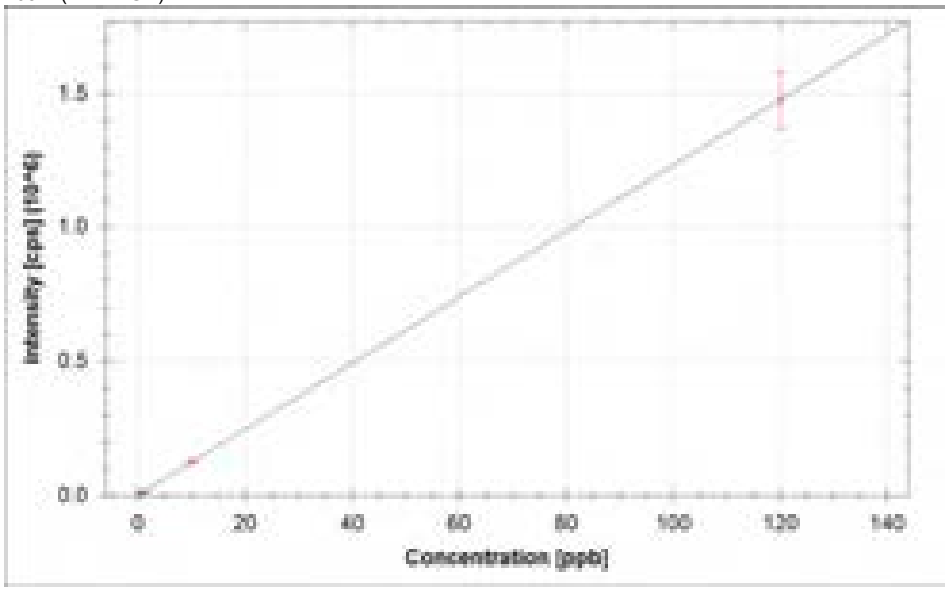
f(x) = 160.4275*x + 6.7187
R^2 = 0.9999
BEC = 0.042 ppb
LoD = 0.2176 ppb

183W (KED AGD)



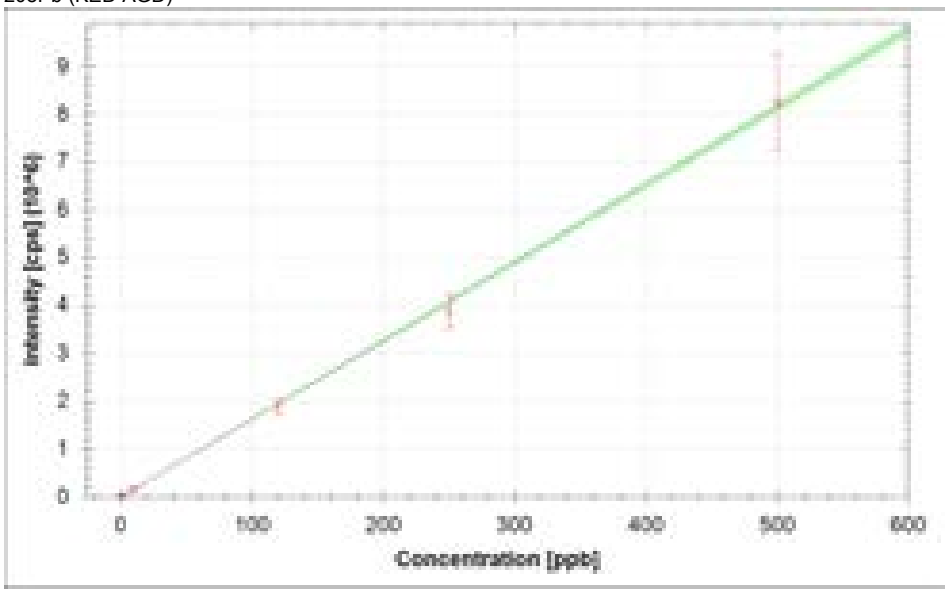
f(x) = 2916.9626*x + 690.3649
R^2 = 0.9996
BEC = 0.237 ppb
LoD = 0.0620 ppb

205Tl (KED AGD)



f(x) = 12300.2109*x + 68.8877
R^2 = 1.0000
BEC = 0.006 ppb
LoD = 0.0049 ppb

208Pb (KED AGD)



f(x) = 16296.5144*x + 601.6059
R^2 = 0.9990
BEC = 0.037 ppb
LoD = 0.0539 ppb

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 3/7/2018 7:59:50 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 50000
Rack: 0
Vial: 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	94.889 %	N/A	
6Li (KED AGD)	97.406 %	N/A	
9Be (STD AGD)	0.197 ppb	5.6 %	0.200 ppb
23Na (KED AGD)	58.942 ppb	24.2 %	20.000 ppb
24Mg (KED AGD)	21.759 ppb	36.5 %	20.000 ppb
27Al (KED AGD)	0.809 ppb	25.3 %	0.200 ppb
39K (KED AGD)	34.549 ppb	4.7 %	20.000 ppb
44Ca (KED AGD)	12.868 ppb	11.8 %	20.000 ppb
45Sc (STD AGD)	87.923 %	N/A	
45Sc (KED AGD)	87.456 %	N/A	
48Ti (KED AGD)	-0.102 ppb	145.5 %	0.200 ppb
51V (KED AGD)	0.178 ppb	18.5 %	0.200 ppb
52Cr (KED AGD)	0.211 ppb	20.7 %	0.200 ppb
55Mn (KED AGD)	0.212 ppb	58.0 %	0.200 ppb
57Fe (KED AGD)	21.316 ppb	8.3 %	20.000 ppb
59Co (KED AGD)	0.215 ppb	8.2 %	0.200 ppb
60Ni (KED AGD)	-0.230 ppb	12.7 %	0.200 ppb
65Cu (KED AGD)	0.247 ppb	7.9 %	0.200 ppb
66Zn (KED AGD)	0.230 ppb	37.1 %	0.200 ppb
74Ge (KED AGD)	96.767 %	N/A	
75As (KED AGD)	0.178 ppb	39.8 %	0.200 ppb
78Se (KED AGD)	0.418 ppb	78.9 %	0.200 ppb
88Sr (KED AGD)	0.180 ppb	30.8 %	0.200 ppb
95Mo (KED AGD)	0.200 ppb	24.5 %	0.200 ppb
103Rh (KED AGD)	98.763 %	N/A	
107Ag (KED AGD)	0.177 ppb	5.4 %	0.200 ppb
111Cd (KED AGD)	0.200 ppb	11.3 %	0.200 ppb
115In (KED AGD)	99.321 %	N/A	
118Sn (KED AGD)	0.026 ppb	223.0 %	0.200 ppb
121Sb (KED AGD)	0.197 ppb	27.2 %	0.200 ppb
137Ba (KED AGD)	0.194 ppb	33.8 %	0.200 ppb
159Tb (KED AGD)	100.132 %	N/A	
175Lu (KED AGD)	99.666 %	N/A	
183W (KED AGD)	0.190 ppb	43.5 %	0.200 ppb
205Tl (KED AGD)	0.171 ppb	7.0 %	0.200 ppb
208Pb (KED AGD)	0.163 ppb	8.5 %	0.200 ppb
209Bi (KED AGD)	97.149 %	N/A	

Standards

Analysis Index: 5
Analysis Name: 1.0/100 Cal
Analysis Type: STD
Analysis Started at: 3/7/2018 8:03:42 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 10000
Rack: 0
Vial: 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	95.503 %	N/A	
6Li (KED AGD)	100.191 %	N/A	
9Be (STD AGD)	1.002 ppb	2.8 %	1.000 ppb
23Na (KED AGD)	138.333 ppb	15.7 %	100.000 ppb
24Mg (KED AGD)	108.619 ppb	9.6 %	100.000 ppb
27Al (KED AGD)	1.161 ppb	18.9 %	1.000 ppb
39K (KED AGD)	111.005 ppb	21.6 %	100.000 ppb
44Ca (KED AGD)	99.140 ppb	26.6 %	100.000 ppb
45Sc (STD AGD)	88.885 %	N/A	
45Sc (KED AGD)	91.097 %	N/A	
48Ti (KED AGD)	0.654 ppb	22.4 %	1.000 ppb
51V (KED AGD)	1.243 ppb	16.9 %	1.000 ppb
52Cr (KED AGD)	1.255 ppb	1.8 %	1.000 ppb
55Mn (KED AGD)	1.329 ppb	11.6 %	1.000 ppb
57Fe (KED AGD)	116.511 ppb	2.7 %	100.000 ppb
59Co (KED AGD)	1.187 ppb	4.0 %	1.000 ppb
60Ni (KED AGD)	0.582 ppb	32.4 %	1.000 ppb
65Cu (KED AGD)	1.063 ppb	15.7 %	1.000 ppb
66Zn (KED AGD)	1.067 ppb	15.8 %	1.000 ppb
74Ge (KED AGD)	97.545 %	N/A	
75As (KED AGD)	0.937 ppb	20.0 %	1.000 ppb
78Se (KED AGD)	1.035 ppb	37.4 %	1.000 ppb
88Sr (KED AGD)	1.000 ppb	10.5 %	1.000 ppb
95Mo (KED AGD)	0.854 ppb	8.3 %	1.000 ppb
103Rh (KED AGD)	97.742 %	N/A	
107Ag (KED AGD)	1.003 ppb	4.4 %	1.000 ppb
111Cd (KED AGD)	0.988 ppb	6.5 %	1.000 ppb
115In (KED AGD)	97.353 %	N/A	
118Sn (KED AGD)	0.453 ppb	10.3 %	1.000 ppb
121Sb (KED AGD)	0.638 ppb	10.8 %	1.000 ppb
137Ba (KED AGD)	0.892 ppb	10.0 %	1.000 ppb
159Tb (KED AGD)	98.021 %	N/A	
175Lu (KED AGD)	98.684 %	N/A	
183W (KED AGD)	0.869 ppb	8.4 %	1.000 ppb
205Tl (KED AGD)	0.970 ppb	5.3 %	1.000 ppb
208Pb (KED AGD)	0.927 ppb	7.2 %	1.000 ppb
209Bi (KED AGD)	97.913 %	N/A	

Standards

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 3/7/2018 8:07:34 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 1000
Rack: 0
Vial: 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	94.620 %	N/A	
6Li (KED AGD)	99.639 %	N/A	
9Be (STD AGD)	10.373 ppb	0.6 %	10.000 ppb
23Na (KED AGD)	1,180.890 ppb	6.0 %	1,000.000 ppb
24Mg (KED AGD)	1,189.233 ppb	6.3 %	1,000.000 ppb
27Al (KED AGD)	12.272 ppb	17.9 %	10.000 ppb
39K (KED AGD)	1,026.347 ppb	6.5 %	1,000.000 ppb
44Ca (KED AGD)	1,011.149 ppb	12.0 %	1,000.000 ppb
45Sc (STD AGD)	90.047 %	N/A	
45Sc (KED AGD)	89.977 %	N/A	
48Ti (KED AGD)	9.481 ppb	11.2 %	10.000 ppb
51V (KED AGD)	12.616 ppb	6.9 %	10.000 ppb
52Cr (KED AGD)	13.030 ppb	4.7 %	10.000 ppb
55Mn (KED AGD)	11.979 ppb	6.7 %	10.000 ppb
57Fe (KED AGD)	1,218.491 ppb	2.1 %	1,000.000 ppb
59Co (KED AGD)	12.448 ppb	5.2 %	10.000 ppb
60Ni (KED AGD)	11.244 ppb	11.3 %	10.000 ppb
65Cu (KED AGD)	11.613 ppb	6.0 %	10.000 ppb
66Zn (KED AGD)	11.346 ppb	3.2 %	10.000 ppb
74Ge (KED AGD)	96.687 %	N/A	
75As (KED AGD)	10.802 ppb	3.9 %	10.000 ppb
78Se (KED AGD)	11.157 ppb	5.2 %	10.000 ppb
88Sr (KED AGD)	9.915 ppb	8.2 %	10.000 ppb
95Mo (KED AGD)	9.828 ppb	7.1 %	10.000 ppb
103Rh (KED AGD)	98.250 %	N/A	
107Ag (KED AGD)	10.219 ppb	4.1 %	10.000 ppb
111Cd (KED AGD)	10.574 ppb	5.7 %	10.000 ppb
115In (KED AGD)	98.188 %	N/A	
118Sn (KED AGD)	7.251 ppb	5.5 %	10.000 ppb
121Sb (KED AGD)	7.004 ppb	7.1 %	10.000 ppb
137Ba (KED AGD)	10.326 ppb	13.2 %	10.000 ppb
159Tb (KED AGD)	97.893 %	N/A	
175Lu (KED AGD)	98.291 %	N/A	
183W (KED AGD)	9.407 ppb	5.7 %	10.000 ppb
205Tl (KED AGD)	10.117 ppb	2.3 %	10.000 ppb
208Pb (KED AGD)	9.736 ppb	4.4 %	10.000 ppb
209Bi (KED AGD)	98.729 %	N/A	

Standards

Analysis Index: 7
Analysis Name: 120/12000
Analysis Type: STD
Analysis Started at: 3/7/2018 8:11:27 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 83.3333333
Rack: 0
Vial: 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	95.233 %	N/A	
6Li (KED AGD)	98.448 %	N/A	
9Be (STD AGD)	119.354 ppb	0.1 %	120.000 ppb
23Na (KED AGD)	11,984.542 ppb	5.4 %	12,000.000 ppb
24Mg (KED AGD)	12,111.120 ppb	5.6 %	12,000.000 ppb
27Al (KED AGD)	118.747 ppb	3.0 %	120.000 ppb
39K (KED AGD)	12,543.617 ppb	9.1 %	12,000.000 ppb
44Ca (KED AGD)	12,271.707 ppb	10.3 %	12,000.000 ppb
45Sc (STD AGD)	113.177 %	N/A	
45Sc (KED AGD)	123.563 %	N/A	
48Ti (KED AGD)	123.188 ppb	8.5 %	120.000 ppb
51V (KED AGD)	117.660 ppb	3.1 %	120.000 ppb
52Cr (KED AGD)	118.048 ppb	6.4 %	120.000 ppb
55Mn (KED AGD)	119.221 ppb	5.7 %	120.000 ppb
57Fe (KED AGD)	11,663.698 ppb	4.9 %	12,000.000 ppb
59Co (KED AGD)	119.589 ppb	6.2 %	120.000 ppb
60Ni (KED AGD)	118.135 ppb	5.4 %	120.000 ppb
65Cu (KED AGD)	118.240 ppb	6.7 %	120.000 ppb
66Zn (KED AGD)	116.064 ppb	6.8 %	120.000 ppb
74Ge (KED AGD)	98.179 %	N/A	
75As (KED AGD)	121.617 ppb	6.1 %	120.000 ppb
78Se (KED AGD)	119.903 ppb	7.9 %	120.000 ppb
88Sr (KED AGD)	118.029 ppb	9.3 %	120.000 ppb
95Mo (KED AGD)	116.568 ppb	7.9 %	120.000 ppb
103Rh (KED AGD)	97.551 %	N/A	
107Ag (KED AGD)	122.147 ppb	6.9 %	120.000 ppb
111Cd (KED AGD)	119.952 ppb	9.6 %	120.000 ppb
115In (KED AGD)	99.909 %	N/A	
118Sn (KED AGD)	108.384 ppb	11.6 %	120.000 ppb
121Sb (KED AGD)	112.012 ppb	13.8 %	120.000 ppb
137Ba (KED AGD)	122.252 ppb	9.1 %	120.000 ppb
159Tb (KED AGD)	101.975 %	N/A	
175Lu (KED AGD)	99.811 %	N/A	
183W (KED AGD)	116.472 ppb	9.9 %	120.000 ppb
205Tl (KED AGD)	119.991 ppb	7.3 %	120.000 ppb
208Pb (KED AGD)	115.167 ppb	8.7 %	120.000 ppb
209Bi (KED AGD)	99.315 %	N/A	

Standard

Analysis Index: 8
Analysis Name: 250/25000
Analysis Type: STD
Analysis Started at: 3/7/2018 8:15:20 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 40
Rack: 0
Vial: 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	90.514 %	N/A	
6Li (KED AGD)	98.916 %	N/A	
9Be (STD AGD)	250.295 ppb	0.2 %	250.000 ppb
23Na (KED AGD)	24,765.700 ppb	8.3 %	25,000.000 ppb
24Mg (KED AGD)	24,939.057 ppb	9.0 %	25,000.000 ppb
27Al (KED AGD)	250.509 ppb	7.8 %	250.000 ppb
39K (KED AGD)	24,737.954 ppb	9.0 %	25,000.000 ppb
44Ca (KED AGD)	24,869.144 ppb	11.1 %	25,000.000 ppb
45Sc (STD AGD)	104.030 %	N/A	
45Sc (KED AGD)	118.000 %	N/A	
48Ti (KED AGD)	248.492 ppb	12.7 %	250.000 ppb
51V (KED AGD)	251.018 ppb	7.2 %	250.000 ppb
52Cr (KED AGD)	250.815 ppb	7.3 %	250.000 ppb
55Mn (KED AGD)	250.293 ppb	7.5 %	250.000 ppb
57Fe (KED AGD)	25,152.618 ppb	9.0 %	25,000.000 ppb
59Co (KED AGD)	250.099 ppb	8.1 %	250.000 ppb
60Ni (KED AGD)	250.848 ppb	6.9 %	250.000 ppb
65Cu (KED AGD)	250.780 ppb	8.0 %	250.000 ppb
66Zn (KED AGD)	251.835 ppb	10.0 %	250.000 ppb
74Ge (KED AGD)	94.127 %	N/A	
75As (KED AGD)	252.209 ppb	9.3 %	250.000 ppb
78Se (KED AGD)	244.076 ppb	7.4 %	250.000 ppb
88Sr (KED AGD)	247.179 ppb	10.5 %	250.000 ppb
95Mo (KED AGD)	247.748 ppb	11.0 %	250.000 ppb
103Rh (KED AGD)	93.728 %	N/A	
107Ag (KED AGD)	248.961 ppb	8.1 %	250.000 ppb
111Cd (KED AGD)	244.946 ppb	9.7 %	250.000 ppb
115In (KED AGD)	96.667 %	N/A	
118Sn (KED AGD)	245.461 ppb	10.7 %	250.000 ppb
121Sb (KED AGD)	247.600 ppb	13.2 %	250.000 ppb
137Ba (KED AGD)	252.220 ppb	9.2 %	250.000 ppb
159Tb (KED AGD)	100.282 %	N/A	
175Lu (KED AGD)	97.895 %	N/A	
183W (KED AGD)	242.285 ppb	11.5 %	250.000 ppb
205Tl (KED AGD)	277.870 ppb	7.1 %	250.000 ppb
208Pb (KED AGD)	237.855 ppb	9.0 %	250.000 ppb
209Bi (KED AGD)	97.405 %	N/A	

Standards

Analysis Index: 9
Analysis Name: 500/50000
Analysis Type: STD
Analysis Started at: 3/7/2018 8:19:14 AM
Standard (Stock): Calibration Standard 6020/200.8
Standard DF: 20
Rack: 0
Vial: 7

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	89.910 %	N/A	
6Li (KED AGD)	94.939 %	N/A	
9Be (STD AGD)	496.273 ppb	0.5 %	500.000 ppb
23Na (KED AGD)	49,169.117 ppb	7.1 %	50,000.000 ppb
24Mg (KED AGD)	49,228.332 ppb	8.2 %	50,000.000 ppb
27Al (KED AGD)	471.208 ppb	8.8 %	500.000 ppb
39K (KED AGD)	50,361.414 ppb	9.4 %	50,000.000 ppb
44Ca (KED AGD)	49,661.629 ppb	12.0 %	50,000.000 ppb
45Sc (STD AGD)	101.892 %	N/A	
45Sc (KED AGD)	117.617 %	N/A	
48Ti (KED AGD)	507.683 ppb	13.3 %	500.000 ppb
51V (KED AGD)	491.047 ppb	7.2 %	500.000 ppb
52Cr (KED AGD)	489.633 ppb	9.0 %	500.000 ppb
55Mn (KED AGD)	483.645 ppb	8.3 %	500.000 ppb
57Fe (KED AGD)	48,594.700 ppb	9.4 %	50,000.000 ppb
59Co (KED AGD)	485.855 ppb	9.6 %	500.000 ppb
60Ni (KED AGD)	480.504 ppb	10.1 %	500.000 ppb
65Cu (KED AGD)	480.241 ppb	11.1 %	500.000 ppb
66Zn (KED AGD)	462.938 ppb	9.8 %	500.000 ppb
74Ge (KED AGD)	91.691 %	N/A	
75As (KED AGD)	498.492 ppb	11.5 %	500.000 ppb
78Se (KED AGD)	483.178 ppb	13.3 %	500.000 ppb
88Sr (KED AGD)	501.885 ppb	13.3 %	500.000 ppb
95Mo (KED AGD)	501.953 ppb	13.1 %	500.000 ppb
103Rh (KED AGD)	92.773 %	N/A	
107Ag (KED AGD)	487.971 ppb	9.2 %	500.000 ppb
111Cd (KED AGD)	475.718 ppb	12.5 %	500.000 ppb
115In (KED AGD)	96.582 %	N/A	
118Sn (KED AGD)	505.113 ppb	14.2 %	500.000 ppb
121Sb (KED AGD)	503.178 ppb	15.2 %	500.000 ppb
137Ba (KED AGD)	498.343 ppb	11.1 %	500.000 ppb
159Tb (KED AGD)	101.128 %	N/A	
175Lu (KED AGD)	96.743 %	N/A	
183W (KED AGD)	504.716 ppb	16.5 %	500.000 ppb
205Tl (KED AGD)	556.732 ppb	11.2 %	500.000 ppb
208Pb (KED AGD)	507.238 ppb	12.3 %	500.000 ppb
209Bi (KED AGD)	95.548 %	N/A	

Analysis index:	1	Analysis started at:	3/7/2018 7:48:11 AM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Analysis index:	2	Analysis started at:	3/7/2018 7:52:02 AM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Analysis index: 3 | Analysis started at: 3/7/2018 7:55:54 AM | Rack: 4
Analysis label: Blank AM ICPMSQ2 | User name: ALPHALAB\metals-instrument | Vial: 49

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	N/A	N/A	0.2 %	0.0 %	0.9 %	0.2 %	0.1 %	0.5 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	N/A	1.5 %	1.7 %	0.0 %	0.3 %	0.5 %	0.9 %	0.2 %	0.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb
Concentration per Run	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb
Concentration RSD	0.1 %	N/A	1.7 %	0.4 %	0.4 %	0.2 %	N/A	0.1 %	0.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	N/A	0.2 %	0.2 %	1.7 %	N/A	N/A	0.1 %	0.3 %	0.5 %

Category	209Bi (KED AGD)
Concentration average	100.000 %
Concentration per Run	100.000 %
Concentration RSD	N/A

Analysis index: 4 Analysis started at: 3/7/2018 7:59:50 AM Rack: 0
Analysis label: 0.2/20 Cal User name: ALPHALAB\metals-instrument Vial: 2

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.889 %	97.406 %	0.197 ppb	58.942 ppb	21.759 ppb	0.809 ppb	34.549 ppb	12.868 ppb	87.923 %
Concentration per Run 1	95.721 %	94.344 %	0.192 ppb	72.498 ppb	21.381 ppb	0.955 ppb	33.837 ppb	13.278 ppb	87.937 %
Concentration per Run 2	94.486 %	96.577 %	0.210 ppb	60.264 ppb	29.894 ppb	0.575 ppb	33.405 ppb	14.140 ppb	87.546 %
Concentration per Run 3	94.459 %	101.297 %	0.189 ppb	44.065 ppb	14.002 ppb	0.899 ppb	36.405 ppb	11.187 ppb	88.285 %
Concentration RSD	N/A	N/A	5.6 %	24.2 %	36.5 %	25.3 %	4.7 %	11.8 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.456 %	-0.102 ppb	0.178 ppb	0.211 ppb	0.212 ppb	21.316 ppb	0.215 ppb	-0.230 ppb	0.247 ppb
Concentration per Run 1	79.197 %	-0.165 ppb	0.215 ppb	0.179 ppb	0.323 ppb	19.681 ppb	0.197 ppb	-0.264 ppb	0.236 ppb
Concentration per Run 2	90.375 %	0.067 ppb	0.152 ppb	0.260 ppb	0.232 ppb	23.193 ppb	0.216 ppb	-0.217 ppb	0.236 ppb
Concentration per Run 3	92.795 %	-0.208 ppb	0.167 ppb	0.193 ppb	0.080 ppb	21.074 ppb	0.231 ppb	-0.210 ppb	0.270 ppb
Concentration RSD	N/A	145.5 %	18.5 %	20.7 %	58.0 %	8.3 %	8.2 %	12.7 %	7.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.230 ppb	96.767 %	0.178 ppb	0.418 ppb	0.180 ppb	0.200 ppb	98.763 %	0.177 ppb	0.200 ppb
Concentration per Run 1	0.144 ppb	95.269 %	0.240 ppb	0.755 ppb	0.130 ppb	0.180 ppb	99.124 %	0.169 ppb	0.202 ppb
Concentration per Run 2	0.234 ppb	95.054 %	0.192 ppb	0.403 ppb	0.240 ppb	0.256 ppb	98.401 %	0.188 ppb	0.222 ppb
Concentration per Run 3	0.314 ppb	99.980 %	0.101 ppb	0.096 ppb	0.171 ppb	0.165 ppb	98.764 %	0.174 ppb	0.177 ppb
Concentration RSD	37.1 %	N/A	39.8 %	78.9 %	30.8 %	24.5 %	N/A	5.4 %	11.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	99.321 %	0.026 ppb	0.197 ppb	0.194 ppb	100.132 %	99.666 %	0.190 ppb	0.171 ppb	0.163 ppb
Concentration per Run 1	97.829 %	-0.039 ppb	0.152 ppb	0.169 ppb	99.322 %	98.511 %	0.122 ppb	0.157 ppb	0.155 ppb
Concentration per Run 2	100.482 %	0.073 ppb	0.256 ppb	0.145 ppb	99.938 %	99.684 %	0.166 ppb	0.180 ppb	0.155 ppb
Concentration per Run 3	99.653 %	0.044 ppb	0.183 ppb	0.269 ppb	101.135 %	100.803 %	0.283 ppb	0.176 ppb	0.179 ppb
Concentration RSD	N/A	223.0 %	27.2 %	33.8 %	N/A	N/A	43.5 %	7.0 %	8.5 %

Category	209Bi (KED AGD)
Concentration average	97.149 %
Concentration per Run 1	93.136 %
Concentration per Run 2	98.469 %
Concentration per Run 3	99.844 %
Concentration RSD	N/A

Analysis index: 5 Analysis started at: 3/7/2018 8:03:42 AM Rack: 0
Analysis label: 1.0/100 Cal User name: ALPHALAB\metals-instrument Vial: 3

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.503 %	100.191 %	1.002 ppb	138.333 ppb	108.619 ppb	1.161 ppb	111.005 ppb	99.140 ppb	88.885 %
Concentration per Run 1	95.564 %	102.382 %	1.023 ppb	119.202 ppb	102.573 ppb	0.911 ppb	84.287 ppb	80.930 ppb	89.209 %
Concentration per Run 2	95.150 %	94.727 %	1.012 ppb	161.918 ppb	120.681 ppb	1.253 ppb	130.474 ppb	129.421 ppb	88.116 %
Concentration per Run 3	95.794 %	103.466 %	0.971 ppb	133.878 ppb	102.604 ppb	1.319 ppb	118.255 ppb	87.069 ppb	89.330 %
Concentration RSD	N/A	N/A	2.8 %	15.7 %	9.6 %	18.9 %	21.6 %	26.6 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	91.097 %	0.654 ppb	1.243 ppb	1.255 ppb	1.329 ppb	116.511 ppb	1.187 ppb	0.582 ppb	1.063 ppb
Concentration per Run 1	83.166 %	0.490 ppb	1.003 ppb	1.250 ppb	1.503 ppb	113.109 ppb	1.140 ppb	0.403 ppb	1.254 ppb
Concentration per Run 2	94.393 %	0.771 ppb	1.399 ppb	1.235 ppb	1.274 ppb	119.405 ppb	1.236 ppb	0.564 ppb	0.985 ppb
Concentration per Run 3	95.732 %	0.702 ppb	1.327 ppb	1.281 ppb	1.210 ppb	117.019 ppb	1.184 ppb	0.779 ppb	0.949 ppb
Concentration RSD	N/A	22.4 %	16.9 %	1.8 %	11.6 %	2.7 %	4.0 %	32.4 %	15.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.067 ppb	97.545 %	0.937 ppb	1.035 ppb	1.000 ppb	0.854 ppb	97.742 %	1.003 ppb	0.988 ppb
Concentration per Run 1	1.252 ppb	91.765 %	0.744 ppb	1.339 ppb	0.965 ppb	0.936 ppb	95.997 %	0.952 ppb	0.922 ppb
Concentration per Run 2	0.921 ppb	100.800 %	1.118 ppb	0.599 ppb	0.916 ppb	0.820 ppb	98.463 %	1.019 ppb	0.992 ppb
Concentration per Run 3	1.028 ppb	100.070 %	0.951 ppb	1.167 ppb	1.117 ppb	0.807 ppb	98.766 %	1.036 ppb	1.050 ppb
Concentration RSD	15.8 %	N/A	20.0 %	37.4 %	10.5 %	8.3 %	N/A	4.4 %	6.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	97.353 %	0.453 ppb	0.638 ppb	0.892 ppb	98.021 %	98.684 %	0.869 ppb	0.970 ppb	0.927 ppb
Concentration per Run 1	92.929 %	0.399 ppb	0.677 ppb	0.791 ppb	96.557 %	97.358 %	0.790 ppb	0.914 ppb	0.856 ppb
Concentration per Run 2	100.222 %	0.480 ppb	0.558 ppb	0.924 ppb	97.738 %	99.532 %	0.884 ppb	0.983 ppb	0.939 ppb
Concentration per Run 3	98.910 %	0.481 ppb	0.677 ppb	0.962 ppb	99.768 %	99.163 %	0.934 ppb	1.014 ppb	0.987 ppb
Concentration RSD	N/A	10.3 %	10.8 %	10.0 %	N/A	N/A	8.4 %	5.3 %	7.2 %

Category	209Bi (KED AGD)
Concentration average	97.913 %
Concentration per Run 1	94.939 %
Concentration per Run 2	98.635 %
Concentration per Run 3	100.166 %
Concentration RSD	N/A

Analysis index: 6 Analysis started at: 3/7/2018 8:07:34 AM Rack: 0
Analysis label: 10/1000 Cal User name: ALPHALAB\metals-instrument Vial: 4

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.620 %	99.639 %	10.373 ppb	1,180.890 ppb	1,189.233 ppb	12.272 ppb	1,026.347 ppb	1,011.149 ppb	90.047 %
Concentration per Run 1	95.403 %	102.063 %	10.428 ppb	1,126.500 ppb	1,138.046 ppb	9.846 ppb	948.964 ppb	873.998 ppb	89.526 %
Concentration per Run 2	94.580 %	94.535 %	10.298 ppb	1,261.426 ppb	1,275.273 ppb	14.145 ppb	1,066.862 ppb	1,052.930 ppb	89.745 %
Concentration per Run 3	93.879 %	102.318 %	10.392 ppb	1,154.743 ppb	1,154.380 ppb	12.827 ppb	1,063.215 ppb	1,106.517 ppb	90.872 %
Concentration RSD	N/A	N/A	0.6 %	6.0 %	6.3 %	17.9 %	6.5 %	12.0 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.977 %	9.481 ppb	12.616 ppb	13.030 ppb	11.979 ppb	1,218.491 ppb	12.448 ppb	11.244 ppb	11.613 ppb
Concentration per Run 1	87.627 %	8.263 ppb	12.317 ppb	12.336 ppb	11.230 ppb	1,229.626 ppb	11.700 ppb	9.794 ppb	10.851 ppb
Concentration per Run 2	84.318 %	9.951 ppb	13.599 ppb	13.483 ppb	11.881 ppb	1,236.080 ppb	12.866 ppb	11.740 ppb	12.221 ppb
Concentration per Run 3	97.987 %	10.229 ppb	11.934 ppb	13.271 ppb	12.826 ppb	1,189.766 ppb	12.780 ppb	12.197 ppb	11.767 ppb
Concentration RSD	N/A	11.2 %	6.9 %	4.7 %	6.7 %	2.1 %	5.2 %	11.3 %	6.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	11.346 ppb	96.687 %	10.802 ppb	11.157 ppb	9.915 ppb	9.828 ppb	98.250 %	10.219 ppb	10.574 ppb
Concentration per Run 1	10.936 ppb	98.053 %	10.310 ppb	10.532 ppb	8.980 ppb	9.044 ppb	100.137 %	9.736 ppb	9.877 ppb
Concentration per Run 2	11.462 ppb	93.199 %	11.055 ppb	11.253 ppb	10.327 ppb	10.366 ppb	96.221 %	10.434 ppb	10.936 ppb
Concentration per Run 3	11.640 ppb	98.809 %	11.041 ppb	11.686 ppb	10.437 ppb	10.074 ppb	98.390 %	10.487 ppb	10.910 ppb
Concentration RSD	3.2 %	N/A	3.9 %	5.2 %	8.2 %	7.1 %	N/A	4.1 %	5.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	98.188 %	7.251 ppb	7.004 ppb	10.326 ppb	97.893 %	98.291 %	9.407 ppb	10.117 ppb	9.736 ppb
Concentration per Run 1	97.718 %	6.797 ppb	6.443 ppb	8.970 ppb	97.820 %	96.883 %	8.790 ppb	9.856 ppb	9.260 ppb
Concentration per Run 2	97.353 %	7.403 ppb	7.179 ppb	11.689 ppb	96.788 %	97.952 %	9.725 ppb	10.271 ppb	9.846 ppb
Concentration per Run 3	99.492 %	7.551 ppb	7.389 ppb	10.318 ppb	99.071 %	100.039 %	9.705 ppb	10.225 ppb	10.103 ppb
Concentration RSD	N/A	5.5 %	7.1 %	13.2 %	N/A	N/A	5.7 %	2.3 %	4.4 %

Category	209Bi (KED AGD)
Concentration average	98.729 %
Concentration per Run 1	97.180 %
Concentration per Run 2	97.991 %
Concentration per Run 3	101.016 %
Concentration RSD	N/A

Analysis index: 7 Analysis started at: 3/7/2018 8:11:27 AM Rack: 0
Analysis label: 120/12000 User name: ALPHALAB\metals-instrument Vial: 5

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.233 %	98.448 %	119.354 ppb	11,984.542 ppb	12,111.120 ppb	118.747 ppb	12,543.617 ppb	12,271.707 ppb	113.177 %
Concentration per Run 1	95.962 %	100.978 %	119.397 ppb	11,250.672 ppb	11,329.015 ppb	114.691 ppb	11,358.734 ppb	10,942.225 ppb	113.621 %
Concentration per Run 2	95.893 %	90.708 %	119.432 ppb	12,460.333 ppb	12,463.434 ppb	121.343 ppb	13,643.829 ppb	13,445.497 ppb	115.195 %
Concentration per Run 3	93.844 %	103.657 %	119.233 ppb	12,242.620 ppb	12,540.912 ppb	120.208 ppb	12,628.289 ppb	12,427.400 ppb	110.716 %
Concentration RSD	N/A	N/A	0.1 %	5.4 %	5.6 %	3.0 %	9.1 %	10.3 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	123.563 %	123.188 ppb	117.660 ppb	118.048 ppb	119.221 ppb	11,663.698 ppb	119.589 ppb	118.135 ppb	118.240 ppb
Concentration per Run 1	120.569 %	111.537 ppb	113.493 ppb	109.425 ppb	111.430 ppb	11,029.438 ppb	111.049 ppb	110.955 ppb	109.268 ppb
Concentration per Run 2	121.749 %	132.019 ppb	119.313 ppb	121.282 ppb	122.877 ppb	11,803.721 ppb	122.774 ppb	120.489 ppb	121.158 ppb
Concentration per Run 3	128.371 %	126.010 ppb	120.174 ppb	123.438 ppb	123.355 ppb	12,157.933 ppb	124.942 ppb	122.960 ppb	124.294 ppb
Concentration RSD	N/A	8.5 %	3.1 %	6.4 %	5.7 %	4.9 %	6.2 %	5.4 %	6.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	116.064 ppb	98.179 %	121.617 ppb	119.903 ppb	118.029 ppb	116.568 ppb	97.551 %	122.147 ppb	119.952 ppb
Concentration per Run 1	107.257 ppb	98.732 %	113.056 ppb	109.114 ppb	105.578 ppb	105.892 ppb	98.926 %	112.621 ppb	106.913 ppb
Concentration per Run 2	118.666 ppb	96.895 %	125.061 ppb	126.826 ppb	122.167 ppb	122.122 ppb	95.509 %	125.151 ppb	124.245 ppb
Concentration per Run 3	122.269 ppb	98.910 %	126.734 ppb	123.770 ppb	126.341 ppb	121.691 ppb	98.219 %	128.668 ppb	128.698 ppb
Concentration RSD	6.8 %	N/A	6.1 %	7.9 %	9.3 %	7.9 %	N/A	6.9 %	9.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	99.909 %	108.384 ppb	112.012 ppb	122.252 ppb	101.975 %	99.811 %	116.472 ppb	119.991 ppb	115.167 ppb
Concentration per Run 1	102.705 %	94.789 ppb	95.095 ppb	109.483 ppb	104.001 %	103.665 %	103.129 ppb	109.876 ppb	103.881 ppb
Concentration per Run 2	97.911 %	110.894 ppb	115.382 ppb	127.111 ppb	100.206 %	95.444 %	122.398 ppb	124.889 ppb	118.645 ppb
Concentration per Run 3	99.109 %	119.469 ppb	125.560 ppb	130.161 ppb	101.716 %	100.324 %	123.888 ppb	125.207 ppb	122.975 ppb
Concentration RSD	N/A	11.6 %	13.8 %	9.1 %	N/A	N/A	9.9 %	7.3 %	8.7 %

Category	209Bi (KED AGD)
Concentration average	99.315 %
Concentration per Run 1	101.042 %
Concentration per Run 2	96.986 %
Concentration per Run 3	99.916 %
Concentration RSD	N/A

Analysis index: 8 Analysis started at: 3/7/2018 8:15:20 AM Rack: 0
Analysis label: 250/25000 User name: ALPHALAB\metals-instrument Vial: 6

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.514 %	98.916 %	250.295 ppb	24,765.700 ppb	24,939.057 ppb	250.509 ppb	24,737.954 ppb	24,869.144 ppb	104.030 %
Concentration per Run 1	90.574 %	104.933 %	249.824 ppb	22,441.999 ppb	22,400.579 ppb	230.527 ppb	22,177.646 ppb	21,677.539 ppb	104.109 %
Concentration per Run 2	90.355 %	98.044 %	250.135 ppb	25,508.112 ppb	25,797.446 ppb	251.403 ppb	25,793.497 ppb	26,388.122 ppb	103.861 %
Concentration per Run 3	90.613 %	93.770 %	250.926 ppb	26,346.989 ppb	26,619.145 ppb	269.598 ppb	26,242.720 ppb	26,541.771 ppb	104.120 %
Concentration RSD	N/A	N/A	0.2 %	8.3 %	9.0 %	7.8 %	9.0 %	11.1 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	118.000 %	248.492 ppb	251.018 ppb	250.815 ppb	250.293 ppb	25,152.618 ppb	250.099 ppb	250.848 ppb	250.780 ppb
Concentration per Run 1	116.315 %	212.039 ppb	231.355 ppb	230.427 ppb	228.813 ppb	22,584.411 ppb	227.113 ppb	231.218 ppb	227.897 ppb
Concentration per Run 2	122.542 %	267.121 ppb	254.898 ppb	256.297 ppb	259.133 ppb	26,050.130 ppb	258.036 ppb	257.750 ppb	259.495 ppb
Concentration per Run 3	115.143 %	266.315 ppb	266.800 ppb	265.720 ppb	262.935 ppb	26,823.314 ppb	265.147 ppb	263.575 ppb	264.948 ppb
Concentration RSD	N/A	12.7 %	7.2 %	7.3 %	7.5 %	9.0 %	8.1 %	6.9 %	8.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	251.835 ppb	94.127 %	252.209 ppb	244.076 ppb	247.179 ppb	247.748 ppb	93.728 %	248.961 ppb	244.946 ppb
Concentration per Run 1	222.648 ppb	97.862 %	225.350 ppb	223.314 ppb	217.163 ppb	216.289 ppb	97.649 %	225.808 ppb	217.697 ppb
Concentration per Run 2	266.070 ppb	93.059 %	267.646 ppb	256.156 ppb	264.098 ppb	261.191 ppb	94.351 %	259.114 ppb	255.555 ppb
Concentration per Run 3	266.788 ppb	91.461 %	263.631 ppb	252.758 ppb	260.275 ppb	265.765 ppb	89.183 %	261.961 ppb	261.586 ppb
Concentration RSD	10.0 %	N/A	9.3 %	7.4 %	10.5 %	11.0 %	N/A	8.1 %	9.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	96.667 %	245.461 ppb	247.600 ppb	252.220 ppb	100.282 %	97.895 %	242.285 ppb	277.870 ppb	237.855 ppb
Concentration per Run 1	101.057 %	216.268 ppb	212.773 ppb	225.815 ppb	103.442 %	103.595 %	210.413 ppb	255.510 ppb	213.159 ppb
Concentration per Run 2	98.827 %	253.275 ppb	252.729 ppb	261.941 ppb	101.276 %	96.172 %	253.928 ppb	284.875 ppb	247.802 ppb
Concentration per Run 3	90.116 %	266.841 ppb	277.299 ppb	268.904 ppb	96.128 %	93.919 %	262.515 ppb	293.224 ppb	252.603 ppb
Concentration RSD	N/A	10.7 %	13.2 %	9.2 %	N/A	N/A	11.5 %	7.1 %	9.0 %

Category	209Bi (KED AGD)
Concentration average	97.405 %
Concentration per Run 1	100.751 %
Concentration per Run 2	98.896 %
Concentration per Run 3	92.568 %
Concentration RSD	N/A

Analysis index: 9 Analysis started at: 3/7/2018 8:19:14 AM Rack: 0
Analysis label: 500/50000 User name: ALPHALAB\metals-instrument Vial: 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.910 %	94.939 %	496.273 ppb	49,169.117 ppb	49,228.332 ppb	471.208 ppb	50,361.414 ppb	49,661.629 ppb	101.892 %
Concentration per Run 1	89.613 %	98.554 %	495.469 ppb	45,520.781 ppb	44,797.639 ppb	427.758 ppb	45,494.952 ppb	43,413.183 ppb	100.579 %
Concentration per Run 2	89.852 %	99.766 %	494.091 ppb	49,532.543 ppb	50,235.455 ppb	475.701 ppb	50,681.225 ppb	50,255.590 ppb	102.955 %
Concentration per Run 3	90.267 %	86.498 %	499.260 ppb	52,454.028 ppb	52,651.901 ppb	510.166 ppb	54,908.065 ppb	55,316.115 ppb	102.140 %
Concentration RSD	N/A	N/A	0.5 %	7.1 %	8.2 %	8.8 %	9.4 %	12.0 %	N/A

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	117.617 %	507.683 ppb	491.047 ppb	489.633 ppb	483.645 ppb	48,594.700 ppb	485.855 ppb	480.504 ppb	480.241 ppb
Concentration per Run 1	114.341 %	436.614 ppb	452.215 ppb	441.490 ppb	439.165 ppb	43,642.030 ppb	435.494 ppb	430.346 ppb	423.326 ppb
Concentration per Run 2	124.140 %	514.867 ppb	499.983 ppb	499.112 ppb	493.790 ppb	49,520.383 ppb	494.817 ppb	484.310 ppb	487.805 ppb
Concentration per Run 3	114.369 %	571.566 ppb	520.943 ppb	528.296 ppb	517.979 ppb	52,621.686 ppb	527.255 ppb	526.855 ppb	529.592 ppb
Concentration RSD	N/A	13.9 %	7.2 %	9.0 %	8.3 %	9.4 %	9.8 %	10.1 %	11.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	462.938 ppb	91.691 %	498.492 ppb	483.178 ppb	501.885 ppb	501.953 ppb	92.773 %	487.971 ppb	475.718 ppb
Concentration per Run 1	413.156 ppb	95.426 %	436.524 ppb	413.510 ppb	427.421 ppb	427.325 ppb	95.909 %	436.617 ppb	408.491 ppb
Concentration per Run 2	474.181 ppb	94.850 %	509.122 ppb	496.154 ppb	522.094 ppb	525.948 ppb	92.441 %	507.320 ppb	498.223 ppb
Concentration per Run 3	501.477 ppb	84.797 %	549.828 ppb	539.869 ppb	556.141 ppb	552.587 ppb	89.969 %	519.975 ppb	520.439 ppb
Concentration RSD	9.8 %	N/A	11.5 %	13.3 %	13.3 %	13.1 %	N/A	9.2 %	12.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	96.582 %	505.113 ppb	503.178 ppb	498.343 ppb	101.128 %	96.743 %	504.716 ppb	556.732 ppb	507.238 ppb
Concentration per Run 1	100.986 %	425.464 ppb	418.252 ppb	434.276 ppb	104.441 %	101.807 %	408.916 ppb	485.443 ppb	435.872 ppb
Concentration per Run 2	96.114 %	524.970 ppb	524.344 ppb	530.668 ppb	100.953 %	96.623 %	560.682 ppb	583.564 ppb	536.457 ppb
Concentration per Run 3	92.645 %	564.906 ppb	566.937 ppb	530.086 ppb	97.991 %	91.800 %	544.551 ppb	601.187 ppb	549.385 ppb
Concentration RSD	N/A	14.2 %	15.2 %	11.1 %	N/A	N/A	16.5 %	11.2 %	12.3 %

Category	209Bi (KED AGD)
Concentration average	95.548 %
Concentration per Run 1	99.506 %
Concentration per Run 2	96.474 %
Concentration per Run 3	90.665 %
Concentration RSD	N/A

Analysis index:	10	Analysis started at:	3/7/2018 8:23:08 AM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Analysis index: 11 Analysis started at: 3/7/2018 8:26:59 AM Rack: 4
Analysis label: Sr 100ppb User name: ALPHALAB\metals-instrument Vial: 57

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.994 %	97.023 %	0.022 ppb	59.372 ppb	4.279 ppb	15.513 ppb	31.787 ppb	0.028 ppb	83.996 %
Concentration per Run 1	88.780 %	102.701 %	0.021 ppb	20.367 ppb	5.372 ppb	13.859 ppb	24.127 ppb	-6.155 ppb	84.010 %
Concentration per Run 2	89.463 %	93.642 %	0.024 ppb	88.669 ppb	4.669 ppb	17.348 ppb	43.177 ppb	-30.615 ppb	82.779 %
Concentration per Run 3	88.739 %	94.727 %	0.021 ppb	69.081 ppb	2.797 ppb	15.333 ppb	28.057 ppb	36.853 ppb	85.199 %
Concentration RSD	0.5 %	5.1 %	7.2 %	59.2 %	31.1 %	11.3 %	31.6 %	123,722.1 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.631 %	0.500 ppb	0.035 ppb	0.057 ppb	0.498 ppb	26.804 ppb	0.052 ppb	-0.252 ppb	0.460 ppb
Concentration per Run 1	95.520 %	0.459 ppb	0.046 ppb	0.037 ppb	0.580 ppb	17.278 ppb	0.050 ppb	-0.291 ppb	0.358 ppb
Concentration per Run 2	89.859 %	0.723 ppb	0.029 ppb	0.080 ppb	0.449 ppb	34.825 ppb	0.035 ppb	-0.271 ppb	0.424 ppb
Concentration per Run 3	92.513 %	0.318 ppb	0.028 ppb	0.055 ppb	0.465 ppb	28.309 ppb	0.072 ppb	-0.193 ppb	0.598 ppb
Concentration RSD	3.1 %	41.2 %	29.1 %	37.5 %	14.4 %	33.1 %	35.6 %	20.7 %	26.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	5.475 ppb	93.153 %	0.088 ppb	0.218 ppb	107.098 ppb	0.564 ppb	94.891 %	0.066 ppb	0.012 ppb
Concentration per Run 1	4.678 ppb	98.064 %	0.079 ppb	0.100 ppb	96.182 ppb	0.365 ppb	98.863 %	0.052 ppb	0.008 ppb
Concentration per Run 2	5.642 ppb	90.023 %	0.125 ppb	0.188 ppb	112.717 ppb	0.648 ppb	92.326 %	0.057 ppb	-0.004 ppb
Concentration per Run 3	6.103 ppb	91.371 %	0.060 ppb	0.367 ppb	112.396 ppb	0.679 ppb	93.484 %	0.091 ppb	0.033 ppb
Concentration RSD	13.3 %	4.6 %	38.3 %	62.2 %	8.8 %	30.7 %	3.7 %	32.4 %	152.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	96.657 %	7.273 ppb	3.293 ppb	1.305 ppb	99.081 %	99.592 %	1.750 ppb	0.056 ppb	0.063 ppb
Concentration per Run 1	100.234 %	6.478 ppb	2.740 ppb	1.191 ppb	102.065 %	104.062 %	1.354 ppb	0.052 ppb	0.048 ppb
Concentration per Run 2	95.156 %	7.597 ppb	3.247 ppb	1.290 ppb	98.232 %	96.859 %	1.886 ppb	0.056 ppb	0.069 ppb
Concentration per Run 3	94.580 %	7.744 ppb	3.893 ppb	1.434 ppb	96.945 %	97.854 %	2.012 ppb	0.061 ppb	0.073 ppb
Concentration RSD	3.2 %	9.5 %	17.6 %	9.4 %	2.7 %	3.9 %	20.0 %	7.9 %	21.1 %

Category	209Bi (KED AGD)
Concentration average	98.958 %
Concentration per Run 1	101.871 %
Concentration per Run 2	98.603 %
Concentration per Run 3	96.400 %
Concentration RSD	2.8 %

Analysis index: 12 Analysis started at: 3/7/2018 8:30:55 AM Rack: 0
Analysis label: ICV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.998 %	100.128 %	99.269 ppb	10,637.229 ppb	10,663.217 ppb	109.159 ppb	10,046.513 ppb	10,328.480 ppb	94.783 %
Concentration per Run 1	90.933 %	105.316 %	98.376 ppb	10,043.927 ppb	9,871.101 ppb	100.783 ppb	9,943.231 ppb	10,117.328 ppb	94.123 %
Concentration per Run 2	91.625 %	98.235 %	99.342 ppb	10,934.393 ppb	11,013.335 ppb	110.436 ppb	10,271.192 ppb	10,348.032 ppb	95.065 %
Concentration per Run 3	90.435 %	96.832 %	100.090 ppb	10,933.367 ppb	11,105.217 ppb	116.258 ppb	9,925.116 ppb	10,520.080 ppb	95.160 %
Recovery Percentage 1			99.269 %	106.372 %	106.632 %	109.159 %	100.465 %	103.285 %	
Concentration RSD	0.7 %	4.5 %	0.9 %	4.8 %	6.4 %	7.2 %	1.9 %	2.0 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	105.146 %	102.138 ppb	109.021 ppb	109.813 ppb	109.827 ppb	10,905.360 ppb	107.496 ppb	105.423 ppb	105.010 ppb
Concentration per Run 1	109.031 %	96.178 ppb	102.379 ppb	100.264 ppb	104.360 ppb	9,814.407 ppb	96.199 ppb	95.738 ppb	91.605 ppb
Concentration per Run 2	102.639 %	105.034 ppb	112.987 ppb	114.685 ppb	114.021 ppb	11,410.745 ppb	112.909 ppb	109.944 ppb	113.208 ppb
Concentration per Run 3	103.767 %	105.201 ppb	111.697 ppb	114.491 ppb	111.101 ppb	11,490.927 ppb	113.379 ppb	110.588 ppb	110.219 ppb
Recovery Percentage 1		102.138 %	109.021 %	109.813 %	109.827 %	109.054 %	107.496 %	105.423 %	105.010 %
Concentration RSD	3.2 %	5.1 %	5.3 %	7.5 %	4.5 %	8.7 %	9.1 %	8.0 %	11.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	100.786 ppb	94.367 %	101.452 ppb	104.625 ppb	102.270 ppb	105.619 ppb	93.911 %	99.798 ppb	99.370 ppb
Concentration per Run 1	90.863 ppb	100.877 %	93.586 ppb	100.688 ppb	96.674 ppb	94.874 ppb	98.734 %	91.551 ppb	88.315 ppb
Concentration per Run 2	106.736 ppb	89.949 %	106.407 ppb	110.253 ppb	104.877 ppb	109.384 ppb	93.149 %	102.791 ppb	103.937 ppb
Concentration per Run 3	104.759 ppb	92.275 %	104.364 ppb	102.934 ppb	105.260 ppb	112.600 ppb	89.850 %	105.051 ppb	105.857 ppb
Recovery Percentage 1	100.786 %		101.452 %	104.625 %	102.270 %	105.619 %		99.798 %	99.370 %
Concentration RSD	8.6 %	6.1 %	6.8 %	4.8 %	4.7 %	8.9 %	4.8 %	7.2 %	9.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	97.691 %	100.327 ppb	108.980 ppb	103.245 ppb	99.930 %	99.659 %	99.104 ppb	97.418 ppb	95.996 ppb
Concentration per Run 1	106.799 %	86.876 ppb	94.813 ppb	94.933 ppb	104.103 %	107.069 %	85.131 ppb	90.383 ppb	86.551 ppb
Concentration per Run 2	94.820 %	102.390 ppb	112.033 ppb	107.345 ppb	98.332 %	97.415 %	102.217 ppb	100.271 ppb	99.850 ppb
Concentration per Run 3	91.453 %	111.716 ppb	120.092 ppb	107.458 ppb	97.356 %	94.494 %	109.964 ppb	101.600 ppb	101.586 ppb
Recovery Percentage 1		100.327 %	108.980 %	103.245 %			99.104 %	97.418 %	95.996 %
Concentration RSD	8.3 %	12.5 %	11.8 %	7.0 %	3.6 %	6.6 %	12.8 %	6.3 %	8.6 %

Category	209Bi (KED AGD)
Concentration average	99.104 %
Concentration per Run 1	104.208 %
Concentration per Run 2	97.255 %
Concentration per Run 3	95.848 %
Recovery Percentage 1	
Concentration RSD	4.5 %

Analysis index: 13 Analysis started at: 3/7/2018 8:34:50 AM Rack: 0
Analysis label: ICB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.208 %	94.301 %	0.012 ppb	22.549 ppb	1.031 ppb	0.024 ppb	14.781 ppb	-0.793 ppb	82.719 %
Concentration per Run 1	88.854 %	96.577 %	0.009 ppb	6.430 ppb	2.134 ppb	-0.474 ppb	23.943 ppb	1.836 ppb	83.663 %
Concentration per Run 2	88.163 %	97.470 %	0.015 ppb	23.444 ppb	-0.165 ppb	0.414 ppb	6.120 ppb	-7.462 ppb	83.121 %
Concentration per Run 3	87.608 %	88.858 %	0.012 ppb	37.771 ppb	1.124 ppb	0.132 ppb	14.279 ppb	3.247 ppb	81.374 %
Recovery Percentage 1			2.376 %	22.549 %	1.031 %	0.243 %	14.781 %	-0.793 %	
Concentration RSD	0.7 %	5.0 %	27.4 %	69.6 %	111.8 %	1,867.5 %	60.4 %	733.5 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.336 %	-0.128 ppb	-0.012 ppb	-0.040 ppb	0.084 ppb	23.166 ppb	0.013 ppb	0.002 ppb	0.011 ppb
Concentration per Run 1	95.615 %	-0.170 ppb	-0.012 ppb	-0.039 ppb	0.109 ppb	23.130 ppb	0.027 ppb	-0.100 ppb	-0.009 ppb
Concentration per Run 2	95.286 %	0.034 ppb	-0.012 ppb	-0.072 ppb	0.080 ppb	25.526 ppb	0.008 ppb	-0.020 ppb	-0.023 ppb
Concentration per Run 3	89.107 %	-0.248 ppb	-0.012 ppb	-0.009 ppb	0.062 ppb	20.843 ppb	0.003 ppb	0.125 ppb	0.065 ppb
Recovery Percentage 1		-25.620 %	-0.249 %	-4.020 %	8.353 %	46.333 %	2.519 %	0.084 %	1.089 %
Concentration RSD	3.9 %	113.8 %	0.0 %	78.9 %	28.5 %	10.1 %	100.1 %	6,799.9 %	433.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.062 ppb	92.514 %	0.098 ppb	0.240 ppb	0.001 ppb	0.540 ppb	93.212 %	0.064 ppb	0.005 ppb
Concentration per Run 1	-0.078 ppb	93.782 %	0.070 ppb	0.232 ppb	0.017 ppb	0.403 ppb	96.171 %	0.060 ppb	0.004 ppb
Concentration per Run 2	-0.081 ppb	94.665 %	0.070 ppb	0.231 ppb	-0.010 ppb	0.555 ppb	93.367 %	0.056 ppb	-0.008 ppb
Concentration per Run 3	-0.027 ppb	89.095 %	0.153 ppb	0.255 ppb	-0.006 ppb	0.663 ppb	90.098 %	0.075 ppb	0.018 ppb
Recovery Percentage 1	-0.619 %		19.546 %	4.791 %	0.117 %	27.016 %		15.990 %	2.333 %
Concentration RSD	49.0 %	3.2 %	48.8 %	5.7 %	2,470.3 %	24.1 %	3.3 %	15.9 %	271.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	94.630 %	6.826 ppb	3.339 ppb	-0.020 ppb	96.706 %	98.080 %	1.548 ppb	0.042 ppb	0.021 ppb
Concentration per Run 1	98.085 %	6.035 ppb	2.953 ppb	-0.042 ppb	98.240 %	101.262 %	1.269 ppb	0.037 ppb	0.014 ppb
Concentration per Run 2	95.005 %	7.591 ppb	3.569 ppb	0.023 ppb	96.964 %	99.048 %	1.745 ppb	0.045 ppb	0.027 ppb
Concentration per Run 3	90.801 %	6.853 ppb	3.494 ppb	-0.042 ppb	94.913 %	93.929 %	1.630 ppb	0.044 ppb	0.023 ppb
Recovery Percentage 1		227.539 %	83.466 %	-4.047 %			77.393 %	8.388 %	4.279 %
Concentration RSD	3.9 %	11.4 %	10.1 %	185.3 %	1.7 %	3.8 %	16.0 %	9.7 %	29.7 %

Category	209Bi (KED AGD)
Concentration average	97.720 %
Concentration per Run 1	99.662 %
Concentration per Run 2	98.026 %
Concentration per Run 3	95.472 %
Recovery Percentage 1	
Concentration RSD	2.2 %

Analysis index: 14 Analysis started at: 3/7/2018 8:38:46 AM Rack: 4
Analysis label: LLICV User name: ALPHALAB\metals-instrument Vial: 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.387 %	96.577 %	0.358 ppb	124.797 ppb	78.470 ppb	12.273 ppb	119.927 ppb	114.281 ppb	85.406 %
Concentration per Run 1	90.246 %	98.299 %	0.354 ppb	74.426 ppb	66.227 ppb	11.141 ppb	90.240 ppb	89.387 ppb	86.383 %
Concentration per Run 2	90.645 %	101.425 %	0.331 ppb	149.702 ppb	82.434 ppb	13.657 ppb	125.636 ppb	127.324 ppb	84.980 %
Concentration per Run 3	90.271 %	90.006 %	0.389 ppb	150.263 ppb	86.749 ppb	12.022 ppb	143.905 ppb	126.131 ppb	84.856 %
Recovery Percentage 1			119.366 %	124.797 %	112.100 %	122.731 %	119.927 %	114.281 %	
Concentration RSD	0.2 %	6.1 %	8.2 %	35.0 %	13.8 %	10.4 %	22.8 %	18.9 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	95.795 %	0.404 ppb	6.361 ppb	0.532 ppb	1.391 ppb	82.150 ppb	0.593 ppb	1.761 ppb	1.113 ppb
Concentration per Run 1	92.513 %	0.380 ppb	5.710 ppb	0.555 ppb	1.462 ppb	68.255 ppb	0.446 ppb	1.512 ppb	0.879 ppb
Concentration per Run 2	100.267 %	0.159 ppb	6.502 ppb	0.542 ppb	1.428 ppb	90.617 ppb	0.607 ppb	1.914 ppb	1.090 ppb
Concentration per Run 3	94.604 %	0.672 ppb	6.872 ppb	0.499 ppb	1.283 ppb	87.578 ppb	0.726 ppb	1.856 ppb	1.369 ppb
Recovery Percentage 1		80.762 %	127.230 %	106.424 %	139.083 %	164.300 %	118.691 %	88.030 %	111.269 %
Concentration RSD	4.2 %	63.8 %	9.3 %	5.5 %	6.9 %	14.8 %	23.7 %	12.4 %	22.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	11.685 ppb	93.636 %	0.603 ppb	6.026 ppb	0.501 ppb	2.283 ppb	94.646 %	0.494 ppb	0.254 ppb
Concentration per Run 1	10.490 ppb	90.607 %	0.586 ppb	5.557 ppb	0.409 ppb	1.828 ppb	95.413 %	0.450 ppb	0.224 ppb
Concentration per Run 2	12.338 ppb	97.255 %	0.727 ppb	5.679 ppb	0.622 ppb	2.309 ppb	95.827 %	0.510 ppb	0.241 ppb
Concentration per Run 3	12.226 ppb	93.044 %	0.497 ppb	6.844 ppb	0.473 ppb	2.712 ppb	92.699 %	0.522 ppb	0.297 ppb
Recovery Percentage 1	116.847 %		120.651 %	120.530 %	100.246 %	114.143 %		123.528 %	126.989 %
Concentration RSD	8.9 %	3.6 %	19.2 %	11.8 %	21.8 %	19.4 %	1.8 %	7.8 %	15.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	97.461 %	5.447 ppb	6.267 ppb	0.456 ppb	97.728 %	99.363 %	2.513 ppb	0.542 ppb	0.484 ppb
Concentration per Run 1	97.938 %	4.648 ppb	5.451 ppb	0.274 ppb	99.625 %	98.806 %	2.310 ppb	0.499 ppb	0.415 ppb
Concentration per Run 2	101.669 %	5.613 ppb	6.345 ppb	0.561 ppb	98.339 %	104.388 %	2.452 ppb	0.555 ppb	0.514 ppb
Concentration per Run 3	92.775 %	6.079 ppb	7.005 ppb	0.533 ppb	95.222 %	94.894 %	2.778 ppb	0.573 ppb	0.523 ppb
Recovery Percentage 1		181.567 %	156.674 %	91.142 %			125.659 %	108.429 %	96.794 %
Concentration RSD	4.6 %	13.4 %	12.4 %	34.7 %	2.3 %	4.8 %	9.6 %	7.1 %	12.4 %

Category	209Bi (KED AGD)
Concentration average	98.673 %
Concentration per Run 1	98.689 %
Concentration per Run 2	100.809 %
Concentration per Run 3	96.523 %
Recovery Percentage 1	
Concentration RSD	2.2 %

Analysis index: 15 Analysis started at: 3/7/2018 8:42:42 AM Rack: 4
Analysis label: ICSA User name: ALPHALAB\metals-instrument Vial: 53

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.745 %	93.727 %	0.011 ppb	54,845.310 ppb	22,267.233 ppb	21,595.789 ppb	21,164.166 ppb	65,971.187 ppb	88.205 %
Concentration per Run 1	84.132 %	94.408 %	0.009 ppb	51,001.452 ppb	20,286.407 ppb	19,081.482 ppb	18,637.114 ppb	55,528.100 ppb	88.371 %
Concentration per Run 2	82.662 %	91.090 %	0.012 ppb	57,112.708 ppb	23,157.477 ppb	22,416.266 ppb	21,953.610 ppb	69,330.519 ppb	87.246 %
Concentration per Run 3	84.440 %	95.683 %	0.011 ppb	56,421.770 ppb	23,357.817 ppb	23,289.617 ppb	22,901.773 ppb	73,054.941 ppb	88.998 %
Recovery Percentage 1				109.691 %	111.336 %	107.979 %	105.821 %	109.952 %	
Concentration RSD	1.1 %	2.5 %	13.6 %	6.1 %	7.7 %	10.3 %	10.6 %	14.0 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	103.564 %	457.200 ppb	0.038 ppb	0.363 ppb	1.124 ppb	53,897.160 ppb	0.269 ppb	-0.117 ppb	0.508 ppb
Concentration per Run 1	96.084 %	389.690 ppb	0.066 ppb	0.308 ppb	0.957 ppb	48,409.781 ppb	0.199 ppb	-0.244 ppb	0.529 ppb
Concentration per Run 2	103.015 %	482.145 ppb	0.025 ppb	0.278 ppb	0.908 ppb	57,121.149 ppb	0.315 ppb	-0.139 ppb	0.510 ppb
Concentration per Run 3	111.592 %	499.764 ppb	0.022 ppb	0.503 ppb	1.508 ppb	56,160.549 ppb	0.293 ppb	0.032 ppb	0.487 ppb
Recovery Percentage 1		114.300 %				107.794 %			
Concentration RSD	7.5 %	12.9 %	64.8 %	33.6 %	29.6 %	8.9 %	23.0 %	119.0 %	4.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	3.960 ppb	91.470 %	0.108 ppb	0.225 ppb	2.196 ppb	420.782 ppb	88.519 %	0.228 ppb	0.039 ppb
Concentration per Run 1	3.530 ppb	93.137 %	0.071 ppb	0.177 ppb	1.775 ppb	361.111 ppb	92.057 %	0.213 ppb	0.020 ppb
Concentration per Run 2	4.569 ppb	85.802 %	0.145 ppb	0.208 ppb	2.358 ppb	443.462 ppb	85.427 %	0.226 ppb	0.047 ppb
Concentration per Run 3	3.779 ppb	95.471 %	0.106 ppb	0.291 ppb	2.455 ppb	457.773 ppb	88.074 %	0.246 ppb	0.050 ppb
Recovery Percentage 1						105.195 %			
Concentration RSD	13.7 %	5.5 %	34.6 %	26.1 %	16.8 %	12.4 %	3.8 %	7.4 %	41.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	95.051 %	2.735 ppb	1.378 ppb	1.050 ppb	95.607 %	92.681 %	0.757 ppb	0.081 ppb	0.055 ppb
Concentration per Run 1	96.731 %	2.025 ppb	1.177 ppb	0.895 ppb	98.480 %	93.804 %	0.580 ppb	0.103 ppb	0.043 ppb
Concentration per Run 2	93.005 %	2.928 ppb	1.402 ppb	1.208 ppb	93.122 %	90.749 %	0.815 ppb	0.078 ppb	0.059 ppb
Concentration per Run 3	95.417 %	3.252 ppb	1.556 ppb	1.048 ppb	95.219 %	93.491 %	0.875 ppb	0.063 ppb	0.062 ppb
Recovery Percentage 1									
Concentration RSD	2.0 %	23.2 %	13.8 %	14.9 %	2.8 %	1.8 %	20.6 %	25.0 %	18.2 %

Category	209Bi (KED AGD)
Concentration average	95.561 %
Concentration per Run 1	98.146 %
Concentration per Run 2	95.689 %
Concentration per Run 3	92.847 %
Recovery Percentage 1	
Concentration RSD	2.8 %

Analysis index: 16 Analysis started at: 3/7/2018 8:46:38 AM Rack: 4
Analysis label: ICSAB User name: ALPHALAB\metals-instrument Vial: 55

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.297 %	91.792 %	0.013 ppb	56,430.848 ppb	22,755.533 ppb	22,317.918 ppb	21,270.301 ppb	66,161.747 ppb	81.165 %
Concentration per Run 1	81.512 %	93.770 %	0.013 ppb	51,657.995 ppb	20,541.591 ppb	19,911.052 ppb	18,284.360 ppb	55,603.382 ppb	80.984 %
Concentration per Run 2	81.521 %	88.730 %	0.012 ppb	58,687.285 ppb	23,496.240 ppb	22,664.251 ppb	21,502.405 ppb	68,523.735 ppb	81.146 %
Concentration per Run 3	80.858 %	92.877 %	0.014 ppb	58,947.266 ppb	24,228.770 ppb	24,378.451 ppb	24,024.140 ppb	74,358.125 ppb	81.365 %
Recovery Percentage 1				112.862 %	113.778 %	111.590 %	106.352 %	110.270 %	
Concentration RSD	0.5 %	2.9 %	8.6 %	7.3 %	8.6 %	10.1 %	13.5 %	14.5 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	95.082 %	461.520 ppb	46.854 ppb	47.107 ppb	43.397 ppb	57,618.772 ppb	44.049 ppb	43.144 ppb	42.858 ppb
Concentration per Run 1	88.919 %	392.406 ppb	43.743 ppb	44.345 ppb	36.698 ppb	53,215.795 ppb	41.298 ppb	42.676 ppb	40.889 ppb
Concentration per Run 2	93.007 %	475.534 ppb	46.910 ppb	49.463 ppb	46.985 ppb	61,112.930 ppb	46.057 ppb	44.307 ppb	44.578 ppb
Concentration per Run 3	103.322 %	516.621 ppb	49.910 ppb	47.514 ppb	46.507 ppb	58,527.593 ppb	44.793 ppb	42.447 ppb	43.107 ppb
Recovery Percentage 1		115.380 %	117.136 %	117.768 %	108.492 %	115.238 %	110.123 %	107.859 %	107.144 %
Concentration RSD	7.8 %	13.7 %	6.6 %	5.5 %	13.4 %	7.0 %	5.6 %	2.4 %	4.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	23.281 ppb	88.185 %	21.708 ppb	21.348 ppb	46.602 ppb	427.648 ppb	87.232 %	10.533 ppb	20.243 ppb
Concentration per Run 1	21.812 ppb	83.752 %	20.027 ppb	17.593 ppb	40.893 ppb	378.286 ppb	87.929 %	9.510 ppb	18.000 ppb
Concentration per Run 2	24.204 ppb	84.882 %	21.408 ppb	23.760 ppb	47.682 ppb	448.375 ppb	85.531 %	10.868 ppb	20.741 ppb
Concentration per Run 3	23.828 ppb	95.921 %	23.689 ppb	22.690 ppb	51.230 ppb	456.284 ppb	88.237 %	11.222 ppb	21.988 ppb
Recovery Percentage 1	116.405 %		108.539 %	106.739 %	116.504 %	106.912 %		105.330 %	101.215 %
Concentration RSD	5.5 %	7.6 %	8.5 %	15.4 %	11.3 %	10.0 %	1.7 %	8.6 %	10.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	93.215 %	1.699 ppb	1.112 ppb	0.692 ppb	93.709 %	89.948 %	0.512 ppb	0.030 ppb	0.050 ppb
Concentration per Run 1	93.141 %	1.362 ppb	0.963 ppb	0.641 ppb	95.491 %	90.940 %	0.364 ppb	0.025 ppb	0.047 ppb
Concentration per Run 2	90.386 %	1.697 ppb	1.196 ppb	0.735 ppb	91.511 %	86.430 %	0.559 ppb	0.035 ppb	0.052 ppb
Concentration per Run 3	96.118 %	2.039 ppb	1.176 ppb	0.701 ppb	94.125 %	92.474 %	0.613 ppb	0.030 ppb	0.051 ppb
Recovery Percentage 1									
Concentration RSD	3.1 %	19.9 %	11.6 %	6.9 %	2.2 %	3.5 %	25.6 %	17.6 %	5.9 %

Category	209Bi (KED AGD)
Concentration average	93.118 %
Concentration per Run 1	93.924 %
Concentration per Run 2	91.419 %
Concentration per Run 3	94.011 %
Recovery Percentage 1	
Concentration RSD	1.6 %

Analysis index:	17	Analysis started at:	3/7/2018 8:50:33 AM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Analysis index: 18 Analysis started at: 3/7/2018 8:54:25 AM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.232 %	94.897 %	105.552 ppb	10,585.830 ppb	10,652.280 ppb	105.927 ppb	10,091.795 ppb	10,439.643 ppb	89.047 %
Concentration per Run 1	85.750 %	96.640 %	105.888 ppb	9,758.155 ppb	9,691.380 ppb	89.540 ppb	9,101.802 ppb	9,366.552 ppb	88.084 %
Concentration per Run 2	87.365 %	89.368 %	106.109 ppb	11,148.255 ppb	11,150.182 ppb	115.698 ppb	11,085.004 ppb	11,538.866 ppb	90.581 %
Concentration per Run 3	85.580 %	98.682 %	104.660 ppb	10,851.080 ppb	11,115.277 ppb	112.543 ppb	10,088.580 ppb	10,413.511 ppb	88.476 %
Recovery Percentage 1			105.552 %	105.858 %	106.523 %	105.927 %	100.918 %	104.396 %	
Concentration RSD	1.1 %	5.2 %	0.7 %	6.9 %	7.8 %	13.5 %	9.8 %	10.4 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.310 %	104.362 ppb	109.103 ppb	101.099 ppb	108.032 ppb	10,801.256 ppb	106.911 ppb	105.960 ppb	103.307 ppb
Concentration per Run 1	101.230 %	92.985 ppb	101.177 ppb	89.454 ppb	98.639 ppb	9,964.838 ppb	99.164 ppb	94.440 ppb	95.692 ppb
Concentration per Run 2	104.260 %	114.499 ppb	111.011 ppb	111.906 ppb	110.245 ppb	10,972.292 ppb	108.969 ppb	112.447 ppb	105.443 ppb
Concentration per Run 3	101.441 %	105.602 ppb	115.120 ppb	101.935 ppb	115.211 ppb	11,466.639 ppb	112.600 ppb	110.993 ppb	108.786 ppb
Recovery Percentage 1		104.362 %	109.103 %	101.099 %	108.032 %	108.013 %	106.911 %	105.960 %	103.307 %
Concentration RSD	1.7 %	10.4 %	6.6 %	11.1 %	7.9 %	7.1 %	6.5 %	9.4 %	6.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	100.450 ppb	92.360 %	99.605 ppb	98.634 ppb	100.036 ppb	103.301 ppb	93.959 %	100.057 ppb	99.221 ppb
Concentration per Run 1	92.157 ppb	89.941 %	92.089 ppb	88.633 ppb	89.538 ppb	92.863 ppb	95.821 %	89.659 ppb	87.596 ppb
Concentration per Run 2	103.286 ppb	93.649 %	104.660 ppb	101.664 ppb	103.990 ppb	107.919 ppb	93.184 %	104.689 ppb	105.147 ppb
Concentration per Run 3	105.906 ppb	93.488 %	102.066 ppb	105.604 ppb	106.579 ppb	109.119 ppb	92.870 %	105.825 ppb	104.919 ppb
Recovery Percentage 1	100.450 %		99.605 %	98.634 %	100.036 %	103.301 %		100.057 %	99.221 %
Concentration RSD	7.3 %	2.3 %	6.7 %	9.0 %	9.2 %	8.8 %	1.7 %	9.0 %	10.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	95.292 %	99.247 ppb	106.398 ppb	101.541 ppb	97.343 %	96.843 %	97.396 ppb	97.687 ppb	95.484 ppb
Concentration per Run 1	97.460 %	86.673 ppb	92.442 ppb	91.093 ppb	97.812 %	97.860 %	87.773 ppb	89.561 ppb	86.110 ppb
Concentration per Run 2	94.699 %	102.084 ppb	110.611 ppb	104.706 ppb	96.604 %	96.163 %	100.018 ppb	101.652 ppb	98.887 ppb
Concentration per Run 3	93.718 %	108.985 ppb	116.140 ppb	108.824 ppb	97.613 %	96.506 %	104.396 ppb	101.848 ppb	101.456 ppb
Recovery Percentage 1		99.247 %	106.398 %	101.541 %			97.396 %	97.687 %	95.484 %
Concentration RSD	2.0 %	11.5 %	11.7 %	9.1 %	0.7 %	0.9 %	8.8 %	7.2 %	8.6 %

Category	209Bi (KED AGD)
Concentration average	97.584 %
Concentration per Run 1	98.626 %
Concentration per Run 2	97.264 %
Concentration per Run 3	96.861 %
Recovery Percentage 1	
Concentration RSD	0.9 %

Analysis index: 19 Analysis started at: 3/7/2018 8:58:20 AM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.819 %	94.237 %	0.011 ppb	17.981 ppb	0.656 ppb	0.393 ppb	20.424 ppb	1.458 ppb	80.269 %
Concentration per Run 1	84.385 %	100.914 %	0.014 ppb	-8.870 ppb	0.407 ppb	0.823 ppb	11.188 ppb	3.423 ppb	80.487 %
Concentration per Run 2	85.313 %	87.837 %	0.013 ppb	43.818 ppb	1.711 ppb	-0.104 ppb	26.135 ppb	8.444 ppb	79.923 %
Concentration per Run 3	84.760 %	93.961 %	0.007 ppb	18.994 ppb	-0.149 ppb	0.461 ppb	23.950 ppb	-7.494 ppb	80.396 %
Recovery Percentage 1			2.249 %	17.981 %	0.656 %	3.934 %	20.424 %	1.458 %	
Concentration RSD	0.6 %	6.9 %	34.6 %	146.6 %	145.5 %	118.8 %	39.5 %	559.0 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.623 %	0.163 ppb	0.008 ppb	0.071 ppb	0.075 ppb	26.606 ppb	0.023 ppb	-0.162 ppb	0.053 ppb
Concentration per Run 1	91.268 %	-0.008 ppb	0.008 ppb	0.162 ppb	0.116 ppb	30.865 ppb	0.021 ppb	-0.130 ppb	0.045 ppb
Concentration per Run 2	92.913 %	0.144 ppb	0.028 ppb	0.018 ppb	0.085 ppb	21.258 ppb	0.034 ppb	-0.279 ppb	0.045 ppb
Concentration per Run 3	93.688 %	0.354 ppb	-0.012 ppb	0.034 ppb	0.025 ppb	27.696 ppb	0.015 ppb	-0.076 ppb	0.068 ppb
Recovery Percentage 1		32.648 %	0.157 %	7.121 %	7.521 %	53.212 %	4.658 %	-8.086 %	5.270 %
Concentration RSD	1.3 %	111.5 %	257.9 %	110.7 %	61.1 %	18.4 %	41.8 %	64.9 %	24.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.069 ppb	93.048 %	0.071 ppb	0.075 ppb	0.019 ppb	0.587 ppb	94.090 %	0.055 ppb	0.010 ppb
Concentration per Run 1	-0.109 ppb	92.898 %	0.096 ppb	0.356 ppb	0.031 ppb	0.451 ppb	97.554 %	0.058 ppb	0.020 ppb
Concentration per Run 2	-0.076 ppb	91.940 %	0.097 ppb	-0.064 ppb	0.014 ppb	0.718 ppb	91.169 %	0.049 ppb	-0.004 ppb
Concentration per Run 3	-0.022 ppb	94.305 %	0.021 ppb	-0.067 ppb	0.011 ppb	0.594 ppb	93.547 %	0.057 ppb	0.013 ppb
Recovery Percentage 1	-0.692 %		14.287 %	1.496 %	3.739 %	29.375 %		13.644 %	4.837 %
Concentration RSD	63.7 %	1.3 %	61.5 %	325.1 %	56.2 %	22.7 %	3.4 %	9.5 %	124.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	94.579 %	4.348 ppb	2.457 ppb	-0.013 ppb	96.026 %	97.237 %	1.000 ppb	0.030 ppb	0.023 ppb
Concentration per Run 1	95.822 %	4.091 ppb	2.353 ppb	-0.020 ppb	98.099 %	98.154 %	0.859 ppb	0.036 ppb	0.029 ppb
Concentration per Run 2	93.139 %	4.320 ppb	2.470 ppb	-0.020 ppb	94.451 %	96.510 %	1.064 ppb	0.031 ppb	0.021 ppb
Concentration per Run 3	94.778 %	4.633 ppb	2.548 ppb	0.002 ppb	95.526 %	97.046 %	1.077 ppb	0.023 ppb	0.020 ppb
Recovery Percentage 1		144.938 %	61.428 %	-2.559 %			50.002 %	6.015 %	4.656 %
Concentration RSD	1.4 %	6.3 %	4.0 %	98.8 %	2.0 %	0.9 %	12.3 %	21.9 %	20.6 %

Category	209Bi (KED AGD)
Concentration average	98.470 %
Concentration per Run 1	101.006 %
Concentration per Run 2	96.656 %
Concentration per Run 3	97.749 %
Recovery Percentage 1	
Concentration RSD	2.3 %

Analysis index: 20 | Analysis started at: 3/7/2018 9:02:16 AM | Rack: 1
Analysis label: WG1094621-1D10 CT-6020TS | User name: ALPHALAB\metals-instrument | Vial: 1

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.717 %	91.133 %	0.009 ppb	33.603 ppb	0.260 ppb	0.500 ppb	24.085 ppb	-0.781 ppb	82.623 %
Concentration per Run 1	85.639 %	92.558 %	0.011 ppb	22.935 ppb	1.054 ppb	0.489 ppb	16.877 ppb	2.291 ppb	82.638 %
Concentration per Run 2	85.607 %	87.008 %	0.009 ppb	68.978 ppb	-0.120 ppb	1.074 ppb	28.248 ppb	0.533 ppb	82.886 %
Concentration per Run 3	85.904 %	93.833 %	0.008 ppb	8.896 ppb	-0.155 ppb	-0.063 ppb	27.129 ppb	-5.166 ppb	82.346 %
Concentration RSD	0.2 %	4.0 %	18.8 %	93.5 %	265.1 %	113.6 %	26.0 %	499.3 %	0.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.461 %	-0.104 ppb	0.008 ppb	0.028 ppb	0.018 ppb	16.981 ppb	0.005 ppb	-0.305 ppb	-0.023 ppb
Concentration per Run 1	92.255 %	-0.161 ppb	0.049 ppb	0.064 ppb	0.087 ppb	15.818 ppb	0.002 ppb	-0.403 ppb	-0.045 ppb
Concentration per Run 2	92.137 %	-0.048 ppb	-0.012 ppb	0.028 ppb	-0.031 ppb	16.363 ppb	0.015 ppb	-0.235 ppb	0.007 ppb
Concentration per Run 3	95.990 %	-0.103 ppb	-0.012 ppb	-0.007 ppb	-0.003 ppb	18.763 ppb	-0.004 ppb	-0.276 ppb	-0.031 ppb
Concentration RSD	2.3 %	54.2 %	444.7 %	126.6 %	346.3 %	9.2 %	211.2 %	28.8 %	117.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.389 ppb	89.764 %	0.022 ppb	0.063 ppb	0.034 ppb	0.297 ppb	92.709 %	0.056 ppb	-0.006 ppb
Concentration per Run 1	0.201 ppb	90.308 %	0.022 ppb	0.123 ppb	0.034 ppb	0.189 ppb	95.178 %	0.048 ppb	-0.004 ppb
Concentration per Run 2	0.502 ppb	91.551 %	0.009 ppb	0.060 ppb	0.036 ppb	0.302 ppb	91.384 %	0.058 ppb	-0.008 ppb
Concentration per Run 3	0.466 ppb	87.433 %	0.036 ppb	0.005 ppb	0.031 ppb	0.401 ppb	91.564 %	0.061 ppb	-0.008 ppb
Concentration RSD	42.2 %	2.4 %	61.3 %	94.0 %	6.6 %	35.6 %	2.3 %	12.0 %	37.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	91.627 %	2.674 ppb	1.065 ppb	0.010 ppb	94.831 %	96.121 %	0.489 ppb	0.015 ppb	-0.008 ppb
Concentration per Run 1	92.224 %	2.223 ppb	0.858 ppb	0.025 ppb	94.474 %	95.600 %	0.348 ppb	0.015 ppb	-0.009 ppb
Concentration per Run 2	90.799 %	2.639 ppb	1.243 ppb	0.026 ppb	93.189 %	95.373 %	0.496 ppb	0.016 ppb	-0.006 ppb
Concentration per Run 3	91.858 %	3.160 ppb	1.095 ppb	-0.020 ppb	96.830 %	97.390 %	0.622 ppb	0.016 ppb	-0.010 ppb
Concentration RSD	0.8 %	17.6 %	18.3 %	253.5 %	1.9 %	1.1 %	28.1 %	3.5 %	27.0 %

Category	209Bi (KED AGD)
Concentration average	96.573 %
Concentration per Run 1	96.644 %
Concentration per Run 2	94.968 %
Concentration per Run 3	98.108 %
Concentration RSD	1.6 %

Analysis index: 21 | Analysis started at: 3/7/2018 9:06:07 AM | Rack: 1
Analysis label: WG1094621-2D10 CT-6020TS | User name: ALPHALAB\metals-instrument | Vial: 2

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.291 %	94.705 %	48.990 ppb	511.730 ppb	1,925.997 ppb	5,735.313 ppb	1,447.857 ppb	3,662.198 ppb	87.801 %
Concentration per Run 1	85.075 %	95.492 %	49.043 ppb	449.201 ppb	1,802.922 ppb	5,193.283 ppb	1,353.447 ppb	3,143.605 ppb	88.384 %
Concentration per Run 2	83.738 %	92.111 %	48.646 ppb	525.532 ppb	1,902.228 ppb	5,995.990 ppb	1,566.856 ppb	4,099.392 ppb	87.807 %
Concentration per Run 3	84.060 %	96.513 %	49.281 ppb	560.456 ppb	2,072.840 ppb	6,016.667 ppb	1,423.267 ppb	3,743.598 ppb	87.212 %
Concentration RSD	0.8 %	2.4 %	0.7 %	11.1 %	7.1 %	8.2 %	7.5 %	13.2 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	99.428 %	254.348 ppb	83.945 ppb	90.389 ppb	316.523 ppb	13,522.202 ppb	59.281 ppb	73.109 ppb	92.651 ppb
Concentration per Run 1	98.387 %	228.323 ppb	79.011 ppb	81.606 ppb	284.344 ppb	12,075.386 ppb	56.372 ppb	66.701 ppb	85.243 ppb
Concentration per Run 2	102.968 %	275.874 ppb	83.380 ppb	91.698 ppb	320.358 ppb	13,776.130 ppb	59.171 ppb	74.248 ppb	93.264 ppb
Concentration per Run 3	96.930 %	258.845 ppb	89.445 ppb	97.865 ppb	344.866 ppb	14,715.090 ppb	62.302 ppb	78.378 ppb	99.444 ppb
Concentration RSD	3.2 %	9.5 %	6.2 %	9.1 %	9.6 %	9.9 %	5.0 %	8.1 %	7.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	195.472 ppb	90.568 %	134.901 ppb	95.636 ppb	46.607 ppb	26.742 ppb	91.245 %	72.211 ppb	105.445 ppb
Concentration per Run 1	177.665 ppb	89.985 %	124.519 ppb	86.351 ppb	42.795 ppb	24.213 ppb	93.531 %	67.495 ppb	95.507 ppb
Concentration per Run 2	198.357 ppb	92.079 %	138.329 ppb	97.513 ppb	47.529 ppb	27.357 ppb	90.416 %	74.026 ppb	109.829 ppb
Concentration per Run 3	210.393 ppb	89.639 %	141.855 ppb	103.043 ppb	49.498 ppb	28.658 ppb	89.787 %	75.111 ppb	111.000 ppb
Concentration RSD	8.5 %	1.5 %	6.8 %	8.9 %	7.4 %	8.5 %	2.2 %	5.7 %	8.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	91.770 %	120.972 ppb	144.099 ppb	175.089 ppb	95.907 %	97.076 %	0.456 ppb	113.619 ppb	157.249 ppb
Concentration per Run 1	92.625 %	105.839 ppb	130.571 ppb	160.482 ppb	97.138 %	99.325 %	0.352 ppb	104.733 ppb	142.993 ppb
Concentration per Run 2	91.381 %	125.423 ppb	149.025 ppb	181.977 ppb	94.845 %	95.387 %	0.483 ppb	116.654 ppb	162.354 ppb
Concentration per Run 3	91.305 %	131.654 ppb	152.699 ppb	182.809 ppb	95.737 %	96.517 %	0.533 ppb	119.469 ppb	166.399 ppb
Concentration RSD	0.8 %	11.1 %	8.2 %	7.2 %	1.2 %	2.1 %	20.5 %	6.9 %	8.0 %

Category	209Bi (KED AGD)
Concentration average	94.931 %
Concentration per Run 1	95.673 %
Concentration per Run 2	94.586 %
Concentration per Run 3	94.534 %
Concentration RSD	0.7 %

Analysis index: 22 | Analysis started at: 3/7/2018 9:09:59 AM | Rack: 1
Analysis label: L1806577-07D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 8

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.457 %	97.937 %	1.187 ppb	72,406.299 ppb	21,587.786 ppb	26,761.135 ppb	9,769.529 ppb	8,084.271 ppb	88.589 %
Concentration per Run 1	83.227 %	99.256 %	1.196 ppb	71,212.911 ppb	21,140.292 ppb	26,177.974 ppb	8,868.358 ppb	7,180.676 ppb	89.471 %
Concentration per Run 2	81.642 %	97.470 %	1.195 ppb	70,290.550 ppb	20,625.223 ppb	25,171.966 ppb	9,364.805 ppb	8,038.535 ppb	87.812 %
Concentration per Run 3	82.502 %	97.087 %	1.171 ppb	75,715.435 ppb	22,997.841 ppb	28,933.464 ppb	11,075.425 ppb	9,033.601 ppb	88.482 %
Concentration RSD	1.0 %	1.2 %	1.2 %	4.0 %	5.8 %	7.3 %	11.9 %	11.5 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	105.530 %	1,071.418 ppb	141.252 ppb	116.884 ppb	310.057 ppb	46,595.496 ppb	14.358 ppb	48.345 ppb	78.683 ppb
Concentration per Run 1	95.004 %	983.387 ppb	144.456 ppb	117.749 ppb	307.394 ppb	46,852.082 ppb	14.975 ppb	49.353 ppb	78.800 ppb
Concentration per Run 2	104.002 %	1,011.986 ppb	135.735 ppb	115.398 ppb	297.171 ppb	45,207.887 ppb	13.907 ppb	45.670 ppb	75.926 ppb
Concentration per Run 3	117.585 %	1,218.880 ppb	143.566 ppb	117.506 ppb	325.607 ppb	47,726.518 ppb	14.191 ppb	50.012 ppb	81.323 ppb
Concentration RSD	10.8 %	12.0 %	3.4 %	1.1 %	4.6 %	2.7 %	3.9 %	4.8 %	3.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	275.783 ppb	88.328 %	19.322 ppb	5.771 ppb	126.021 ppb	33.126 ppb	87.540 %	2.101 ppb	1.081 ppb
Concentration per Run 1	277.438 ppb	83.715 %	18.304 ppb	5.536 ppb	118.940 ppb	31.956 ppb	83.710 %	2.070 ppb	1.043 ppb
Concentration per Run 2	262.755 ppb	89.784 %	18.299 ppb	5.905 ppb	119.136 ppb	32.709 ppb	89.597 %	2.032 ppb	1.013 ppb
Concentration per Run 3	287.157 ppb	91.483 %	21.362 ppb	5.871 ppb	139.985 ppb	34.713 ppb	89.313 %	2.201 ppb	1.186 ppb
Concentration RSD	4.5 %	4.6 %	9.1 %	3.5 %	9.6 %	4.3 %	3.8 %	4.2 %	8.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.946 %	30.755 ppb	3.318 ppb	89.267 ppb	91.126 %	95.389 %	1.124 ppb	0.647 ppb	193.654 ppb
Concentration per Run 1	83.954 %	30.107 ppb	3.313 ppb	86.068 ppb	87.013 %	91.387 %	1.175 ppb	0.605 ppb	189.018 ppb
Concentration per Run 2	90.391 %	29.729 ppb	3.027 ppb	86.170 ppb	92.194 %	95.699 %	1.068 ppb	0.631 ppb	186.040 ppb
Concentration per Run 3	92.491 %	32.429 ppb	3.615 ppb	95.564 ppb	94.171 %	99.082 %	1.130 ppb	0.704 ppb	205.905 ppb
Concentration RSD	5.0 %	4.8 %	8.9 %	6.1 %	4.1 %	4.0 %	4.7 %	7.9 %	5.5 %

Category	209Bi (KED AGD)
Concentration average	93.350 %
Concentration per Run 1	90.571 %
Concentration per Run 2	94.130 %
Concentration per Run 3	95.349 %
Concentration RSD	2.7 %

Analysis index: 23 | Analysis started at: 3/7/2018 9:13:52 AM | Rack: 1
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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.242 %	95.173 %	1.334 ppb	62,615.321 ppb	18,375.481 ppb	27,651.870 ppb	7,575.672 ppb	6,940.184 ppb	85.225 %
Concentration per Run 1	83.156 %	98.809 %	1.298 ppb	58,009.344 ppb	16,653.576 ppb	25,023.783 ppb	6,661.930 ppb	6,059.223 ppb	86.365 %
Concentration per Run 2	83.724 %	93.642 %	1.371 ppb	64,072.777 ppb	18,824.891 ppb	28,383.429 ppb	7,938.944 ppb	7,405.092 ppb	84.661 %
Concentration per Run 3	82.845 %	93.068 %	1.332 ppb	65,763.842 ppb	19,647.975 ppb	29,548.398 ppb	8,126.142 ppb	7,356.237 ppb	84.650 %
Concentration RSD	0.5 %	3.3 %	2.7 %	6.5 %	8.4 %	8.5 %	10.5 %	11.0 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	95.497 %	892.788 ppb	133.143 ppb	110.688 ppb	311.045 ppb	48,637.105 ppb	13.545 ppb	45.286 ppb	198.610 ppb
Concentration per Run 1	94.299 %	784.845 ppb	123.737 ppb	103.219 ppb	291.464 ppb	45,749.226 ppb	12.601 ppb	41.031 ppb	189.599 ppb
Concentration per Run 2	96.813 %	947.436 ppb	138.988 ppb	114.540 ppb	323.219 ppb	50,388.521 ppb	14.092 ppb	48.162 ppb	203.339 ppb
Concentration per Run 3	95.379 %	946.084 ppb	136.702 ppb	114.304 ppb	318.452 ppb	49,773.568 ppb	13.941 ppb	46.664 ppb	202.891 ppb
Concentration RSD	1.3 %	10.5 %	6.2 %	5.8 %	5.5 %	5.2 %	6.1 %	8.3 %	3.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	322.162 ppb	87.297 %	16.824 ppb	5.843 ppb	117.482 ppb	17.320 ppb	86.782 %	2.347 ppb	1.103 ppb
Concentration per Run 1	299.920 ppb	85.960 %	15.830 ppb	5.493 ppb	104.682 ppb	15.258 ppb	88.696 %	2.183 ppb	0.985 ppb
Concentration per Run 2	332.487 ppb	88.101 %	17.413 ppb	5.857 ppb	121.850 ppb	17.713 ppb	84.991 %	2.420 ppb	1.115 ppb
Concentration per Run 3	334.078 ppb	87.831 %	17.228 ppb	6.178 ppb	125.914 ppb	18.989 ppb	86.658 %	2.438 ppb	1.208 ppb
Concentration RSD	6.0 %	1.3 %	5.1 %	5.9 %	9.6 %	11.0 %	2.1 %	6.1 %	10.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.936 %	27.776 ppb	2.856 ppb	141.319 ppb	89.275 %	91.629 %	0.526 ppb	0.392 ppb	344.127 ppb
Concentration per Run 1	88.791 %	23.823 ppb	2.403 ppb	126.651 ppb	91.022 %	94.180 %	0.407 ppb	0.322 ppb	309.446 ppb
Concentration per Run 2	85.418 %	29.154 ppb	3.037 ppb	148.724 ppb	87.832 %	90.440 %	0.534 ppb	0.405 ppb	345.667 ppb
Concentration per Run 3	86.599 %	30.351 ppb	3.128 ppb	148.582 ppb	88.972 %	90.266 %	0.635 ppb	0.449 ppb	377.267 ppb
Concentration RSD	2.0 %	12.5 %	13.8 %	9.0 %	1.8 %	2.4 %	21.7 %	16.5 %	9.9 %

Category	209Bi (KED AGD)
Concentration average	91.283 %
Concentration per Run 1	91.856 %
Concentration per Run 2	91.575 %
Concentration per Run 3	90.419 %
Concentration RSD	0.8 %

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Analysis label: L1806577-09D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.306 %	95.301 %	1.752 ppb	75,543.714 ppb	22,227.093 ppb	29,534.580 ppb	8,889.834 ppb	8,156.310 ppb	86.703 %
Concentration per Run 1	82.301 %	102.956 %	1.750 ppb	65,327.883 ppb	18,974.175 ppb	25,336.056 ppb	7,616.077 ppb	6,703.429 ppb	86.589 %
Concentration per Run 2	82.429 %	92.111 %	1.723 ppb	79,467.906 ppb	23,382.802 ppb	31,152.059 ppb	9,355.907 ppb	9,006.262 ppb	86.701 %
Concentration per Run 3	82.188 %	90.835 %	1.784 ppb	81,835.354 ppb	24,324.301 ppb	32,115.626 ppb	9,697.520 ppb	8,759.239 ppb	86.819 %
Concentration RSD	0.1 %	7.0 %	1.7 %	11.8 %	12.8 %	12.4 %	12.6 %	15.5 %	0.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	101.324 %	1,004.659 ppb	135.062 ppb	149.899 ppb	486.197 ppb	62,366.113 ppb	17.084 ppb	56.867 ppb	473.224 ppb
Concentration per Run 1	102.992 %	825.880 ppb	117.168 ppb	133.048 ppb	425.551 ppb	54,610.392 ppb	14.738 ppb	49.564 ppb	414.879 ppb
Concentration per Run 2	101.817 %	1,067.035 ppb	142.072 ppb	155.595 ppb	509.880 ppb	65,768.723 ppb	18.048 ppb	61.117 ppb	504.230 ppb
Concentration per Run 3	99.162 %	1,121.063 ppb	145.948 ppb	161.053 ppb	523.161 ppb	66,719.224 ppb	18.466 ppb	59.919 ppb	500.564 ppb
Concentration RSD	1.9 %	15.6 %	11.6 %	9.9 %	10.9 %	10.8 %	12.0 %	11.2 %	10.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	802.366 ppb	87.350 %	31.761 ppb	6.964 ppb	150.708 ppb	19.591 ppb	87.028 %	8.094 ppb	3.041 ppb
Concentration per Run 1	702.098 ppb	89.905 %	27.679 ppb	6.346 ppb	131.532 ppb	17.684 ppb	88.611 %	7.234 ppb	2.530 ppb
Concentration per Run 2	848.858 ppb	84.953 %	33.300 ppb	6.971 ppb	162.188 ppb	19.955 ppb	85.677 %	8.511 ppb	3.371 ppb
Concentration per Run 3	856.140 ppb	87.192 %	34.303 ppb	7.576 ppb	158.405 ppb	21.135 ppb	86.796 %	8.537 ppb	3.223 ppb
Concentration RSD	10.8 %	2.8 %	11.2 %	8.8 %	11.1 %	9.0 %	1.7 %	9.2 %	14.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.789 %	88.329 ppb	7.829 ppb	185.427 ppb	89.145 %	91.717 %	0.711 ppb	0.407 ppb	1,167.879 ppb
Concentration per Run 1	91.033 %	76.379 ppb	6.614 ppb	163.510 ppb	90.988 %	94.696 %	0.582 ppb	0.350 ppb	1,054.071 ppb
Concentration per Run 2	86.404 %	90.711 ppb	8.324 ppb	194.159 ppb	88.140 %	90.830 %	0.754 ppb	0.421 ppb	1,211.483 ppb
Concentration per Run 3	85.931 %	97.897 ppb	8.548 ppb	198.612 ppb	88.308 %	89.624 %	0.797 ppb	0.451 ppb	1,238.084 ppb
Concentration RSD	3.2 %	12.4 %	13.5 %	10.3 %	1.8 %	2.9 %	16.0 %	12.8 %	8.5 %

Category	209Bi (KED AGD)
Concentration average	95.629 %
Concentration per Run 1	96.570 %
Concentration per Run 2	95.819 %
Concentration per Run 3	94.497 %
Concentration RSD	1.1 %

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Analysis label: L1806577-10D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 11

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.612 %	90.835 %	0.846 ppb	50,083.555 ppb	14,149.136 ppb	11,584.534 ppb	4,877.928 ppb	15,521.928 ppb	83.174 %
Concentration per Run 1	75.590 %	93.132 %	0.860 ppb	46,454.308 ppb	12,893.653 ppb	10,550.387 ppb	4,498.571 ppb	14,109.920 ppb	82.722 %
Concentration per Run 2	74.413 %	89.751 %	0.816 ppb	51,457.995 ppb	14,617.927 ppb	11,958.848 ppb	5,117.008 ppb	16,113.243 ppb	81.780 %
Concentration per Run 3	76.833 %	89.623 %	0.863 ppb	52,338.362 ppb	14,935.830 ppb	12,244.366 ppb	5,018.205 ppb	16,342.620 ppb	85.019 %
Concentration RSD	1.6 %	2.2 %	3.1 %	6.3 %	7.8 %	7.8 %	6.8 %	7.9 %	2.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	99.154 %	549.282 ppb	76.730 ppb	128.703 ppb	1,944.684 ppb	284,512.550 ppb	26.981 ppb	161.391 ppb	730.825 ppb
Concentration per Run 1	98.669 %	492.003 ppb	70.593 ppb	116.407 ppb	1,785.839 ppb	256,433.905 ppb	25.039 ppb	145.907 ppb	668.807 ppb
Concentration per Run 2	101.981 %	572.970 ppb	77.854 ppb	132.472 ppb	1,962.522 ppb	294,250.545 ppb	27.073 ppb	166.304 ppb	753.092 ppb
Concentration per Run 3	96.813 %	582.872 ppb	81.744 ppb	137.231 ppb	2,085.691 ppb	302,853.200 ppb	28.830 ppb	171.963 ppb	770.576 ppb
Concentration RSD	2.6 %	9.1 %	7.4 %	8.5 %	7.8 %	8.7 %	7.0 %	8.5 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	2,859.013 ppb	83.538 %	71.786 ppb	4.888 ppb	223.048 ppb	41.783 ppb	84.609 %	8.186 ppb	10.477 ppb
Concentration per Run 1	2,584.606 ppb	84.500 %	66.452 ppb	4.801 ppb	201.787 ppb	37.193 ppb	86.382 %	7.530 ppb	9.345 ppb
Concentration per Run 2	2,970.181 ppb	83.722 %	72.560 ppb	4.866 ppb	234.799 ppb	44.525 ppb	83.318 %	8.548 ppb	11.141 ppb
Concentration per Run 3	3,022.253 ppb	82.394 %	76.348 ppb	4.997 ppb	232.559 ppb	43.631 ppb	84.128 %	8.480 ppb	10.944 ppb
Concentration RSD	8.4 %	1.3 %	7.0 %	2.0 %	8.3 %	9.6 %	1.9 %	6.9 %	9.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.514 %	220.044 ppb	14.835 ppb	145.994 ppb	93.853 %	90.202 %	1.626 ppb	0.302 ppb	2,452.957 ppb
Concentration per Run 1	90.039 %	198.194 ppb	13.086 ppb	130.067 ppb	94.459 %	91.296 %	1.420 ppb	0.266 ppb	2,236.122 ppb
Concentration per Run 2	86.802 %	232.710 ppb	15.984 ppb	154.425 ppb	93.125 %	90.174 %	1.746 ppb	0.321 ppb	2,594.876 ppb
Concentration per Run 3	88.701 %	229.227 ppb	15.436 ppb	153.491 ppb	93.974 %	89.137 %	1.713 ppb	0.320 ppb	2,527.874 ppb
Concentration RSD	1.8 %	8.6 %	10.4 %	9.5 %	0.7 %	1.2 %	11.0 %	10.4 %	7.8 %

Category	209Bi (KED AGD)
Concentration average	90.857 %
Concentration per Run 1	92.412 %
Concentration per Run 2	89.057 %
Concentration per Run 3	91.104 %
Concentration RSD	1.9 %

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Analysis label: L1806577-11D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 12

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.597 %	96.279 %	1.846 ppb	34,920.150 ppb	17,085.945 ppb	32,782.106 ppb	8,028.125 ppb	6,139.655 ppb	83.385 %
Concentration per Run 1	79.631 %	102.573 %	1.857 ppb	31,107.940 ppb	15,046.390 ppb	28,966.452 ppb	6,872.181 ppb	5,074.194 ppb	83.880 %
Concentration per Run 2	78.983 %	95.428 %	1.861 ppb	35,959.978 ppb	17,669.244 ppb	33,767.401 ppb	8,280.242 ppb	6,496.427 ppb	83.052 %
Concentration per Run 3	80.179 %	90.835 %	1.820 ppb	37,692.532 ppb	18,542.203 ppb	35,612.464 ppb	8,931.952 ppb	6,848.342 ppb	83.224 %
Concentration RSD	0.8 %	6.1 %	1.2 %	9.8 %	10.6 %	10.5 %	13.1 %	15.3 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	97.705 %	1,054.268 ppb	133.936 ppb	125.297 ppb	400.701 ppb	68,663.302 ppb	18.306 ppb	60.311 ppb	380.087 ppb
Concentration per Run 1	97.776 %	890.314 ppb	120.825 ppb	112.742 ppb	359.400 ppb	61,926.416 ppb	16.903 ppb	56.155 ppb	348.193 ppb
Concentration per Run 2	97.682 %	1,101.717 ppb	140.514 ppb	130.591 ppb	417.409 ppb	71,223.916 ppb	19.071 ppb	62.404 ppb	391.555 ppb
Concentration per Run 3	97.658 %	1,170.773 ppb	140.469 ppb	132.557 ppb	425.295 ppb	72,839.575 ppb	18.942 ppb	62.375 ppb	400.512 ppb
Concentration RSD	0.1 %	13.9 %	8.5 %	8.7 %	9.0 %	8.6 %	6.6 %	6.0 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	790.388 ppb	87.390 %	29.994 ppb	7.248 ppb	136.598 ppb	22.243 ppb	88.141 %	4.001 ppb	2.853 ppb
Concentration per Run 1	718.493 ppb	88.382 %	27.641 ppb	6.610 ppb	123.295 ppb	19.608 ppb	90.938 %	3.696 ppb	2.662 ppb
Concentration per Run 2	817.173 ppb	88.071 %	31.307 ppb	7.554 ppb	141.464 ppb	23.411 ppb	88.307 %	4.060 ppb	2.983 ppb
Concentration per Run 3	835.498 ppb	85.718 %	31.035 ppb	7.579 ppb	145.034 ppb	23.709 ppb	85.178 %	4.248 ppb	2.915 ppb
Concentration RSD	8.0 %	1.7 %	6.8 %	7.6 %	8.5 %	10.3 %	3.3 %	7.0 %	5.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.782 %	57.550 ppb	4.593 ppb	165.935 ppb	90.816 %	91.097 %	0.484 ppb	0.477 ppb	990.157 ppb
Concentration per Run 1	91.948 %	49.970 ppb	4.211 ppb	149.349 ppb	92.503 %	93.713 %	0.373 ppb	0.433 ppb	893.197 ppb
Concentration per Run 2	86.547 %	60.688 ppb	4.784 ppb	174.179 ppb	90.065 %	90.248 %	0.489 ppb	0.489 ppb	1,023.242 ppb
Concentration per Run 3	87.852 %	61.993 ppb	4.784 ppb	174.276 ppb	89.879 %	89.329 %	0.589 ppb	0.509 ppb	1,054.033 ppb
Concentration RSD	3.2 %	11.5 %	7.2 %	8.7 %	1.6 %	2.5 %	22.4 %	8.2 %	8.6 %

Category	209Bi (KED AGD)
Concentration average	92.906 %
Concentration per Run 1	94.320 %
Concentration per Run 2	92.919 %
Concentration per Run 3	91.480 %
Concentration RSD	1.5 %

Analysis index: 27 | Analysis started at: 3/7/2018 9:29:28 AM | Rack: 1
Analysis label: L1806577-12D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 13

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.677 %	96.640 %	1.251 ppb	23,024.858 ppb	14,616.601 ppb	29,452.645 ppb	8,135.119 ppb	5,210.530 ppb	84.645 %
Concentration per Run 1	79.383 %	99.383 %	1.202 ppb	21,362.148 ppb	13,313.233 ppb	26,748.539 ppb	7,412.758 ppb	4,586.387 ppb	83.348 %
Concentration per Run 2	79.507 %	94.790 %	1.272 ppb	23,688.099 ppb	15,142.663 ppb	30,563.528 ppb	8,427.777 ppb	5,279.770 ppb	85.595 %
Concentration per Run 3	80.143 %	95.747 %	1.280 ppb	24,024.329 ppb	15,393.907 ppb	31,045.867 ppb	8,564.820 ppb	5,765.431 ppb	84.992 %
Concentration RSD	0.5 %	2.5 %	3.4 %	6.3 %	7.8 %	8.0 %	7.7 %	11.4 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	97.047 %	1,128.891 ppb	131.708 ppb	117.193 ppb	399.756 ppb	56,093.744 ppb	15.982 ppb	50.527 ppb	107.665 ppb
Concentration per Run 1	97.846 %	1,018.074 ppb	120.798 ppb	107.128 ppb	371.364 ppb	52,008.608 ppb	15.134 ppb	48.028 ppb	100.169 ppb
Concentration per Run 2	95.873 %	1,168.897 ppb	139.238 ppb	122.526 ppb	415.226 ppb	57,833.721 ppb	16.372 ppb	52.961 ppb	109.289 ppb
Concentration per Run 3	97.423 %	1,199.701 ppb	135.089 ppb	121.924 ppb	412.678 ppb	58,438.905 ppb	16.440 ppb	50.593 ppb	113.538 ppb
Concentration RSD	1.1 %	8.6 %	7.3 %	7.4 %	6.2 %	6.3 %	4.6 %	4.9 %	6.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	338.897 ppb	88.051 %	21.295 ppb	5.496 ppb	73.608 ppb	16.771 ppb	87.608 %	1.645 ppb	1.202 ppb
Concentration per Run 1	314.163 ppb	87.004 %	19.435 ppb	5.487 ppb	67.252 ppb	14.455 ppb	90.008 %	1.494 ppb	1.160 ppb
Concentration per Run 2	347.284 ppb	89.182 %	21.917 ppb	4.762 ppb	76.843 ppb	17.718 ppb	86.642 %	1.681 ppb	1.183 ppb
Concentration per Run 3	355.245 ppb	87.966 %	22.532 ppb	6.239 ppb	76.729 ppb	18.139 ppb	86.173 %	1.762 ppb	1.261 ppb
Concentration RSD	6.4 %	1.2 %	7.7 %	13.4 %	7.5 %	12.0 %	2.4 %	8.4 %	4.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.995 %	28.236 ppb	2.569 ppb	138.581 ppb	90.555 %	90.195 %	0.412 ppb	0.453 ppb	240.199 ppb
Concentration per Run 1	89.258 %	25.844 ppb	2.226 ppb	126.795 ppb	91.139 %	92.340 %	0.321 ppb	0.409 ppb	222.472 ppb
Concentration per Run 2	88.362 %	28.825 ppb	2.586 ppb	141.166 ppb	90.563 %	90.329 %	0.451 ppb	0.466 ppb	247.637 ppb
Concentration per Run 3	86.364 %	30.040 ppb	2.895 ppb	147.781 ppb	89.962 %	87.915 %	0.466 ppb	0.485 ppb	250.488 ppb
Concentration RSD	1.7 %	7.6 %	13.0 %	7.7 %	0.6 %	2.5 %	19.4 %	8.8 %	6.4 %

Category	209Bi (KED AGD)
Concentration average	90.740 %
Concentration per Run 1	91.363 %
Concentration per Run 2	90.268 %
Concentration per Run 3	90.588 %
Concentration RSD	0.6 %

Analysis index: 28 | Analysis started at: 3/7/2018 9:33:18 AM | Rack: 1
Analysis label: L1806577-13D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 14

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.284 %	91.261 %	1.763 ppb	53,109.799 ppb	25,654.257 ppb	37,120.668 ppb	10,752.842 ppb	23,879.845 ppb	82.427 %
Concentration per Run 1	77.010 %	92.558 %	1.796 ppb	48,526.028 ppb	22,837.706 ppb	32,778.199 ppb	9,927.354 ppb	21,530.866 ppb	82.984 %
Concentration per Run 2	77.304 %	90.453 %	1.694 ppb	54,762.898 ppb	26,417.203 ppb	38,058.442 ppb	11,082.215 ppb	24,716.444 ppb	81.872 %
Concentration per Run 3	77.537 %	90.771 %	1.798 ppb	56,040.471 ppb	27,707.862 ppb	40,525.364 ppb	11,248.955 ppb	25,392.227 ppb	82.426 %
Concentration RSD	0.3 %	1.2 %	3.4 %	7.6 %	9.8 %	10.7 %	6.7 %	8.6 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	96.014 %	1,434.182 ppb	135.077 ppb	149.367 ppb	671.589 ppb	79,138.179 ppb	23.200 ppb	66.720 ppb	128.852 ppb
Concentration per Run 1	99.773 %	1,273.877 ppb	116.904 ppb	127.215 ppb	578.308 ppb	67,873.479 ppb	20.296 ppb	56.365 ppb	113.695 ppb
Concentration per Run 2	96.202 %	1,485.019 ppb	139.564 ppb	154.090 ppb	685.894 ppb	80,581.171 ppb	23.906 ppb	69.334 ppb	132.353 ppb
Concentration per Run 3	92.067 %	1,543.648 ppb	148.763 ppb	166.796 ppb	750.565 ppb	88,959.887 ppb	25.398 ppb	74.460 ppb	140.507 ppb
Concentration RSD	4.0 %	9.9 %	12.1 %	13.5 %	13.0 %	13.4 %	11.3 %	14.0 %	10.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	332.042 ppb	85.677 %	29.068 ppb	5.952 ppb	188.372 ppb	11.924 ppb	83.963 %	1.685 ppb	1.271 ppb
Concentration per Run 1	290.451 ppb	89.101 %	25.383 ppb	4.824 ppb	162.938 ppb	10.572 ppb	87.398 %	1.420 ppb	1.044 ppb
Concentration per Run 2	340.323 ppb	85.874 %	30.474 ppb	6.338 ppb	193.518 ppb	12.265 ppb	83.341 %	1.782 ppb	1.412 ppb
Concentration per Run 3	365.351 ppb	82.055 %	31.347 ppb	6.693 ppb	208.660 ppb	12.935 ppb	81.151 %	1.854 ppb	1.358 ppb
Concentration RSD	11.5 %	4.1 %	11.1 %	16.7 %	12.4 %	10.2 %	3.8 %	13.8 %	15.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.889 %	19.893 ppb	1.384 ppb	121.967 ppb	87.856 %	86.182 %	0.648 ppb	0.603 ppb	183.269 ppb
Concentration per Run 1	90.211 %	17.305 ppb	1.276 ppb	107.388 ppb	90.236 %	88.849 %	0.519 ppb	0.537 ppb	161.043 ppb
Concentration per Run 2	86.146 %	20.686 ppb	1.293 ppb	126.597 ppb	86.578 %	84.150 %	0.733 ppb	0.629 ppb	187.622 ppb
Concentration per Run 3	84.310 %	21.687 ppb	1.582 ppb	131.915 ppb	86.753 %	85.549 %	0.691 ppb	0.642 ppb	201.141 ppb
Concentration RSD	3.5 %	11.5 %	12.4 %	10.6 %	2.3 %	2.8 %	17.5 %	9.5 %	11.1 %

Category	209Bi (KED AGD)
Concentration average	87.963 %
Concentration per Run 1	89.609 %
Concentration per Run 2	87.757 %
Concentration per Run 3	86.524 %
Concentration RSD	1.8 %

Analysis index: 29 | Analysis started at: 3/7/2018 9:37:09 AM | Rack: 1
Analysis label: L1807335-01D10 CT-6020TS | User name: ALPHALAB\metals-instrument | Vial: 3

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.639 %	94.790 %	1.266 ppb	14,479.459 ppb	15,090.766 ppb	23,863.794 ppb	6,628.663 ppb	8,984.167 ppb	83.695 %
Concentration per Run 1	78.133 %	97.151 %	1.316 ppb	13,313.576 ppb	14,133.891 ppb	21,804.132 ppb	6,029.392 ppb	7,781.495 ppb	83.534 %
Concentration per Run 2	78.828 %	97.980 %	1.263 ppb	14,566.535 ppb	14,958.281 ppb	24,073.763 ppb	6,473.324 ppb	9,006.345 ppb	84.163 %
Concentration per Run 3	78.956 %	89.240 %	1.220 ppb	15,558.266 ppb	16,180.124 ppb	25,713.485 ppb	7,383.274 ppb	10,164.659 ppb	83.388 %
Concentration RSD	0.6 %	5.1 %	3.8 %	7.8 %	6.8 %	8.2 %	10.4 %	13.3 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	98.066 %	1,110.190 ppb	74.414 ppb	78.192 ppb	545.908 ppb	47,474.283 ppb	16.777 ppb	44.410 ppb	239.878 ppb
Concentration per Run 1	97.564 %	980.919 ppb	65.925 ppb	71.305 ppb	499.405 ppb	43,046.724 ppb	14.994 ppb	41.662 ppb	218.272 ppb
Concentration per Run 2	98.763 %	1,099.250 ppb	76.000 ppb	80.357 ppb	560.546 ppb	48,996.204 ppb	17.587 ppb	43.288 ppb	249.417 ppb
Concentration per Run 3	97.870 %	1,250.400 ppb	81.318 ppb	82.915 ppb	577.774 ppb	50,379.920 ppb	17.751 ppb	48.280 ppb	251.944 ppb
Concentration RSD	0.6 %	12.2 %	10.5 %	7.8 %	7.5 %	8.2 %	9.2 %	7.8 %	7.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	707.649 ppb	90.900 %	19.272 ppb	4.168 ppb	63.155 ppb	2.541 ppb	89.052 %	2.030 ppb	2.894 ppb
Concentration per Run 1	642.439 ppb	91.747 %	18.055 ppb	3.568 ppb	56.017 ppb	2.111 ppb	90.442 %	1.902 ppb	2.749 ppb
Concentration per Run 2	736.532 ppb	89.949 %	19.873 ppb	4.088 ppb	65.605 ppb	2.914 ppb	87.933 %	2.105 ppb	3.013 ppb
Concentration per Run 3	743.975 ppb	91.005 %	19.887 ppb	4.847 ppb	67.843 ppb	2.597 ppb	88.781 %	2.083 ppb	2.919 ppb
Concentration RSD	8.0 %	1.0 %	5.5 %	15.4 %	9.9 %	15.9 %	1.4 %	5.5 %	4.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	89.659 %	35.583 ppb	2.158 ppb	231.202 ppb	91.487 %	91.903 %	0.413 ppb	0.611 ppb	591.336 ppb
Concentration per Run 1	90.135 %	31.575 ppb	1.966 ppb	205.054 ppb	92.360 %	93.134 %	0.388 ppb	0.576 ppb	540.143 ppb
Concentration per Run 2	88.869 %	37.071 ppb	2.241 ppb	243.746 ppb	91.082 %	91.429 %	0.442 ppb	0.626 ppb	610.209 ppb
Concentration per Run 3	89.974 %	38.104 ppb	2.267 ppb	244.806 ppb	91.020 %	91.145 %	0.410 ppb	0.630 ppb	623.656 ppb
Concentration RSD	0.8 %	9.9 %	7.7 %	9.8 %	0.8 %	1.2 %	6.6 %	4.9 %	7.6 %

Category	209Bi (KED AGD)
Concentration average	90.784 %
Concentration per Run 1	91.355 %
Concentration per Run 2	91.737 %
Concentration per Run 3	89.259 %
Concentration RSD	1.5 %

Analysis index: 30 Analysis started at: 3/7/2018 9:41:01 AM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.365 %	94.514 %	97.022 ppb	10,068.339 ppb	10,993.776 ppb	108.602 ppb	10,315.280 ppb	10,691.592 ppb	85.030 %
Concentration per Run 1	80.337 %	95.046 %	96.849 ppb	8,973.803 ppb	9,754.753 ppb	100.319 ppb	9,109.331 ppb	9,330.538 ppb	85.163 %
Concentration per Run 2	80.687 %	93.961 %	97.659 ppb	10,658.394 ppb	11,524.619 ppb	113.089 ppb	11,170.946 ppb	11,625.231 ppb	86.225 %
Concentration per Run 3	80.070 %	94.535 %	96.560 ppb	10,572.820 ppb	11,701.955 ppb	112.399 ppb	10,665.564 ppb	11,119.008 ppb	83.700 %
Recovery Percentage 1			97.022 %	100.683 %	109.938 %	108.602 %	103.153 %	106.916 %	
Concentration RSD	0.4 %	0.6 %	0.6 %	9.4 %	9.8 %	6.6 %	10.4 %	11.3 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	98.044 %	106.175 ppb	100.171 ppb	101.243 ppb	98.991 ppb	10,158.083 ppb	108.950 ppb	107.923 ppb	105.621 ppb
Concentration per Run 1	95.783 %	92.534 ppb	88.376 ppb	89.492 ppb	87.791 ppb	9,145.946 ppb	98.604 ppb	100.035 ppb	97.983 ppb
Concentration per Run 2	100.736 %	114.739 ppb	105.089 ppb	107.346 ppb	104.045 ppb	10,530.675 ppb	112.547 ppb	109.929 ppb	108.535 ppb
Concentration per Run 3	97.612 %	111.252 ppb	107.047 ppb	106.893 ppb	105.136 ppb	10,797.629 ppb	115.700 ppb	113.805 ppb	110.347 ppb
Recovery Percentage 1		106.175 %	100.171 %	101.243 %	98.991 %	101.581 %	108.950 %	107.923 %	105.621 %
Concentration RSD	2.6 %	11.2 %	10.2 %	10.1 %	9.8 %	8.7 %	8.4 %	6.6 %	6.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	102.721 ppb	90.839 %	103.148 ppb	102.665 ppb	102.495 ppb	104.587 ppb	91.386 %	101.544 ppb	100.991 ppb
Concentration per Run 1	92.918 ppb	89.579 %	91.165 ppb	94.721 ppb	90.787 ppb	92.459 ppb	92.476 %	91.120 ppb	89.009 ppb
Concentration per Run 2	106.687 ppb	92.948 %	106.419 ppb	105.018 ppb	107.388 ppb	109.457 ppb	89.532 %	107.450 ppb	108.386 ppb
Concentration per Run 3	108.559 ppb	89.990 %	111.860 ppb	108.255 ppb	109.310 ppb	111.846 ppb	92.150 %	106.063 ppb	105.577 ppb
Recovery Percentage 1	102.721 %		103.148 %	102.665 %	102.495 %	104.587 %		101.544 %	100.991 %
Concentration RSD	8.3 %	2.0 %	10.4 %	6.9 %	9.9 %	10.1 %	1.8 %	8.9 %	10.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	92.521 %	106.175 ppb	102.825 ppb	105.138 ppb	94.985 %	95.126 %	102.448 ppb	100.363 ppb	98.280 ppb
Concentration per Run 1	93.670 %	92.493 ppb	90.783 ppb	92.524 ppb	95.799 %	94.812 %	90.810 ppb	90.421 ppb	87.726 ppb
Concentration per Run 2	92.127 %	111.153 ppb	106.758 ppb	111.973 ppb	92.560 %	94.059 %	108.012 ppb	105.025 ppb	104.630 ppb
Concentration per Run 3	91.764 %	114.878 ppb	110.934 ppb	110.917 ppb	96.596 %	96.506 %	108.522 ppb	105.643 ppb	102.484 ppb
Recovery Percentage 1		106.175 %	102.825 %	105.138 %			102.448 %	100.363 %	98.280 %
Concentration RSD	1.1 %	11.3 %	10.3 %	10.4 %	2.3 %	1.3 %	9.8 %	8.6 %	9.4 %

Category	209Bi (KED AGD)
Concentration average	91.559 %
Concentration per Run 1	92.903 %
Concentration per Run 2	90.807 %
Concentration per Run 3	90.967 %
Recovery Percentage 1	
Concentration RSD	1.3 %

Analysis index: 31 Analysis started at: 3/7/2018 9:44:56 AM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.976 %	94.004 %	0.012 ppb	89.415 ppb	0.844 ppb	1.565 ppb	40.422 ppb	-0.894 ppb	80.054 %
Concentration per Run 1	79.938 %	96.194 %	0.008 ppb	64.901 ppb	1.073 ppb	1.470 ppb	32.517 ppb	-4.967 ppb	79.380 %
Concentration per Run 2	80.275 %	91.218 %	0.019 ppb	108.806 ppb	0.447 ppb	0.263 ppb	43.413 ppb	5.317 ppb	80.743 %
Concentration per Run 3	79.714 %	94.599 %	0.011 ppb	94.538 ppb	1.013 ppb	2.962 ppb	45.335 ppb	-3.033 ppb	80.041 %
Recovery Percentage 1			2.484 %	89.415 %	0.844 %	15.650 %	40.422 %	-0.894 %	
Concentration RSD	0.4 %	2.7 %	45.5 %	25.0 %	40.9 %	86.4 %	17.1 %	611.1 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.037 %	0.438 ppb	0.001 ppb	0.157 ppb	0.000 ppb	40.629 ppb	0.013 ppb	-0.062 ppb	-0.021 ppb
Concentration per Run 1	85.915 %	0.337 ppb	-0.012 ppb	0.186 ppb	0.005 ppb	39.673 ppb	0.003 ppb	-0.048 ppb	-0.010 ppb
Concentration per Run 2	95.544 %	0.627 ppb	0.007 ppb	0.214 ppb	-0.003 ppb	38.409 ppb	0.009 ppb	-0.008 ppb	-0.007 ppb
Concentration per Run 3	94.651 %	0.349 ppb	0.008 ppb	0.070 ppb	-0.003 ppb	43.805 ppb	0.028 ppb	-0.130 ppb	-0.045 ppb
Recovery Percentage 1		87.545 %	0.017 %	15.669 %	-0.020 %	81.258 %	2.613 %	-3.084 %	-2.062 %
Concentration RSD	5.8 %	37.5 %	1,388.6 %	49.0 %	2,374.8 %	6.9 %	98.9 %	100.7 %	103.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.005 ppb	87.944 %	0.093 ppb	0.285 ppb	0.017 ppb	0.365 ppb	89.739 %	0.053 ppb	0.007 ppb
Concentration per Run 1	-0.060 ppb	83.770 %	0.079 ppb	0.414 ppb	-0.010 ppb	0.304 ppb	88.518 %	0.059 ppb	0.005 ppb
Concentration per Run 2	0.007 ppb	90.457 %	0.125 ppb	0.125 ppb	0.001 ppb	0.375 ppb	90.117 %	0.047 ppb	0.001 ppb
Concentration per Run 3	0.069 ppb	89.604 %	0.074 ppb	0.316 ppb	0.060 ppb	0.415 ppb	90.583 %	0.054 ppb	0.014 ppb
Recovery Percentage 1	0.050 %		18.538 %	5.698 %	3.400 %	18.227 %		13.280 %	3.286 %
Concentration RSD	1,301.2 %	4.1 %	30.1 %	51.6 %	219.6 %	15.3 %	1.2 %	11.2 %	98.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	89.078 %	3.740 ppb	2.032 ppb	0.035 ppb	91.678 %	93.918 %	0.849 ppb	0.027 ppb	0.079 ppb
Concentration per Run 1	87.563 %	3.589 ppb	1.943 ppb	0.005 ppb	91.250 %	93.240 %	0.801 ppb	0.026 ppb	0.057 ppb
Concentration per Run 2	90.439 %	3.896 ppb	2.039 ppb	0.072 ppb	92.309 %	93.433 %	0.852 ppb	0.029 ppb	0.079 ppb
Concentration per Run 3	89.234 %	3.736 ppb	2.113 ppb	0.027 ppb	91.476 %	95.080 %	0.894 ppb	0.025 ppb	0.100 ppb
Recovery Percentage 1		124.672 %	50.789 %	6.902 %			42.454 %	5.360 %	15.749 %
Concentration RSD	1.6 %	4.1 %	4.2 %	99.1 %	0.6 %	1.1 %	5.5 %	8.0 %	27.3 %

Category	209Bi (KED AGD)
Concentration average	91.145 %
Concentration per Run 1	90.543 %
Concentration per Run 2	90.965 %
Concentration per Run 3	91.926 %
Recovery Percentage 1	
Concentration RSD	0.8 %

Analysis index: 32 | Analysis started at: 3/7/2018 10:08:49 AM | Rack: 1
Analysis label: WG1094941-1 2008TL | User name: ALPHALAB\metals-instrument | Vial: 15

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.001 %	102.084 %	0.007 ppb	66.483 ppb	6.924 ppb	3.329 ppb	22.972 ppb	192.818 ppb	86.812 %
Concentration per Run 1	83.925 %	111.121 %	0.008 ppb	25.393 ppb	5.225 ppb	2.234 ppb	30.358 ppb	151.493 ppb	86.675 %
Concentration per Run 2	83.977 %	100.595 %	0.008 ppb	79.236 ppb	8.414 ppb	3.818 ppb	9.478 ppb	193.163 ppb	87.054 %
Concentration per Run 3	84.101 %	94.535 %	0.004 ppb	94.820 ppb	7.133 ppb	3.935 ppb	29.081 ppb	233.798 ppb	86.706 %
Concentration RSD	0.1 %	8.2 %	32.3 %	54.8 %	23.2 %	28.5 %	50.9 %	21.3 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	106.125 %	0.218 ppb	0.023 ppb	0.170 ppb	0.073 ppb	7.667 ppb	0.000 ppb	-0.392 ppb	0.008 ppb
Concentration per Run 1	111.076 %	0.035 ppb	0.039 ppb	0.084 ppb	0.033 ppb	7.092 ppb	-0.004 ppb	-0.356 ppb	-0.024 ppb
Concentration per Run 2	104.824 %	0.391 ppb	0.024 ppb	0.257 ppb	0.196 ppb	7.577 ppb	0.002 ppb	-0.440 ppb	0.028 ppb
Concentration per Run 3	102.475 %	0.228 ppb	0.006 ppb	0.170 ppb	-0.010 ppb	8.332 ppb	0.002 ppb	-0.380 ppb	0.019 ppb
Concentration RSD	4.2 %	81.7 %	72.2 %	50.7 %	148.6 %	8.2 %	3,577.4 %	11.0 %	363.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.321 ppb	102.890 %	0.011 ppb	0.070 ppb	0.176 ppb	0.074 ppb	100.122 %	0.009 ppb	0.008 ppb
Concentration per Run 1	0.273 ppb	106.420 %	0.018 ppb	0.078 ppb	0.160 ppb	0.025 ppb	105.984 %	0.007 ppb	0.003 ppb
Concentration per Run 2	0.349 ppb	101.837 %	0.019 ppb	0.036 ppb	0.228 ppb	0.078 ppb	98.560 %	0.014 ppb	0.015 ppb
Concentration per Run 3	0.341 ppb	100.414 %	-0.004 ppb	0.096 ppb	0.141 ppb	0.119 ppb	95.823 %	0.007 ppb	0.004 ppb
Concentration RSD	13.0 %	3.1 %	117.9 %	44.3 %	25.9 %	63.5 %	5.3 %	42.5 %	91.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	101.569 %	0.914 ppb	0.249 ppb	0.039 ppb	99.146 %	102.754 %	0.049 ppb	0.003 ppb	0.056 ppb
Concentration per Run 1	108.373 %	0.781 ppb	0.202 ppb	0.116 ppb	101.703 %	107.239 %	-0.003 ppb	0.003 ppb	0.046 ppb
Concentration per Run 2	99.628 %	1.005 ppb	0.238 ppb	0.021 ppb	98.625 %	102.867 %	0.053 ppb	0.005 ppb	0.065 ppb
Concentration per Run 3	96.708 %	0.955 ppb	0.308 ppb	-0.020 ppb	97.110 %	98.157 %	0.097 ppb	0.002 ppb	0.057 ppb
Concentration RSD	6.0 %	12.9 %	21.5 %	180.0 %	2.4 %	4.4 %	102.4 %	55.7 %	17.0 %

Category	209Bi (KED AGD)
Concentration average	100.617 %
Concentration per Run 1	106.341 %
Concentration per Run 2	98.117 %
Concentration per Run 3	97.393 %
Concentration RSD	4.9 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.603 %	102.849 %	11.527 ppb	2,324.461 ppb	2,297.897 ppb	474.225 ppb	2,177.140 ppb	1,923.236 ppb	88.049 %
Concentration per Run 1	83.804 %	103.913 %	11.673 ppb	2,108.774 ppb	2,032.013 ppb	414.381 ppb	1,813.914 ppb	1,481.598 ppb	89.646 %
Concentration per Run 2	83.119 %	105.188 %	11.375 ppb	2,421.506 ppb	2,397.297 ppb	509.112 ppb	2,442.637 ppb	2,268.853 ppb	87.304 %
Concentration per Run 3	83.886 %	99.447 %	11.533 ppb	2,443.102 ppb	2,464.381 ppb	499.183 ppb	2,274.868 ppb	2,019.256 ppb	87.198 %
Concentration RSD	0.5 %	2.9 %	1.3 %	8.0 %	10.1 %	11.0 %	15.0 %	20.9 %	1.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	107.496 %	186.709 ppb	115.145 ppb	46.381 ppb	113.853 ppb	227.420 ppb	108.132 ppb	108.748 ppb	52.927 ppb
Concentration per Run 1	100.995 %	159.582 ppb	104.087 ppb	42.455 ppb	101.490 ppb	206.999 ppb	98.760 ppb	98.795 ppb	48.208 ppb
Concentration per Run 2	115.752 %	204.108 ppb	120.139 ppb	47.407 ppb	119.089 ppb	238.435 ppb	109.638 ppb	109.785 ppb	54.254 ppb
Concentration per Run 3	105.741 %	196.438 ppb	121.208 ppb	49.282 ppb	120.979 ppb	236.826 ppb	115.998 ppb	117.665 ppb	56.318 ppb
Concentration RSD	7.0 %	12.7 %	8.3 %	7.6 %	9.4 %	7.8 %	8.1 %	8.7 %	8.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	107.259 ppb	101.143 %	25.665 ppb	26.060 ppb	210.395 ppb	204.661 ppb	97.971 %	10.746 ppb	11.071 ppb
Concentration per Run 1	94.118 ppb	101.160 %	22.386 ppb	23.813 ppb	181.036 ppb	178.280 ppb	99.929 %	9.686 ppb	9.684 ppb
Concentration per Run 2	111.920 ppb	106.638 %	26.520 ppb	27.389 ppb	226.887 ppb	213.436 ppb	98.202 %	11.091 ppb	11.477 ppb
Concentration per Run 3	115.741 ppb	95.631 %	28.090 ppb	26.980 ppb	223.262 ppb	222.267 ppb	95.782 %	11.461 ppb	12.053 ppb
Concentration RSD	10.8 %	5.4 %	11.5 %	7.5 %	12.1 %	11.4 %	2.1 %	8.7 %	11.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	99.453 %	180.548 ppb	116.661 ppb	433.208 ppb	98.503 %	102.405 %	0.110 ppb	24.212 ppb	104.571 ppb
Concentration per Run 1	99.638 %	160.605 ppb	101.191 ppb	372.830 ppb	99.404 %	101.695 %	0.061 ppb	21.580 ppb	90.604 ppb
Concentration per Run 2	102.615 %	185.629 ppb	122.061 ppb	462.771 ppb	99.744 %	106.434 %	0.105 ppb	25.078 ppb	109.222 ppb
Concentration per Run 3	96.107 %	195.409 ppb	126.730 ppb	464.024 ppb	96.361 %	99.086 %	0.162 ppb	25.979 ppb	113.887 ppb
Concentration RSD	3.3 %	9.9 %	11.7 %	12.1 %	1.9 %	3.6 %	46.3 %	9.6 %	11.8 %

Category	209Bi (KED AGD)
Concentration average	99.253 %
Concentration per Run 1	101.480 %
Concentration per Run 2	102.160 %
Concentration per Run 3	94.118 %
Concentration RSD	4.5 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.495 %	101.616 %	0.821 ppb	10,420.573 ppb	14,361.001 ppb	15,983.796 ppb	4,930.678 ppb	16,643.425 ppb	93.494 %
Concentration per Run 1	82.261 %	102.063 %	0.827 ppb	9,551.995 ppb	12,745.220 ppb	14,114.937 ppb	4,373.036 ppb	14,708.159 ppb	94.009 %
Concentration per Run 2	82.941 %	99.639 %	0.798 ppb	10,667.944 ppb	14,713.579 ppb	16,123.128 ppb	4,998.302 ppb	16,940.210 ppb	93.754 %
Concentration per Run 3	82.284 %	103.147 %	0.837 ppb	11,041.781 ppb	15,624.205 ppb	17,713.323 ppb	5,420.695 ppb	18,281.906 ppb	92.719 %
Concentration RSD	0.5 %	1.8 %	2.4 %	7.4 %	10.2 %	11.3 %	10.7 %	10.8 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	114.670 %	882.450 ppb	64.424 ppb	124.153 ppb	349.697 ppb	34,347.212 ppb	11.794 ppb	44.437 ppb	254.077 ppb
Concentration per Run 1	110.581 %	785.219 ppb	61.770 ppb	115.528 ppb	324.285 ppb	31,899.072 ppb	11.302 ppb	43.313 ppb	242.399 ppb
Concentration per Run 2	112.625 %	908.219 ppb	67.184 ppb	129.626 ppb	359.675 ppb	35,566.898 ppb	12.426 ppb	45.897 ppb	266.536 ppb
Concentration per Run 3	120.804 %	953.912 ppb	64.318 ppb	127.306 ppb	365.131 ppb	35,575.668 ppb	11.653 ppb	44.101 ppb	253.295 ppb
Concentration RSD	4.7 %	9.9 %	4.2 %	6.1 %	6.3 %	6.2 %	4.9 %	3.0 %	4.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	564.462 ppb	96.430 %	9.333 ppb	2.944 ppb	58.116 ppb	6.429 ppb	91.852 %	4.707 ppb	3.094 ppb
Concentration per Run 1	525.383 ppb	92.566 %	8.503 ppb	2.800 ppb	52.501 ppb	6.029 ppb	91.938 %	4.355 ppb	2.847 ppb
Concentration per Run 2	586.004 ppb	95.028 %	9.126 ppb	2.794 ppb	59.387 ppb	6.485 ppb	91.437 %	4.883 ppb	3.176 ppb
Concentration per Run 3	581.998 ppb	101.696 %	10.370 ppb	3.238 ppb	62.459 ppb	6.774 ppb	92.182 %	4.883 ppb	3.261 ppb
Concentration RSD	6.0 %	4.9 %	10.2 %	8.7 %	8.8 %	5.8 %	0.4 %	6.5 %	7.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	95.640 %	31.252 ppb	5.484 ppb	126.361 ppb	96.779 %	98.076 %	1.099 ppb	0.380 ppb	824.471 ppb
Concentration per Run 1	92.776 %	28.146 ppb	4.991 ppb	113.554 ppb	95.643 %	94.805 %	0.974 ppb	0.345 ppb	746.917 ppb
Concentration per Run 2	95.060 %	33.683 ppb	5.607 ppb	132.416 ppb	95.307 %	96.163 %	1.242 ppb	0.400 ppb	861.737 ppb
Concentration per Run 3	99.083 %	31.928 ppb	5.854 ppb	133.112 ppb	99.388 %	103.259 %	1.082 ppb	0.394 ppb	864.759 ppb
Concentration RSD	3.3 %	9.1 %	8.1 %	8.8 %	2.3 %	4.6 %	12.3 %	7.9 %	8.1 %

Category	209Bi (KED AGD)
Concentration average	96.575 %
Concentration per Run 1	96.149 %
Concentration per Run 2	94.822 %
Concentration per Run 3	98.755 %
Concentration RSD	2.1 %

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Analysis label: L1807335-03D10 CT-6020TS | User name: ALPHALAB\metals-instrument | Vial: 5

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.502 %	97.810 %	0.960 ppb	12,322.358 ppb	12,700.954 ppb	18,980.190 ppb	5,663.234 ppb	6,546.907 ppb	90.252 %
Concentration per Run 1	83.986 %	98.490 %	0.999 ppb	11,177.844 ppb	11,121.383 ppb	16,644.383 ppb	5,012.067 ppb	5,475.239 ppb	91.523 %
Concentration per Run 2	82.633 %	92.175 %	0.961 ppb	13,065.745 ppb	13,650.684 ppb	19,880.823 ppb	6,022.277 ppb	7,138.451 ppb	89.920 %
Concentration per Run 3	83.888 %	102.764 %	0.921 ppb	12,723.485 ppb	13,330.794 ppb	20,415.365 ppb	5,955.358 ppb	7,027.030 ppb	89.314 %
Concentration RSD	0.9 %	5.4 %	4.1 %	8.2 %	10.8 %	10.8 %	10.0 %	14.2 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	109.360 %	794.750 ppb	57.998 ppb	87.858 ppb	525.433 ppb	42,272.496 ppb	12.818 ppb	38.015 ppb	238.820 ppb
Concentration per Run 1	105.506 %	680.501 ppb	52.454 ppb	80.534 ppb	478.245 ppb	38,501.287 ppb	12.241 ppb	35.529 ppb	219.306 ppb
Concentration per Run 2	106.680 %	855.212 ppb	60.702 ppb	92.626 ppb	544.979 ppb	44,111.474 ppb	13.350 ppb	38.673 ppb	252.084 ppb
Concentration per Run 3	115.893 %	848.539 ppb	60.838 ppb	90.414 ppb	553.075 ppb	44,204.727 ppb	12.862 ppb	39.842 ppb	245.071 ppb
Concentration RSD	5.2 %	12.5 %	8.3 %	7.3 %	7.8 %	7.7 %	4.3 %	5.9 %	7.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	889.980 ppb	96.361 %	13.173 ppb	2.576 ppb	46.458 ppb	4.038 ppb	93.681 %	2.303 ppb	7.477 ppb
Concentration per Run 1	808.532 ppb	94.504 %	12.077 ppb	2.322 ppb	40.961 ppb	3.374 ppb	93.547 %	2.110 ppb	6.682 ppb
Concentration per Run 2	937.987 ppb	93.415 %	13.634 ppb	2.901 ppb	49.377 ppb	4.235 ppb	91.185 %	2.475 ppb	7.812 ppb
Concentration per Run 3	923.421 ppb	101.164 %	13.810 ppb	2.505 ppb	49.037 ppb	4.506 ppb	96.310 %	2.323 ppb	7.937 ppb
Concentration RSD	8.0 %	4.4 %	7.2 %	11.5 %	10.3 %	14.6 %	2.7 %	8.0 %	9.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	96.165 %	15.879 ppb	2.497 ppb	77.661 ppb	96.137 %	98.539 %	0.702 ppb	0.398 ppb	143.236 ppb
Concentration per Run 1	95.434 %	13.991 ppb	2.106 ppb	70.302 ppb	94.397 %	96.981 %	0.452 ppb	0.348 ppb	127.577 ppb
Concentration per Run 2	91.938 %	17.379 ppb	2.626 ppb	79.771 ppb	93.194 %	94.156 %	0.755 ppb	0.428 ppb	150.925 ppb
Concentration per Run 3	101.125 %	16.268 ppb	2.758 ppb	82.910 ppb	100.821 %	104.479 %	0.899 ppb	0.419 ppb	151.207 ppb
Concentration RSD	4.8 %	10.9 %	13.8 %	8.5 %	4.3 %	5.4 %	32.5 %	11.1 %	9.5 %

Category	209Bi (KED AGD)
Concentration average	95.154 %
Concentration per Run 1	96.568 %
Concentration per Run 2	92.549 %
Concentration per Run 3	96.346 %
Concentration RSD	2.4 %

Analysis index: 36
Analysis label: L1807335-04D10 CT-6020TS
Analysis started at: 3/7/2018 10:24:15 AM
User name: ALPHALAB\metals-instrument
Rack: 1
Vial: 6

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.783 %	103.806 %	1.362 ppb	11,341.339 ppb	14,894.339 ppb	26,668.447 ppb	6,578.363 ppb	3,220.896 ppb	87.901 %
Concentration per Run 1	83.936 %	107.102 %	1.334 ppb	10,298.456 ppb	13,460.415 ppb	23,973.039 ppb	6,109.775 ppb	2,939.191 ppb	88.015 %
Concentration per Run 2	84.249 %	103.466 %	1.368 ppb	11,901.240 ppb	15,627.387 ppb	27,967.217 ppb	6,676.653 ppb	3,395.579 ppb	88.299 %
Concentration per Run 3	83.164 %	100.851 %	1.383 ppb	11,824.321 ppb	15,595.216 ppb	28,065.085 ppb	6,948.660 ppb	3,327.919 ppb	87.388 %
Concentration RSD	0.7 %	3.0 %	1.8 %	8.0 %	8.3 %	8.8 %	6.5 %	7.6 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	105.396 %	1,048.099 ppb	74.994 ppb	67.241 ppb	654.858 ppb	56,755.805 ppb	17.262 ppb	39.155 ppb	28.339 ppb
Concentration per Run 1	107.291 %	932.593 ppb	69.066 ppb	60.249 ppb	593.501 ppb	51,420.086 ppb	15.625 ppb	34.520 ppb	25.832 ppb
Concentration per Run 2	104.965 %	1,090.067 ppb	77.368 ppb	71.040 ppb	683.381 ppb	59,574.369 ppb	18.191 ppb	40.798 ppb	29.209 ppb
Concentration per Run 3	103.931 %	1,121.639 ppb	78.547 ppb	70.433 ppb	687.692 ppb	59,272.961 ppb	17.969 ppb	42.147 ppb	29.976 ppb
Concentration RSD	1.6 %	9.7 %	6.9 %	9.0 %	8.1 %	8.1 %	8.2 %	10.4 %	7.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	114.815 ppb	92.233 %	16.299 ppb	4.748 ppb	39.111 ppb	25.968 ppb	91.959 %	0.230 ppb	0.358 ppb
Concentration per Run 1	103.593 ppb	92.585 %	15.163 ppb	4.072 ppb	35.338 ppb	23.704 ppb	92.995 %	0.232 ppb	0.312 ppb
Concentration per Run 2	121.871 ppb	91.117 %	17.162 ppb	5.257 ppb	41.208 ppb	27.606 ppb	91.061 %	0.214 ppb	0.363 ppb
Concentration per Run 3	118.980 ppb	92.996 %	16.571 ppb	4.913 ppb	40.788 ppb	26.594 ppb	91.821 %	0.242 ppb	0.399 ppb
Concentration RSD	8.6 %	1.1 %	6.3 %	12.8 %	8.4 %	7.8 %	1.1 %	6.2 %	12.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	92.258 %	4.488 ppb	0.701 ppb	70.037 ppb	92.436 %	93.055 %	0.253 ppb	0.378 ppb	22.304 ppb
Concentration per Run 1	92.975 %	3.979 ppb	0.611 ppb	60.996 ppb	91.934 %	93.183 %	0.172 ppb	0.347 ppb	19.592 ppb
Concentration per Run 2	91.853 %	4.689 ppb	0.683 ppb	76.638 ppb	92.381 %	92.435 %	0.268 ppb	0.385 ppb	23.778 ppb
Concentration per Run 3	91.947 %	4.797 ppb	0.810 ppb	72.478 ppb	92.991 %	93.548 %	0.320 ppb	0.401 ppb	23.544 ppb
Concentration RSD	0.7 %	9.9 %	14.4 %	11.6 %	0.6 %	0.6 %	29.5 %	7.4 %	10.5 %

Category	209Bi (KED AGD)
Concentration average	92.825 %
Concentration per Run 1	96.612 %
Concentration per Run 2	90.546 %
Concentration per Run 3	91.318 %
Concentration RSD	3.6 %

Analysis index: 37 | Analysis started at: 3/7/2018 10:28:08 AM | Rack: 1
Analysis label: L1807335-05D10 CT-6020TS | User name: ALPHALAB\metals-instrument | Vial: 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.033 %	99.724 %	0.879 ppb	16,629.074 ppb	14,113.345 ppb	16,403.554 ppb	4,637.118 ppb	12,241.892 ppb	87.151 %
Concentration per Run 1	82.414 %	102.318 %	0.873 ppb	15,249.296 ppb	12,834.708 ppb	14,723.047 ppb	4,228.836 ppb	10,801.822 ppb	86.384 %
Concentration per Run 2	83.312 %	97.789 %	0.874 ppb	17,176.818 ppb	14,751.867 ppb	17,069.666 ppb	4,803.462 ppb	12,924.300 ppb	88.223 %
Concentration per Run 3	83.374 %	99.064 %	0.891 ppb	17,461.108 ppb	14,753.458 ppb	17,417.949 ppb	4,879.055 ppb	12,999.553 ppb	86.846 %
Concentration RSD	0.6 %	2.3 %	1.2 %	7.2 %	7.8 %	8.9 %	7.7 %	10.2 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.044 %	673.086 ppb	65.233 ppb	97.810 ppb	376.101 ppb	35,228.461 ppb	11.667 ppb	39.094 ppb	235.517 ppb
Concentration per Run 1	103.791 %	597.967 ppb	58.707 ppb	86.782 ppb	332.615 ppb	31,238.856 ppb	10.454 ppb	35.813 ppb	211.289 ppb
Concentration per Run 2	100.219 %	707.424 ppb	68.662 ppb	103.395 ppb	397.124 ppb	36,863.243 ppb	12.563 ppb	40.229 ppb	248.382 ppb
Concentration per Run 3	102.122 %	713.867 ppb	68.330 ppb	103.252 ppb	398.563 ppb	37,583.283 ppb	11.983 ppb	41.241 ppb	246.881 ppb
Concentration RSD	1.8 %	9.7 %	8.7 %	9.8 %	10.0 %	9.9 %	9.3 %	7.4 %	8.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	546.493 ppb	92.964 %	8.338 ppb	2.970 ppb	54.427 ppb	8.280 ppb	92.289 %	7.058 ppb	2.493 ppb
Concentration per Run 1	492.664 ppb	94.496 %	7.291 ppb	2.795 ppb	47.810 ppb	7.331 ppb	94.661 %	6.503 ppb	2.139 ppb
Concentration per Run 2	568.297 ppb	92.360 %	8.613 ppb	3.668 ppb	56.861 ppb	8.458 ppb	90.675 %	7.299 ppb	2.473 ppb
Concentration per Run 3	578.519 ppb	92.037 %	9.108 ppb	2.449 ppb	58.610 ppb	9.050 ppb	91.532 %	7.372 ppb	2.868 ppb
Concentration RSD	8.6 %	1.4 %	11.3 %	21.1 %	10.7 %	10.5 %	2.3 %	6.8 %	14.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	93.195 %	15.736 ppb	2.603 ppb	92.882 ppb	95.132 %	95.234 %	0.734 ppb	0.416 ppb	343.568 ppb
Concentration per Run 1	94.258 %	13.726 ppb	2.151 ppb	84.288 ppb	95.510 %	95.808 %	0.647 ppb	0.369 ppb	310.674 ppb
Concentration per Run 2	91.950 %	16.164 ppb	2.824 ppb	99.378 ppb	93.661 %	93.834 %	0.785 ppb	0.439 ppb	355.256 ppb
Concentration per Run 3	93.378 %	17.318 ppb	2.835 ppb	94.981 ppb	96.226 %	96.061 %	0.769 ppb	0.439 ppb	364.773 ppb
Concentration RSD	1.2 %	11.7 %	15.0 %	8.4 %	1.4 %	1.3 %	10.3 %	9.6 %	8.4 %

Category	209Bi (KED AGD)
Concentration average	95.566 %
Concentration per Run 1	95.983 %
Concentration per Run 2	96.212 %
Concentration per Run 3	94.502 %
Concentration RSD	1.0 %

Analysis index: 38 | Analysis started at: 3/7/2018 10:32:01 AM | Rack: 1
Analysis label: WG1094941-3D10 2008TL | User name: ALPHALAB\metals-instrument | Vial: 17

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.563 %	99.447 %	5.819 ppb	3,852.130 ppb	5,321.357 ppb	238.952 ppb	1,213.598 ppb	10,862.028 ppb	83.306 %
Concentration per Run 1	83.936 %	99.064 %	5.754 ppb	3,613.951 ppb	4,835.874 ppb	223.051 ppb	1,140.833 ppb	9,816.979 ppb	83.944 %
Concentration per Run 2	83.915 %	97.980 %	5.744 ppb	3,962.697 ppb	5,517.080 ppb	250.212 ppb	1,304.055 ppb	11,395.689 ppb	83.783 %
Concentration per Run 3	82.838 %	101.297 %	5.959 ppb	3,979.742 ppb	5,611.117 ppb	243.593 ppb	1,195.905 ppb	11,373.416 ppb	82.189 %
Concentration RSD	0.8 %	1.7 %	2.1 %	5.4 %	8.0 %	5.9 %	6.8 %	8.3 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	94.698 %	107.401 ppb	63.033 ppb	24.799 ppb	66.027 ppb	197.221 ppb	57.087 ppb	55.808 ppb	32.666 ppb
Concentration per Run 1	94.557 %	96.370 ppb	56.820 ppb	21.941 ppb	61.868 ppb	204.483 ppb	51.238 ppb	51.062 ppb	28.671 ppb
Concentration per Run 2	94.252 %	113.206 ppb	64.946 ppb	25.795 ppb	70.241 ppb	197.696 ppb	59.915 ppb	59.490 ppb	34.754 ppb
Concentration per Run 3	95.285 %	112.627 ppb	67.334 ppb	26.660 ppb	65.973 ppb	189.483 ppb	60.107 ppb	56.873 ppb	34.573 ppb
Concentration RSD	0.6 %	8.9 %	8.7 %	10.1 %	6.3 %	3.8 %	8.9 %	7.7 %	10.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	59.406 ppb	93.443 %	12.863 ppb	13.118 ppb	176.860 ppb	104.726 ppb	93.241 %	5.483 ppb	5.628 ppb
Concentration per Run 1	51.880 ppb	95.597 %	11.329 ppb	12.331 ppb	156.191 ppb	92.861 ppb	94.618 %	5.028 ppb	4.940 ppb
Concentration per Run 2	62.854 ppb	90.488 %	13.536 ppb	13.654 ppb	187.733 ppb	109.541 ppb	92.853 %	5.730 ppb	6.011 ppb
Concentration per Run 3	63.484 ppb	94.242 %	13.723 ppb	13.370 ppb	186.655 ppb	111.775 ppb	92.251 %	5.691 ppb	5.932 ppb
Concentration RSD	11.0 %	2.8 %	10.3 %	5.3 %	10.1 %	9.9 %	1.3 %	7.2 %	10.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	93.610 %	105.691 ppb	62.835 ppb	218.980 ppb	95.889 %	98.006 %	0.037 ppb	12.479 ppb	53.756 ppb
Concentration per Run 1	95.202 %	96.554 ppb	55.703 ppb	197.534 ppb	96.114 %	99.358 %	0.000 ppb	11.411 ppb	48.162 ppb
Concentration per Run 2	93.270 %	107.224 ppb	64.348 ppb	224.991 ppb	96.142 %	97.623 %	0.061 ppb	12.721 ppb	55.439 ppb
Concentration per Run 3	92.358 %	113.296 ppb	68.456 ppb	234.416 ppb	95.412 %	97.037 %	0.049 ppb	13.306 ppb	57.668 ppb
Concentration RSD	1.6 %	8.0 %	10.4 %	8.8 %	0.4 %	1.2 %	89.2 %	7.8 %	9.2 %

Category	209Bi (KED AGD)
Concentration average	93.735 %
Concentration per Run 1	94.055 %
Concentration per Run 2	94.440 %
Concentration per Run 3	92.710 %
Concentration RSD	1.0 %

Analysis index: 39 | Analysis started at: 3/7/2018 10:35:53 AM | Rack: 1
Analysis label: WG1094941-4 2008TL | User name: ALPHALAB\metals-instrument | Vial: 18

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.079 %	98.852 %	0.035 ppb	25,817.658 ppb	40,508.272 ppb	5.768 ppb	1,575.415 ppb	98,024.247 ppb	80.154 %
Concentration per Run 1	79.503 %	98.554 %	0.034 ppb	23,999.516 ppb	37,349.597 ppb	4.258 ppb	1,438.624 ppb	87,999.066 ppb	81.555 %
Concentration per Run 2	79.020 %	99.638 %	0.034 ppb	26,562.194 ppb	41,706.336 ppb	5.262 ppb	1,647.784 ppb	102,523.055 ppb	78.518 %
Concentration per Run 3	78.715 %	98.363 %	0.038 ppb	26,891.263 ppb	42,468.883 ppb	7.783 ppb	1,639.836 ppb	103,550.619 ppb	80.391 %
Concentration RSD	0.5 %	0.7 %	7.4 %	6.1 %	6.8 %	31.5 %	7.5 %	8.9 %	1.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.858 %	134.020 ppb	0.468 ppb	0.699 ppb	46.341 ppb	293.300 ppb	0.189 ppb	1.095 ppb	52.350 ppb
Concentration per Run 1	91.644 %	119.204 ppb	0.439 ppb	0.758 ppb	42.026 ppb	263.172 ppb	0.169 ppb	0.905 ppb	47.052 ppb
Concentration per Run 2	93.382 %	142.875 ppb	0.455 ppb	0.712 ppb	49.364 ppb	312.992 ppb	0.194 ppb	1.205 ppb	57.055 ppb
Concentration per Run 3	93.547 %	139.982 ppb	0.512 ppb	0.627 ppb	47.634 ppb	303.735 ppb	0.203 ppb	1.176 ppb	52.944 ppb
Concentration RSD	1.1 %	9.6 %	8.1 %	9.5 %	8.3 %	9.0 %	9.5 %	15.1 %	9.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	32.560 ppb	89.988 %	0.039 ppb	0.462 ppb	739.927 ppb	0.630 ppb	87.650 %	0.042 ppb	0.010 ppb
Concentration per Run 1	29.321 ppb	90.158 %	0.035 ppb	0.189 ppb	658.374 ppb	0.407 ppb	88.713 %	0.047 ppb	0.005 ppb
Concentration per Run 2	34.687 ppb	88.511 %	0.009 ppb	0.453 ppb	783.389 ppb	0.758 ppb	85.987 %	0.039 ppb	0.014 ppb
Concentration per Run 3	33.671 ppb	91.296 %	0.073 ppb	0.744 ppb	778.019 ppb	0.723 ppb	88.249 %	0.039 ppb	0.013 ppb
Concentration RSD	8.8 %	1.6 %	82.1 %	60.1 %	9.6 %	30.7 %	1.7 %	10.4 %	48.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	93.274 %	8.646 ppb	0.964 ppb	8.087 ppb	97.622 %	93.840 %	0.115 ppb	0.005 ppb	2.021 ppb
Concentration per Run 1	94.788 %	7.767 ppb	0.912 ppb	7.727 ppb	98.859 %	94.995 %	0.058 ppb	0.004 ppb	1.837 ppb
Concentration per Run 2	91.510 %	9.172 ppb	1.039 ppb	8.122 ppb	95.823 %	92.873 %	0.116 ppb	0.006 ppb	2.141 ppb
Concentration per Run 3	93.523 %	8.998 ppb	0.943 ppb	8.413 ppb	98.183 %	93.651 %	0.170 ppb	0.006 ppb	2.085 ppb
Concentration RSD	1.8 %	8.9 %	6.9 %	4.3 %	1.6 %	1.1 %	49.0 %	21.6 %	8.0 %

Category	209Bi (KED AGD)
Concentration average	91.529 %
Concentration per Run 1	93.100 %
Concentration per Run 2	89.743 %
Concentration per Run 3	91.743 %
Concentration RSD	1.8 %

Analysis index: 40 | Analysis started at: 3/7/2018 10:39:45 AM | Rack: 1
Analysis label: L1807566-02 2008TL | User name: ALPHALAB\metals-instrument | Vial: 19

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.448 %	93.025 %	0.025 ppb	26,338.805 ppb	41,243.265 ppb	5.377 ppb	1,651.294 ppb	99,369.659 ppb	78.489 %
Concentration per Run 1	78.079 %	92.749 %	0.031 ppb	24,551.983 ppb	38,079.817 ppb	4.725 ppb	1,498.409 ppb	90,184.138 ppb	79.557 %
Concentration per Run 2	77.540 %	93.323 %	0.022 ppb	26,733.442 ppb	41,908.617 ppb	5.918 ppb	1,704.948 ppb	104,026.655 ppb	78.389 %
Concentration per Run 3	76.725 %	93.004 %	0.024 ppb	27,730.990 ppb	43,741.360 ppb	5.489 ppb	1,750.524 ppb	103,898.185 ppb	77.522 %
Concentration RSD	0.9 %	0.3 %	18.4 %	6.2 %	7.0 %	11.2 %	8.1 %	8.0 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.780 %	136.124 ppb	0.463 ppb	0.757 ppb	49.882 ppb	282.751 ppb	0.160 ppb	1.281 ppb	53.101 ppb
Concentration per Run 1	88.919 %	126.689 ppb	0.283 ppb	0.724 ppb	46.910 ppb	243.506 ppb	0.160 ppb	0.872 ppb	49.019 ppb
Concentration per Run 2	92.419 %	143.169 ppb	0.561 ppb	0.707 ppb	50.627 ppb	274.922 ppb	0.163 ppb	1.410 ppb	53.742 ppb
Concentration per Run 3	88.003 %	138.514 ppb	0.545 ppb	0.838 ppb	52.107 ppb	329.825 ppb	0.157 ppb	1.561 ppb	56.542 ppb
Concentration RSD	2.6 %	6.2 %	33.7 %	9.4 %	5.4 %	15.5 %	2.0 %	28.3 %	7.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	33.855 ppb	87.493 %	0.018 ppb	0.544 ppb	740.555 ppb	0.171 ppb	85.648 %	0.019 ppb	0.014 ppb
Concentration per Run 1	31.035 ppb	88.796 %	0.022 ppb	0.450 ppb	667.127 ppb	0.107 ppb	86.881 %	0.016 ppb	0.005 ppb
Concentration per Run 2	34.835 ppb	88.332 %	0.009 ppb	0.839 ppb	768.645 ppb	0.237 ppb	85.596 %	0.014 ppb	0.018 ppb
Concentration per Run 3	35.695 ppb	85.352 %	0.023 ppb	0.342 ppb	785.894 ppb	0.170 ppb	84.467 %	0.026 ppb	0.018 ppb
Concentration RSD	7.3 %	2.1 %	43.0 %	48.0 %	8.7 %	37.8 %	1.4 %	35.0 %	54.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	92.164 %	3.778 ppb	0.360 ppb	7.839 ppb	96.252 %	94.494 %	0.106 ppb	0.002 ppb	1.995 ppb
Concentration per Run 1	92.017 %	3.383 ppb	0.292 ppb	7.099 ppb	96.550 %	95.155 %	0.051 ppb	0.002 ppb	1.818 ppb
Concentration per Run 2	92.662 %	4.205 ppb	0.328 ppb	8.418 ppb	96.466 %	93.659 %	0.146 ppb	0.000 ppb	2.051 ppb
Concentration per Run 3	91.813 %	3.746 ppb	0.460 ppb	8.002 ppb	95.739 %	94.669 %	0.122 ppb	0.004 ppb	2.115 ppb
Concentration RSD	0.5 %	10.9 %	24.6 %	8.6 %	0.5 %	0.8 %	46.2 %	85.5 %	7.8 %

Category	209Bi (KED AGD)
Concentration average	90.908 %
Concentration per Run 1	91.570 %
Concentration per Run 2	90.963 %
Concentration per Run 3	90.191 %
Concentration RSD	0.8 %

Analysis index: 41 | Analysis started at: 3/7/2018 10:43:37 AM | Rack: 1
Analysis label: L1807567-01 2008TL | User name: ALPHALAB\metals-instrument | Vial: 20

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.874 %	91.898 %	0.016 ppb	36,632.133 ppb	14,521.643 ppb	3.403 ppb	1,545.381 ppb	46,708.637 ppb	77.916 %
Concentration per Run 1	77.468 %	92.111 %	0.015 ppb	33,863.048 ppb	13,320.291 ppb	3.161 ppb	1,422.465 ppb	42,281.782 ppb	77.825 %
Concentration per Run 2	76.814 %	92.621 %	0.012 ppb	37,606.027 ppb	14,902.810 ppb	2.518 ppb	1,602.439 ppb	48,339.152 ppb	77.995 %
Concentration per Run 3	76.339 %	90.963 %	0.020 ppb	38,427.324 ppb	15,341.827 ppb	4.530 ppb	1,611.240 ppb	49,504.979 ppb	77.928 %
Concentration RSD	0.7 %	0.9 %	23.7 %	6.6 %	7.3 %	30.2 %	6.9 %	8.3 %	0.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.389 %	63.398 ppb	0.087 ppb	0.807 ppb	115.935 ppb	813.854 ppb	0.300 ppb	5.129 ppb	61.120 ppb
Concentration per Run 1	89.060 %	55.244 ppb	0.073 ppb	0.831 ppb	107.137 ppb	732.139 ppb	0.251 ppb	4.558 ppb	57.384 ppb
Concentration per Run 2	89.083 %	66.659 ppb	0.115 ppb	0.764 ppb	119.823 ppb	851.569 ppb	0.324 ppb	5.375 ppb	64.107 ppb
Concentration per Run 3	90.023 %	68.291 ppb	0.072 ppb	0.825 ppb	120.846 ppb	857.853 ppb	0.327 ppb	5.453 ppb	61.869 ppb
Concentration RSD	0.6 %	11.2 %	28.6 %	4.6 %	6.6 %	8.7 %	14.3 %	9.7 %	5.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	69.260 ppb	84.679 %	0.138 ppb	0.101 ppb	103.778 ppb	0.341 ppb	85.356 %	0.018 ppb	0.017 ppb
Concentration per Run 1	64.374 ppb	84.140 %	0.134 ppb	0.013 ppb	95.734 ppb	0.350 ppb	87.260 %	0.008 ppb	0.035 ppb
Concentration per Run 2	71.645 ppb	84.589 %	0.148 ppb	0.080 ppb	107.545 ppb	0.273 ppb	84.060 %	0.017 ppb	0.019 ppb
Concentration per Run 3	71.760 ppb	85.308 %	0.133 ppb	0.210 ppb	108.056 ppb	0.400 ppb	84.748 %	0.029 ppb	-0.003 ppb
Concentration RSD	6.1 %	0.7 %	5.9 %	99.1 %	6.7 %	18.8 %	2.0 %	57.8 %	114.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.076 %	2.045 ppb	0.384 ppb	6.581 ppb	91.730 %	94.774 %	0.190 ppb	0.000 ppb	2.182 ppb
Concentration per Run 1	89.379 %	1.699 ppb	0.296 ppb	5.847 ppb	92.702 %	96.140 %	0.084 ppb	-0.001 ppb	2.034 ppb
Concentration per Run 2	88.196 %	2.186 ppb	0.382 ppb	6.673 ppb	91.280 %	94.176 %	0.255 ppb	0.003 ppb	2.239 ppb
Concentration per Run 3	86.653 %	2.249 ppb	0.473 ppb	7.225 ppb	91.207 %	94.007 %	0.232 ppb	-0.001 ppb	2.272 ppb
Concentration RSD	1.6 %	14.7 %	23.1 %	10.5 %	0.9 %	1.3 %	48.9 %	1,029.3 %	5.9 %

Category	209Bi (KED AGD)
Concentration average	90.349 %
Concentration per Run 1	89.528 %
Concentration per Run 2	91.027 %
Concentration per Run 3	90.493 %
Concentration RSD	0.8 %

Analysis index: 42 Analysis started at: 3/7/2018 10:47:29 AM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.350 %	95.981 %	109.514 ppb	10,328.869 ppb	10,284.727 ppb	103.505 ppb	9,466.582 ppb	9,854.692 ppb	86.539 %
Concentration per Run 1	80.104 %	99.001 %	108.836 ppb	9,671.281 ppb	9,617.876 ppb	98.155 ppb	8,429.032 ppb	8,380.580 ppb	86.753 %
Concentration per Run 2	79.517 %	94.408 %	110.316 ppb	10,516.933 ppb	10,584.251 ppb	102.687 ppb	9,899.258 ppb	10,333.374 ppb	85.937 %
Concentration per Run 3	81.430 %	94.535 %	109.391 ppb	10,798.392 ppb	10,652.053 ppb	109.672 ppb	10,071.454 ppb	10,850.122 ppb	86.926 %
Recovery Percentage 1			109.514 %	103.289 %	102.847 %	103.505 %	94.666 %	98.547 %	
Concentration RSD	1.2 %	2.7 %	0.7 %	5.7 %	5.6 %	5.6 %	9.5 %	13.2 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	100.352 %	95.962 ppb	104.465 ppb	106.493 ppb	103.446 ppb	10,411.614 ppb	103.768 ppb	101.619 ppb	100.080 ppb
Concentration per Run 1	93.758 %	81.613 ppb	98.312 ppb	98.512 ppb	96.141 ppb	9,659.034 ppb	96.617 ppb	92.913 ppb	91.773 ppb
Concentration per Run 2	104.025 %	103.236 ppb	105.421 ppb	109.896 ppb	107.142 ppb	10,589.272 ppb	105.835 ppb	103.903 ppb	104.172 ppb
Concentration per Run 3	103.274 %	103.036 ppb	109.662 ppb	111.071 ppb	107.056 ppb	10,986.535 ppb	108.851 ppb	108.042 ppb	104.296 ppb
Recovery Percentage 1		95.962 %	104.465 %	106.493 %	103.446 %	104.116 %	103.768 %	101.619 %	100.080 %
Concentration RSD	5.7 %	12.9 %	5.5 %	6.5 %	6.1 %	6.5 %	6.1 %	7.7 %	7.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	99.932 ppb	88.815 %	98.721 ppb	103.785 ppb	101.398 ppb	103.811 ppb	87.609 %	101.213 ppb	100.675 ppb
Concentration per Run 1	93.292 ppb	88.497 %	89.407 ppb	93.182 ppb	91.689 ppb	91.603 ppb	88.104 %	93.917 ppb	90.921 ppb
Concentration per Run 2	103.107 ppb	89.129 %	102.633 ppb	108.007 ppb	105.161 ppb	107.039 ppb	87.703 %	103.652 ppb	105.157 ppb
Concentration per Run 3	103.398 ppb	88.818 %	104.123 ppb	110.167 ppb	107.344 ppb	112.792 ppb	87.021 %	106.071 ppb	105.947 ppb
Recovery Percentage 1	99.932 %		98.721 %	103.785 %	101.398 %	103.811 %		101.213 %	100.675 %
Concentration RSD	5.8 %	0.4 %	8.2 %	8.9 %	8.4 %	10.6 %	0.6 %	6.4 %	8.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	89.795 %	96.244 ppb	100.021 ppb	103.495 ppb	93.326 %	97.011 %	98.483 ppb	98.949 ppb	97.588 ppb
Concentration per Run 1	90.085 %	85.688 ppb	89.201 ppb	91.024 ppb	93.459 %	97.139 %	88.033 ppb	91.054 ppb	88.658 ppb
Concentration per Run 2	90.288 %	97.288 ppb	101.890 ppb	108.781 ppb	92.744 %	96.586 %	102.276 ppb	102.635 ppb	100.641 ppb
Concentration per Run 3	89.012 %	105.756 ppb	108.972 ppb	110.681 ppb	93.774 %	97.310 %	105.139 ppb	103.158 ppb	103.463 ppb
Recovery Percentage 1		96.244 %	100.021 %	103.495 %			98.483 %	98.949 %	97.588 %
Concentration RSD	0.8 %	10.5 %	10.0 %	10.5 %	0.6 %	0.4 %	9.3 %	6.9 %	8.1 %

Category	209Bi (KED AGD)
Concentration average	93.376 %
Concentration per Run 1	93.950 %
Concentration per Run 2	92.637 %
Concentration per Run 3	93.539 %
Recovery Percentage 1	
Concentration RSD	0.7 %

Analysis index: 43 Analysis started at: 3/7/2018 10:51:24 AM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.270 %	91.005 %	0.013 ppb	57.641 ppb	0.103 ppb	-0.111 ppb	9.526 ppb	-6.586 ppb	74.300 %
Concentration per Run 1	78.792 %	91.537 %	0.016 ppb	34.891 ppb	1.162 ppb	-0.374 ppb	15.997 ppb	0.125 ppb	74.359 %
Concentration per Run 2	79.977 %	87.710 %	0.010 ppb	82.885 ppb	-0.115 ppb	-0.615 ppb	7.099 ppb	-9.954 ppb	74.807 %
Concentration per Run 3	79.040 %	93.770 %	0.013 ppb	55.147 ppb	-0.738 ppb	0.657 ppb	5.482 ppb	-9.930 ppb	73.732 %
Recovery Percentage 1			2.586 %	57.641 %	0.103 %	-1.106 %	9.526 %	-6.586 %	
Concentration RSD	0.8 %	3.4 %	20.2 %	41.8 %	936.2 %	610.8 %	59.4 %	88.3 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.811 %	0.004 ppb	0.003 ppb	0.112 ppb	-0.015 ppb	29.708 ppb	0.012 ppb	-0.029 ppb	0.083 ppb
Concentration per Run 1	82.062 %	-0.065 ppb	0.033 ppb	0.158 ppb	0.040 ppb	23.884 ppb	0.003 ppb	-0.156 ppb	0.062 ppb
Concentration per Run 2	89.647 %	0.178 ppb	-0.012 ppb	0.037 ppb	-0.028 ppb	30.555 ppb	0.036 ppb	0.075 ppb	0.044 ppb
Concentration per Run 3	85.724 %	-0.103 ppb	-0.012 ppb	0.140 ppb	-0.058 ppb	34.685 ppb	-0.004 ppb	-0.006 ppb	0.144 ppb
Recovery Percentage 1		0.705 %	0.054 %	11.188 %	-1.526 %	59.416 %	2.358 %	-1.449 %	8.327 %
Concentration RSD	4.4 %	4,312.8 %	980.3 %	58.3 %	330.2 %	18.3 %	181.3 %	403.2 %	63.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.018 ppb	84.725 %	0.051 ppb	0.277 ppb	0.026 ppb	0.427 ppb	87.247 %	0.049 ppb	-0.005 ppb
Concentration per Run 1	-0.031 ppb	84.578 %	0.051 ppb	0.407 ppb	0.019 ppb	0.230 ppb	90.256 %	0.043 ppb	-0.008 ppb
Concentration per Run 2	0.010 ppb	84.365 %	0.051 ppb	0.280 ppb	0.038 ppb	0.513 ppb	85.681 %	0.056 ppb	0.001 ppb
Concentration per Run 3	-0.031 ppb	85.233 %	0.051 ppb	0.144 ppb	0.022 ppb	0.539 ppb	85.804 %	0.048 ppb	-0.008 ppb
Recovery Percentage 1	-0.176 %		10.193 %	5.539 %	5.254 %	21.359 %		12.312 %	-2.367 %
Concentration RSD	133.3 %	0.5 %	0.5 %	47.7 %	38.4 %	40.2 %	3.0 %	13.3 %	107.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.636 %	4.665 ppb	2.167 ppb	0.013 ppb	90.569 %	93.542 %	0.889 ppb	0.026 ppb	0.020 ppb
Concentration per Run 1	88.572 %	4.089 ppb	2.132 ppb	-0.019 ppb	92.736 %	96.053 %	0.759 ppb	0.026 ppb	0.017 ppb
Concentration per Run 2	86.883 %	5.089 ppb	2.132 ppb	0.029 ppb	88.705 %	92.246 %	0.969 ppb	0.023 ppb	0.022 ppb
Concentration per Run 3	87.452 %	4.817 ppb	2.236 ppb	0.028 ppb	90.265 %	92.327 %	0.938 ppb	0.028 ppb	0.020 ppb
Recovery Percentage 1		155.504 %	54.164 %	2.562 %			44.444 %	5.176 %	3.945 %
Concentration RSD	1.0 %	11.1 %	2.8 %	214.8 %	2.2 %	2.3 %	12.8 %	9.8 %	12.9 %

Category	209Bi (KED AGD)
Concentration average	92.012 %
Concentration per Run 1	91.803 %
Concentration per Run 2	93.726 %
Concentration per Run 3	90.507 %
Recovery Percentage 1	
Concentration RSD	1.8 %

Analysis index: 44 | Analysis started at: 3/7/2018 10:55:54 AM | Rack: 1
Analysis label: WG1094930-1 2008TL | User name: ALPHALAB\metals-instrument | Vial: 22

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.015 %	90.261 %	0.010 ppb	82.670 ppb	1.352 ppb	1.598 ppb	25.717 ppb	21.388 ppb	71.688 %
Concentration per Run 1	66.593 %	94.344 %	0.015 ppb	72.367 ppb	1.119 ppb	0.898 ppb	19.678 ppb	18.800 ppb	61.095 %
Concentration per Run 2	82.801 %	87.773 %	0.009 ppb	65.197 ppb	1.137 ppb	2.188 ppb	30.239 ppb	16.100 ppb	75.064 %
Concentration per Run 3	84.652 %	88.666 %	0.004 ppb	110.444 ppb	1.800 ppb	1.708 ppb	27.234 ppb	29.263 ppb	78.906 %
Concentration RSD	12.7 %	3.9 %	58.2 %	29.4 %	28.7 %	40.8 %	21.2 %	32.5 %	13.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.771 %	0.031 ppb	0.024 ppb	1.236 ppb	0.333 ppb	21.730 ppb	0.008 ppb	-0.377 ppb	0.047 ppb
Concentration per Run 1	83.211 %	-0.226 ppb	0.032 ppb	1.060 ppb	0.328 ppb	23.624 ppb	0.010 ppb	-0.368 ppb	0.033 ppb
Concentration per Run 2	88.989 %	0.438 ppb	0.009 ppb	1.133 ppb	0.217 ppb	18.641 ppb	0.003 ppb	-0.351 ppb	0.001 ppb
Concentration per Run 3	85.113 %	-0.119 ppb	0.032 ppb	1.515 ppb	0.454 ppb	22.925 ppb	0.010 ppb	-0.413 ppb	0.107 ppb
Concentration RSD	3.4 %	1,142.4 %	55.3 %	19.8 %	35.5 %	12.4 %	54.6 %	8.5 %	115.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.091 ppb	84.135 %	0.028 ppb	0.146 ppb	0.035 ppb	0.174 ppb	85.230 %	0.040 ppb	0.022 ppb
Concentration per Run 1	0.053 ppb	84.993 %	0.010 ppb	0.143 ppb	0.074 ppb	0.136 ppb	87.666 %	0.046 ppb	0.010 ppb
Concentration per Run 2	0.111 ppb	85.053 %	0.065 ppb	0.278 ppb	0.047 ppb	0.172 ppb	83.543 %	0.040 ppb	0.024 ppb
Concentration per Run 3	0.107 ppb	82.359 %	0.010 ppb	0.018 ppb	-0.015 ppb	0.215 ppb	84.480 %	0.034 ppb	0.033 ppb
Concentration RSD	35.9 %	1.8 %	112.0 %	88.9 %	128.9 %	22.7 %	2.5 %	15.0 %	52.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.803 %	2.889 ppb	0.709 ppb	-0.010 ppb	88.954 %	93.906 %	0.201 ppb	0.006 ppb	0.066 ppb
Concentration per Run 1	87.948 %	2.481 ppb	0.572 ppb	-0.042 ppb	90.018 %	96.509 %	0.130 ppb	0.004 ppb	0.052 ppb
Concentration per Run 2	84.498 %	2.838 ppb	0.755 ppb	0.055 ppb	87.279 %	91.207 %	0.228 ppb	0.009 ppb	0.071 ppb
Concentration per Run 3	84.964 %	3.347 ppb	0.800 ppb	-0.042 ppb	89.564 %	94.002 %	0.245 ppb	0.005 ppb	0.075 ppb
Concentration RSD	2.2 %	15.1 %	17.0 %	580.5 %	1.7 %	2.8 %	30.8 %	37.7 %	18.1 %

Category	209Bi (KED AGD)
Concentration average	92.831 %
Concentration per Run 1	95.114 %
Concentration per Run 2	92.331 %
Concentration per Run 3	91.049 %
Concentration RSD	2.2 %

Analysis index: 45 | Analysis started at: 3/7/2018 10:59:47 AM | Rack: 1
Analysis label: WG1094930-2D5 2008TL | User name: ALPHALAB\metals-instrument | Vial: 23

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.247 %	95.832 %	11.385 ppb	2,350.990 ppb	2,368.753 ppb	483.949 ppb	1,985.824 ppb	1,780.161 ppb	79.118 %
Concentration per Run 1	79.988 %	98.044 %	11.192 ppb	2,185.915 ppb	2,177.116 ppb	454.957 ppb	1,883.891 ppb	1,552.627 ppb	79.139 %
Concentration per Run 2	80.438 %	98.044 %	11.586 ppb	2,356.994 ppb	2,415.911 ppb	490.970 ppb	1,935.579 ppb	1,702.343 ppb	79.598 %
Concentration per Run 3	80.314 %	91.409 %	11.376 ppb	2,510.061 ppb	2,513.233 ppb	505.921 ppb	2,138.002 ppb	2,085.512 ppb	78.616 %
Concentration RSD	0.3 %	4.0 %	1.7 %	6.9 %	7.3 %	5.4 %	6.8 %	15.4 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.177 %	175.146 ppb	121.152 ppb	48.009 ppb	119.263 ppb	243.423 ppb	113.018 ppb	111.714 ppb	54.531 ppb
Concentration per Run 1	86.100 %	155.703 ppb	113.529 ppb	45.427 ppb	113.735 ppb	244.128 ppb	102.227 ppb	103.189 ppb	49.924 ppb
Concentration per Run 2	90.939 %	178.486 ppb	123.276 ppb	49.137 ppb	119.772 ppb	234.240 ppb	115.651 ppb	114.158 ppb	55.931 ppb
Concentration per Run 3	90.493 %	191.249 ppb	126.652 ppb	49.464 ppb	124.281 ppb	251.900 ppb	121.177 ppb	117.796 ppb	57.737 ppb
Concentration RSD	3.0 %	10.3 %	5.6 %	4.7 %	4.4 %	3.6 %	8.6 %	6.8 %	7.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	112.043 ppb	86.641 %	26.046 ppb	28.521 ppb	209.459 ppb	207.460 ppb	87.710 %	11.010 ppb	11.494 ppb
Concentration per Run 1	101.774 ppb	88.258 %	23.704 ppb	24.001 ppb	183.803 ppb	181.056 ppb	88.715 %	9.917 ppb	10.218 ppb
Concentration per Run 2	114.804 ppb	87.233 %	26.977 ppb	30.245 ppb	218.354 ppb	220.188 ppb	87.286 %	11.366 ppb	11.988 ppb
Concentration per Run 3	119.552 ppb	84.432 %	27.456 ppb	31.318 ppb	226.221 ppb	221.135 ppb	87.129 %	11.747 ppb	12.277 ppb
Concentration RSD	8.2 %	2.3 %	7.8 %	13.9 %	10.8 %	11.0 %	1.0 %	8.8 %	9.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.401 %	195.026 ppb	124.538 ppb	433.789 ppb	91.952 %	96.275 %	0.263 ppb	24.932 ppb	107.533 ppb
Concentration per Run 1	88.868 %	171.013 ppb	110.296 ppb	381.699 ppb	92.384 %	96.465 %	0.130 ppb	23.075 ppb	98.015 ppb
Concentration per Run 2	87.340 %	202.246 ppb	130.539 ppb	454.659 ppb	90.494 %	95.526 %	0.407 ppb	25.701 ppb	111.906 ppb
Concentration per Run 3	88.994 %	211.818 ppb	132.780 ppb	465.010 ppb	92.976 %	96.835 %	0.252 ppb	26.020 ppb	112.677 ppb
Concentration RSD	1.0 %	10.9 %	9.9 %	10.5 %	1.4 %	0.7 %	52.7 %	6.5 %	7.7 %

Category	209Bi (KED AGD)
Concentration average	94.435 %
Concentration per Run 1	94.921 %
Concentration per Run 2	93.094 %
Concentration per Run 3	95.291 %
Concentration RSD	1.2 %

Analysis index: 46 | Analysis started at: 3/7/2018 11:03:41 AM | Rack: 1
Analysis label: WG1094930-3D10 2008TL | User name: ALPHALAB\metals-instrument | Vial: 24

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.939 %	93.111 %	5.644 ppb	101,353.320 ppb	1,497.551 ppb	242.353 ppb	3,141.061 ppb	5,132.134 ppb	76.854 %
Concentration per Run 1	79.516 %	92.622 %	5.693 ppb	89,948.998 ppb	1,294.130 ppb	215.679 ppb	2,871.458 ppb	4,550.913 ppb	76.808 %
Concentration per Run 2	78.900 %	97.597 %	5.638 ppb	104,003.320 ppb	1,518.826 ppb	246.502 ppb	3,204.242 ppb	5,271.390 ppb	76.767 %
Concentration per Run 3	78.401 %	89.113 %	5.601 ppb	110,107.641 ppb	1,679.695 ppb	264.878 ppb	3,347.483 ppb	5,574.100 ppb	76.986 %
Concentration RSD	0.7 %	4.6 %	0.8 %	10.2 %	12.9 %	10.3 %	7.8 %	10.2 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.325 %	92.434 ppb	57.500 ppb	85.256 ppb	59.505 ppb	236.096 ppb	58.760 ppb	80.184 ppb	37.149 ppb
Concentration per Run 1	87.513 %	80.394 ppb	49.196 ppb	73.580 ppb	49.284 ppb	206.607 ppb	50.888 ppb	67.660 ppb	32.721 ppb
Concentration per Run 2	90.610 %	91.600 ppb	60.471 ppb	89.184 ppb	63.613 ppb	244.021 ppb	62.199 ppb	87.604 ppb	39.036 ppb
Concentration per Run 3	86.852 %	105.309 ppb	62.832 ppb	93.003 ppb	65.617 ppb	257.661 ppb	63.193 ppb	85.289 ppb	39.690 ppb
Concentration RSD	2.3 %	13.5 %	12.7 %	12.1 %	15.0 %	11.2 %	11.6 %	13.6 %	10.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	97.245 ppb	83.642 %	13.106 ppb	14.035 ppb	128.364 ppb	97.684 ppb	83.418 %	5.464 ppb	47.245 ppb
Concentration per Run 1	83.358 ppb	85.087 %	10.919 ppb	12.539 ppb	108.429 ppb	81.035 ppb	87.960 %	4.856 ppb	40.941 ppb
Concentration per Run 2	104.712 ppb	83.666 %	14.156 ppb	14.382 ppb	137.514 ppb	102.287 ppb	82.977 %	5.623 ppb	48.999 ppb
Concentration per Run 3	103.666 ppb	82.172 %	14.242 ppb	15.184 ppb	139.148 ppb	109.729 ppb	79.316 %	5.914 ppb	51.794 ppb
Concentration RSD	12.4 %	1.7 %	14.5 %	9.7 %	13.5 %	15.2 %	5.2 %	10.0 %	11.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.043 %	101.508 ppb	68.800 ppb	215.307 ppb	85.574 %	93.506 %	0.193 ppb	11.676 ppb	51.987 ppb
Concentration per Run 1	86.123 %	86.453 ppb	56.722 ppb	178.822 ppb	87.961 %	96.512 %	0.059 ppb	10.116 ppb	44.489 ppb
Concentration per Run 2	84.933 %	104.737 ppb	73.005 ppb	232.432 ppb	85.906 %	92.837 %	0.175 ppb	12.191 ppb	54.388 ppb
Concentration per Run 3	78.072 %	113.334 ppb	76.674 ppb	234.666 ppb	82.854 %	91.170 %	0.344 ppb	12.721 ppb	57.084 ppb
Concentration RSD	5.2 %	13.5 %	15.4 %	14.7 %	3.0 %	2.9 %	74.5 %	11.8 %	12.8 %

Category	209Bi (KED AGD)
Concentration average	87.596 %
Concentration per Run 1	88.299 %
Concentration per Run 2	90.314 %
Concentration per Run 3	84.175 %
Concentration RSD	3.6 %

Analysis index: 47 Analysis started at: 3/7/2018 11:07:34 AM Rack: 1
Analysis label: WG1094930-4 2008TL User name: ALPHALAB\metals-instrument Vial: 25

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	69.502 %	83.712 %	0.013 ppb	[illegible] ppb	3,594.198 ppb	53.622 ppb	22,035.477 ppb	44,618.998 ppb	75.122 %
Concentration per Run 1	71.531 %	82.287 %	0.010 ppb	972,168.408 ppb	3,135.412 ppb	49.863 ppb	19,565.533 ppb	39,338.338 ppb	75.270 %
Concentration per Run 2	71.497 %	86.816 %	0.013 ppb	1,062,191.699 ppb	3,732.021 ppb	54.801 ppb	22,645.035 ppb	45,782.756 ppb	75.691 %
Concentration per Run 3	65.478 %	82.032 %	0.015 ppb	1,112,558.028 ppb	3,915.161 ppb	56.202 ppb	23,895.861 ppb	48,735.900 ppb	74.406 %
Concentration RSD	5.0 %	3.2 %	21.9 %	6.8 %	11.3 %	6.2 %	10.1 %	10.8 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.670 %	62.768 ppb	1.266 ppb	625.853 ppb	23.255 ppb	1,085.126 ppb	48.272 ppb	244.792 ppb	98.665 ppb
Concentration per Run 1	80.346 %	56.732 ppb	1.173 ppb	588.804 ppb	21.469 ppb	1,033.833 ppb	45.528 ppb	234.200 ppb	94.999 ppb
Concentration per Run 2	90.281 %	66.423 ppb	1.202 ppb	631.653 ppb	23.345 ppb	1,106.283 ppb	49.315 ppb	245.679 ppb	99.469 ppb
Concentration per Run 3	86.382 %	65.150 ppb	1.422 ppb	657.102 ppb	24.952 ppb	1,115.262 ppb	49.972 ppb	254.498 ppb	101.526 ppb
Concentration RSD	5.8 %	8.4 %	10.8 %	5.5 %	7.5 %	4.1 %	5.0 %	4.2 %	3.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	335.745 ppb	77.869 %	3.183 ppb	0.520 ppb	252.276 ppb	12.236 ppb	70.370 %	3.688 ppb	395.817 ppb
Concentration per Run 1	319.950 ppb	74.502 %	3.208 ppb	0.424 ppb	227.708 ppb	11.524 ppb	69.211 %	3.555 ppb	366.981 ppb
Concentration per Run 2	342.097 ppb	79.380 %	3.265 ppb	0.390 ppb	262.707 ppb	12.345 ppb	70.856 %	3.746 ppb	411.184 ppb
Concentration per Run 3	345.188 ppb	79.724 %	3.075 ppb	0.746 ppb	266.413 ppb	12.840 ppb	71.043 %	3.764 ppb	409.287 ppb
Concentration RSD	4.1 %	3.8 %	3.1 %	37.8 %	8.5 %	5.4 %	1.4 %	3.1 %	6.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	60.778 %	15.261 ppb	22.381 ppb	16.618 ppb	70.804 %	88.482 %	0.925 ppb	0.078 ppb	0.836 ppb
Concentration per Run 1	59.220 %	14.697 ppb	20.443 ppb	14.849 ppb	68.325 %	85.934 %	0.965 ppb	0.073 ppb	0.759 ppb
Concentration per Run 2	61.709 %	15.856 ppb	23.019 ppb	17.752 ppb	72.590 %	89.473 %	0.905 ppb	0.078 ppb	0.895 ppb
Concentration per Run 3	61.405 %	15.231 ppb	23.682 ppb	17.251 ppb	71.496 %	90.040 %	0.905 ppb	0.083 ppb	0.854 ppb
Concentration RSD	2.2 %	3.8 %	7.6 %	9.3 %	3.1 %	2.5 %	3.7 %	6.5 %	8.3 %

Category	209Bi (KED AGD)
Concentration average	72.236 %
Concentration per Run 1	70.533 %
Concentration per Run 2	72.448 %
Concentration per Run 3	73.728 %
Concentration RSD	2.2 %

Analysis index: 48 | Analysis started at: 3/7/2018 11:11:25 AM | Rack: 1
Analysis label: L1807334-02 2008TL | User name: ALPHALAB\metals-instrument | Vial: 26

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.668 %	88.518 %	0.016 ppb	[illegible] ppb	3,892.719 ppb	63.302 ppb	21,332.147 ppb	43,887.292 ppb	78.493 %
Concentration per Run 1	73.634 %	89.942 %	0.013 ppb	966,624.374 ppb	3,582.075 ppb	56.020 ppb	19,758.729 ppb	39,596.678 ppb	79.536 %
Concentration per Run 2	72.830 %	86.370 %	0.014 ppb	1,066,802.756 ppb	4,054.605 ppb	65.125 ppb	21,634.892 ppb	45,145.142 ppb	78.488 %
Concentration per Run 3	71.540 %	89.240 %	0.022 ppb	1,066,212.457 ppb	4,041.475 ppb	68.759 ppb	22,602.821 ppb	46,920.055 ppb	77.454 %
Concentration RSD	1.5 %	2.1 %	30.3 %	5.6 %	6.9 %	10.4 %	6.8 %	8.7 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.445 %	61.654 ppb	1.220 ppb	634.923 ppb	25.116 ppb	1,156.158 ppb	49.441 ppb	251.298 ppb	102.905 ppb
Concentration per Run 1	84.103 %	56.903 ppb	0.816 ppb	585.325 ppb	23.482 ppb	1,065.162 ppb	46.320 ppb	228.826 ppb	92.692 ppb
Concentration per Run 2	84.245 %	64.414 ppb	1.426 ppb	674.677 ppb	26.976 ppb	1,256.762 ppb	53.357 ppb	269.378 ppb	110.890 ppb
Concentration per Run 3	90.986 %	63.645 ppb	1.419 ppb	644.766 ppb	24.891 ppb	1,146.551 ppb	48.647 ppb	255.690 ppb	105.132 ppb
Concentration RSD	4.6 %	6.7 %	28.7 %	7.2 %	7.0 %	8.3 %	7.3 %	8.2 %	9.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	342.386 ppb	79.589 %	3.352 ppb	0.939 ppb	254.562 ppb	10.804 ppb	71.839 %	3.576 ppb	393.379 ppb
Concentration per Run 1	311.688 ppb	82.714 %	2.780 ppb	0.851 ppb	230.619 ppb	9.822 ppb	73.502 %	3.255 ppb	362.867 ppb
Concentration per Run 2	367.184 ppb	74.187 %	3.553 ppb	0.965 ppb	265.653 ppb	11.228 ppb	68.740 %	3.709 ppb	413.833 ppb
Concentration per Run 3	348.285 ppb	81.865 %	3.722 ppb	1.001 ppb	267.415 ppb	11.363 ppb	73.275 %	3.765 ppb	403.437 ppb
Concentration RSD	8.2 %	5.9 %	15.0 %	8.3 %	8.2 %	7.9 %	3.7 %	7.8 %	6.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	61.659 %	6.449 ppb	22.027 ppb	20.365 ppb	70.381 %	87.019 %	0.842 ppb	0.073 ppb	0.959 ppb
Concentration per Run 1	63.335 %	6.059 ppb	20.301 ppb	18.242 ppb	71.687 %	89.786 %	0.724 ppb	0.071 ppb	0.879 ppb
Concentration per Run 2	58.133 %	6.670 ppb	23.352 ppb	21.721 ppb	67.143 %	82.105 %	0.871 ppb	0.073 ppb	0.988 ppb
Concentration per Run 3	63.511 %	6.619 ppb	22.427 ppb	21.133 ppb	72.312 %	89.167 %	0.931 ppb	0.077 ppb	1.009 ppb
Concentration RSD	5.0 %	5.3 %	7.1 %	9.1 %	4.0 %	4.9 %	12.7 %	3.9 %	7.3 %

Category	209Bi (KED AGD)
Concentration average	72.011 %
Concentration per Run 1	73.783 %
Concentration per Run 2	70.019 %
Concentration per Run 3	72.231 %
Concentration RSD	2.6 %

Analysis index: 49 | Analysis started at: 3/7/2018 11:15:16 AM | Rack: 1
Analysis label: L1807597-08 6020TL | User name: ALPHALAB\metals-instrument | Vial: 32

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.393 %	95.173 %	0.006 ppb	235.786 ppb	0.472 ppb	2.037 ppb	32.985 ppb	17.945 ppb	80.581 %
Concentration per Run 1	77.153 %	97.789 %	0.009 ppb	259.689 ppb	0.458 ppb	2.279 ppb	19.397 ppb	13.335 ppb	79.864 %
Concentration per Run 2	77.816 %	96.258 %	0.005 ppb	226.894 ppb	-0.151 ppb	1.680 ppb	41.186 ppb	20.875 ppb	81.234 %
Concentration per Run 3	77.209 %	91.473 %	0.004 ppb	220.774 ppb	1.110 ppb	2.152 ppb	38.372 ppb	19.626 ppb	80.646 %
Concentration RSD	0.5 %	3.5 %	50.3 %	8.9 %	133.6 %	15.5 %	35.9 %	22.5 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.411 %	-0.146 ppb	0.002 ppb	0.317 ppb	0.186 ppb	13.582 ppb	0.009 ppb	-0.388 ppb	16.464 ppb
Concentration per Run 1	86.030 %	-0.260 ppb	0.009 ppb	0.356 ppb	0.068 ppb	13.007 ppb	-0.004 ppb	-0.393 ppb	14.484 ppb
Concentration per Run 2	91.715 %	-0.050 ppb	-0.012 ppb	0.237 ppb	0.356 ppb	8.984 ppb	0.022 ppb	-0.358 ppb	16.729 ppb
Concentration per Run 3	87.489 %	-0.127 ppb	0.009 ppb	0.357 ppb	0.133 ppb	18.756 ppb	0.010 ppb	-0.412 ppb	18.180 ppb
Concentration RSD	3.3 %	72.9 %	596.4 %	21.8 %	81.4 %	36.2 %	137.9 %	7.1 %	11.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	9.177 ppb	83.942 %	0.015 ppb	0.105 ppb	0.057 ppb	0.184 ppb	85.315 %	0.005 ppb	0.031 ppb
Concentration per Run 1	8.308 ppb	84.425 %	0.024 ppb	0.079 ppb	0.037 ppb	0.152 ppb	86.856 %	0.013 ppb	0.023 ppb
Concentration per Run 2	9.310 ppb	88.167 %	0.009 ppb	0.070 ppb	0.035 ppb	0.196 ppb	84.995 %	0.003 ppb	0.028 ppb
Concentration per Run 3	9.912 ppb	79.233 %	0.011 ppb	0.166 ppb	0.100 ppb	0.204 ppb	84.094 %	-0.001 ppb	0.042 ppb
Concentration RSD	8.8 %	5.3 %	54.3 %	50.3 %	64.1 %	15.2 %	1.7 %	133.0 %	31.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.903 %	3.524 ppb	0.486 ppb	-0.018 ppb	87.412 %	90.628 %	0.142 ppb	-0.001 ppb	0.932 ppb
Concentration per Run 1	86.655 %	2.965 ppb	0.411 ppb	-0.042 ppb	88.212 %	91.754 %	0.081 ppb	-0.001 ppb	0.814 ppb
Concentration per Run 2	84.315 %	3.878 ppb	0.498 ppb	-0.017 ppb	85.091 %	87.898 %	0.165 ppb	0.001 ppb	0.989 ppb
Concentration per Run 3	83.740 %	3.728 ppb	0.548 ppb	0.006 ppb	88.932 %	92.232 %	0.181 ppb	-0.002 ppb	0.992 ppb
Concentration RSD	1.8 %	13.9 %	14.2 %	136.3 %	2.3 %	2.6 %	37.7 %	256.3 %	11.0 %

Category	209Bi (KED AGD)
Concentration average	87.258 %
Concentration per Run 1	89.432 %
Concentration per Run 2	83.199 %
Concentration per Run 3	89.144 %
Concentration RSD	4.0 %

Analysis index: 50 Analysis started at: 3/7/2018 11:19:08 AM Rack: 1
Analysis label: L1807332-01 2008TL User name: ALPHALAB\metals-instrument Vial: 27

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.726 %	88.900 %	0.286 ppb	188,409.929 ppb	24,723.323 ppb	4,973.506 ppb	19,197.781 ppb	58,835.260 ppb	80.588 %
Concentration per Run 1	74.522 %	95.875 %	0.260 ppb	174,022.609 ppb	22,039.385 ppb	4,521.567 ppb	16,809.186 ppb	49,797.813 ppb	80.960 %
Concentration per Run 2	73.318 %	89.432 %	0.287 ppb	192,964.533 ppb	25,547.823 ppb	5,079.029 ppb	20,044.585 ppb	61,306.257 ppb	80.320 %
Concentration per Run 3	73.337 %	81.394 %	0.312 ppb	198,242.647 ppb	26,582.761 ppb	5,319.923 ppb	20,739.571 ppb	65,401.710 ppb	80.485 %
Concentration RSD	0.9 %	8.2 %	9.2 %	6.8 %	9.6 %	8.2 %	10.9 %	13.8 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.960 %	236.827 ppb	7.944 ppb	7.144 ppb	507.043 ppb	8,219.065 ppb	2.774 ppb	13.162 ppb	191.197 ppb
Concentration per Run 1	84.855 %	200.662 ppb	6.994 ppb	6.617 ppb	467.946 ppb	7,505.151 ppb	2.600 ppb	11.943 ppb	174.124 ppb
Concentration per Run 2	89.083 %	244.622 ppb	8.043 ppb	7.222 ppb	527.102 ppb	8,616.624 ppb	2.764 ppb	13.686 ppb	196.590 ppb
Concentration per Run 3	83.941 %	265.198 ppb	8.795 ppb	7.591 ppb	526.083 ppb	8,535.421 ppb	2.957 ppb	13.858 ppb	202.875 ppb
Concentration RSD	3.2 %	13.9 %	11.4 %	6.9 %	6.7 %	7.5 %	6.4 %	8.0 %	7.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	296.663 ppb	80.569 %	31.107 ppb	8.177 ppb	300.456 ppb	8.546 ppb	78.316 %	2.405 ppb	6.094 ppb
Concentration per Run 1	272.266 ppb	82.363 %	28.174 ppb	7.079 ppb	270.086 ppb	7.479 ppb	81.397 %	2.189 ppb	5.289 ppb
Concentration per Run 2	307.800 ppb	80.605 %	33.389 ppb	9.569 ppb	322.199 ppb	9.277 ppb	78.459 %	2.524 ppb	6.713 ppb
Concentration per Run 3	309.923 ppb	78.738 %	31.759 ppb	7.882 ppb	309.085 ppb	8.881 ppb	75.093 %	2.503 ppb	6.280 ppb
Concentration RSD	7.1 %	2.2 %	8.6 %	15.5 %	9.0 %	11.1 %	4.0 %	7.8 %	12.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	78.649 %	6.504 ppb	2.875 ppb	236.436 ppb	81.239 %	86.808 %	4.310 ppb	0.203 ppb	14.535 ppb
Concentration per Run 1	82.485 %	5.670 ppb	2.480 ppb	210.550 ppb	83.813 %	89.348 %	3.642 ppb	0.180 ppb	13.333 ppb
Concentration per Run 2	79.320 %	6.828 ppb	2.950 ppb	248.295 ppb	82.990 %	89.928 %	4.464 ppb	0.214 ppb	14.999 ppb
Concentration per Run 3	74.142 %	7.013 ppb	3.196 ppb	250.462 ppb	76.913 %	81.148 %	4.825 ppb	0.215 ppb	15.273 ppb
Concentration RSD	5.4 %	11.2 %	12.7 %	9.5 %	4.6 %	5.7 %	14.1 %	9.8 %	7.2 %

Category	209Bi (KED AGD)
Concentration average	104.069 %
Concentration per Run 1	104.226 %
Concentration per Run 2	107.048 %
Concentration per Run 3	100.934 %
Concentration RSD	2.9 %

Analysis index: 51 | Analysis started at: 3/7/2018 11:22:59 AM | Rack: 1
Analysis label: L1807332-02 2008TL | User name: ALPHALAB\metals-instrument | Vial: 28

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.729 %	90.750 %	2.597 ppb	[illegible] ppb	45,719.705 ppb	52,574.359 ppb	40,346.592 ppb	173,750.793 ppb	79.823 %
Concentration per Run 1	71.013 %	89.368 %	2.608 ppb	572,451.675 ppb	43,658.329 ppb	50,208.001 ppb	38,610.661 ppb	160,812.832 ppb	79.436 %
Concentration per Run 2	70.333 %	89.942 %	2.569 ppb	602,144.829 ppb	46,467.637 ppb	53,548.928 ppb	41,381.409 ppb	180,832.294 ppb	80.114 %
Concentration per Run 3	70.841 %	92.940 %	2.613 ppb	599,094.109 ppb	47,033.149 ppb	53,966.148 ppb	41,047.705 ppb	179,607.253 ppb	79.920 %
Concentration RSD	0.5 %	2.1 %	0.9 %	2.8 %	4.0 %	3.9 %	3.7 %	6.5 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.036 %	1,985.482 ppb	74.824 ppb	54.099 ppb	2,967.907 ppb	45,702.375 ppb	17.882 ppb	70.576 ppb	1,944.073 ppb
Concentration per Run 1	87.462 %	1,857.961 ppb	70.394 ppb	51.812 ppb	2,798.246 ppb	42,837.998 ppb	17.331 ppb	65.599 ppb	1,815.807 ppb
Concentration per Run 2	93.476 %	2,073.942 ppb	76.969 ppb	56.057 ppb	3,051.104 ppb	47,049.072 ppb	18.096 ppb	74.714 ppb	2,016.428 ppb
Concentration per Run 3	95.168 %	2,024.544 ppb	77.110 ppb	54.428 ppb	3,054.371 ppb	47,220.054 ppb	18.220 ppb	71.413 ppb	1,999.985 ppb
Concentration RSD	4.4 %	5.7 %	5.1 %	4.0 %	5.0 %	5.4 %	2.7 %	6.5 %	5.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	2,333.543 ppb	81.030 %	392.508 ppb	118.408 ppb	913.435 ppb	63.918 ppb	75.443 %	25.446 ppb	70.984 ppb
Concentration per Run 1	2,207.533 ppb	80.001 %	369.071 ppb	115.853 ppb	831.118 ppb	59.407 ppb	76.148 %	23.808 ppb	66.322 ppb
Concentration per Run 2	2,405.579 ppb	80.120 %	408.757 ppb	118.353 ppb	958.535 ppb	66.112 ppb	74.977 %	26.568 ppb	72.775 ppb
Concentration per Run 3	2,387.517 ppb	82.968 %	399.696 ppb	121.017 ppb	950.653 ppb	66.235 ppb	75.203 %	25.962 ppb	73.856 ppb
Concentration RSD	4.7 %	2.1 %	5.3 %	2.2 %	7.8 %	6.1 %	0.8 %	5.7 %	5.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	75.570 %	14.168 ppb	12.191 ppb	2,085.548 ppb	69.326 %	76.279 %	10.346 ppb	0.650 ppb	37.978 ppb
Concentration per Run 1	75.685 %	12.835 ppb	11.017 ppb	1,912.597 ppb	69.412 %	77.794 %	9.770 ppb	0.652 ppb	37.387 ppb
Concentration per Run 2	75.320 %	14.368 ppb	12.577 ppb	2,150.563 ppb	69.356 %	75.382 %	10.553 ppb	0.648 ppb	38.112 ppb
Concentration per Run 3	75.704 %	15.302 ppb	12.977 ppb	2,193.484 ppb	69.210 %	75.661 %	10.716 ppb	0.649 ppb	38.434 ppb
Concentration RSD	0.3 %	8.8 %	8.5 %	7.3 %	0.2 %	1.7 %	4.9 %	0.4 %	1.4 %

Category	209Bi (KED AGD)
Concentration average	382.446 %
Concentration per Run 1	361.489 %
Concentration per Run 2	391.076 %
Concentration per Run 3	394.773 %
Concentration RSD	4.8 %

Analysis index: 52 | Analysis started at: 3/7/2018 11:26:50 AM | Rack: 1
Analysis label: L1807332-03 2008TL | User name: ALPHALAB\metals-instrument | Vial: 29

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.866 %	93.897 %	0.063 ppb	167,445.448 ppb	19,876.388 ppb	879.708 ppb	9,877.648 ppb	38,293.590 ppb	76.907 %
Concentration per Run 1	72.445 %	94.089 %	0.067 ppb	159,809.199 ppb	18,478.140 ppb	806.225 ppb	9,350.936 ppb	36,003.241 ppb	76.010 %
Concentration per Run 2	73.207 %	91.027 %	0.061 ppb	173,336.745 ppb	20,758.743 ppb	927.228 ppb	10,475.582 ppb	40,900.816 ppb	77.870 %
Concentration per Run 3	72.945 %	96.576 %	0.061 ppb	169,190.400 ppb	20,392.281 ppb	905.672 ppb	9,806.426 ppb	37,976.714 ppb	76.840 %
Concentration RSD	0.5 %	3.0 %	5.5 %	4.1 %	6.2 %	7.3 %	5.7 %	6.4 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.851 %	86.592 ppb	1.991 ppb	2.551 ppb	142.776 ppb	927.797 ppb	0.938 ppb	5.089 ppb	40.628 ppb
Concentration per Run 1	91.597 %	80.656 ppb	1.791 ppb	2.346 ppb	130.945 ppb	872.963 ppb	0.786 ppb	4.819 ppb	38.270 ppb
Concentration per Run 2	88.355 %	88.921 ppb	2.019 ppb	2.540 ppb	149.920 ppb	972.582 ppb	1.000 ppb	6.073 ppb	40.814 ppb
Concentration per Run 3	89.600 %	90.198 ppb	2.162 ppb	2.769 ppb	147.463 ppb	937.847 ppb	1.027 ppb	4.376 ppb	42.800 ppb
Concentration RSD	1.8 %	6.0 %	9.4 %	8.3 %	7.2 %	5.4 %	14.1 %	17.3 %	5.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	86.374 ppb	85.837 %	10.178 ppb	4.191 ppb	233.372 ppb	6.012 ppb	82.706 %	0.515 ppb	2.068 ppb
Concentration per Run 1	79.662 ppb	86.296 %	9.169 ppb	4.339 ppb	216.037 ppb	5.524 ppb	83.668 %	0.439 ppb	1.933 ppb
Concentration per Run 2	90.610 ppb	85.214 %	10.584 ppb	4.262 ppb	240.655 ppb	6.023 ppb	82.848 %	0.557 ppb	2.061 ppb
Concentration per Run 3	88.850 ppb	86.001 %	10.781 ppb	3.972 ppb	243.424 ppb	6.487 ppb	81.602 %	0.548 ppb	2.211 ppb
Concentration RSD	6.8 %	0.7 %	8.6 %	4.6 %	6.5 %	8.0 %	1.3 %	12.8 %	6.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.583 %	2.208 ppb	1.541 ppb	69.305 ppb	84.872 %	93.058 %	2.128 ppb	0.147 ppb	3.355 ppb
Concentration per Run 1	82.917 %	1.974 ppb	1.349 ppb	61.801 ppb	85.263 %	93.768 %	1.872 ppb	0.135 ppb	3.192 ppb
Concentration per Run 2	80.338 %	2.190 ppb	1.616 ppb	73.632 ppb	83.697 %	92.127 %	2.232 ppb	0.157 ppb	3.421 ppb
Concentration per Run 3	81.493 %	2.458 ppb	1.659 ppb	72.483 ppb	85.657 %	93.279 %	2.281 ppb	0.149 ppb	3.453 ppb
Concentration RSD	1.6 %	11.0 %	10.9 %	9.4 %	1.2 %	0.9 %	10.5 %	7.5 %	4.2 %

Category	209Bi (KED AGD)
Concentration average	91.774 %
Concentration per Run 1	92.490 %
Concentration per Run 2	90.820 %
Concentration per Run 3	92.010 %
Concentration RSD	0.9 %

Analysis index: 53 | Analysis started at: 3/7/2018 11:30:41 AM | Rack: 1
Analysis label: L1807568-01 2008TL | User name: ALPHALAB\metals-instrument | Vial: 21

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.506 %	100.319 %	0.010 ppb	9,682.319 ppb	28,058.014 ppb	11.354 ppb	1,079.934 ppb	80,377.628 ppb	80.539 %
Concentration per Run 1	76.242 %	107.613 %	0.011 ppb	8,929.216 ppb	25,452.183 ppb	12.355 ppb	1,021.802 ppb	73,318.030 ppb	80.702 %
Concentration per Run 2	76.379 %	97.151 %	0.007 ppb	9,955.228 ppb	28,966.356 ppb	9.517 ppb	1,078.580 ppb	82,676.203 ppb	79.902 %
Concentration per Run 3	76.897 %	96.194 %	0.011 ppb	10,162.514 ppb	29,755.502 ppb	12.190 ppb	1,139.419 ppb	85,138.650 ppb	81.012 %
Concentration RSD	0.5 %	6.3 %	26.2 %	6.8 %	8.2 %	14.0 %	5.4 %	7.8 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	94.816 %	109.223 ppb	0.108 ppb	0.367 ppb	0.599 ppb	38.733 ppb	0.022 ppb	-0.212 ppb	0.379 ppb
Concentration per Run 1	101.113 %	100.989 ppb	0.081 ppb	0.304 ppb	0.312 ppb	26.994 ppb	0.008 ppb	-0.222 ppb	0.238 ppb
Concentration per Run 2	92.255 %	109.220 ppb	0.090 ppb	0.428 ppb	0.707 ppb	49.058 ppb	0.003 ppb	-0.123 ppb	0.383 ppb
Concentration per Run 3	91.080 %	117.460 ppb	0.154 ppb	0.368 ppb	0.779 ppb	40.146 ppb	0.055 ppb	-0.291 ppb	0.515 ppb
Concentration RSD	5.8 %	7.5 %	36.8 %	16.8 %	41.9 %	28.7 %	132.7 %	39.7 %	36.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.880 ppb	91.880 %	0.673 ppb	0.138 ppb	169.248 ppb	1.876 ppb	87.063 %	0.004 ppb	-0.002 ppb
Concentration per Run 1	1.548 ppb	98.978 %	0.562 ppb	0.273 ppb	152.939 ppb	1.388 ppb	91.994 %	0.009 ppb	0.000 ppb
Concentration per Run 2	1.998 ppb	89.200 %	0.781 ppb	0.004 ppb	172.448 ppb	1.931 ppb	84.852 %	0.005 ppb	-0.008 ppb
Concentration per Run 3	2.094 ppb	87.463 %	0.676 ppb	0.137 ppb	182.357 ppb	2.310 ppb	84.343 %	-0.001 ppb	0.001 ppb
Concentration RSD	15.5 %	6.8 %	16.2 %	97.5 %	8.8 %	24.7 %	4.9 %	113.8 %	224.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	92.622 %	1.014 ppb	0.283 ppb	66.058 ppb	95.440 %	97.052 %	0.201 ppb	-0.001 ppb	0.015 ppb
Concentration per Run 1	100.011 %	0.788 ppb	0.183 ppb	59.156 ppb	100.552 %	105.527 %	0.117 ppb	-0.003 ppb	0.008 ppb
Concentration per Run 2	89.389 %	1.120 ppb	0.296 ppb	67.728 ppb	92.740 %	92.630 %	0.207 ppb	0.000 ppb	0.018 ppb
Concentration per Run 3	88.466 %	1.135 ppb	0.369 ppb	71.289 ppb	93.026 %	92.999 %	0.279 ppb	0.000 ppb	0.019 ppb
Concentration RSD	6.9 %	19.4 %	33.2 %	9.4 %	4.6 %	7.6 %	40.2 %	123.6 %	42.1 %

Category	209Bi (KED AGD)
Concentration average	90.225 %
Concentration per Run 1	97.043 %
Concentration per Run 2	88.082 %
Concentration per Run 3	85.550 %
Concentration RSD	6.7 %

Analysis index: 54 Analysis started at: 3/7/2018 11:34:34 AM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.277 %	99.298 %	95.545 ppb	10,286.679 ppb	10,249.813 ppb	101.989 ppb	9,705.680 ppb	9,929.106 ppb	87.075 %
Concentration per Run 1	77.701 %	98.809 %	95.891 ppb	9,690.136 ppb	9,531.425 ppb	97.121 ppb	9,518.437 ppb	9,227.365 ppb	87.638 %
Concentration per Run 2	77.548 %	105.444 %	95.450 ppb	10,236.853 ppb	10,231.606 ppb	103.273 ppb	9,488.995 ppb	9,818.435 ppb	87.053 %
Concentration per Run 3	76.582 %	93.642 %	95.294 ppb	10,933.049 ppb	10,986.408 ppb	105.573 ppb	10,109.607 ppb	10,741.519 ppb	86.534 %
Recovery Percentage 1			95.545 %	102.867 %	102.498 %	101.989 %	97.057 %	99.291 %	
Concentration RSD	0.8 %	6.0 %	0.3 %	6.1 %	7.1 %	4.3 %	3.6 %	7.7 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	106.016 %	96.006 ppb	103.844 ppb	103.523 ppb	104.316 ppb	10,292.221 ppb	99.954 ppb	100.544 ppb	97.892 ppb
Concentration per Run 1	107.293 %	89.864 ppb	92.437 ppb	93.990 ppb	92.990 ppb	9,358.351 ppb	90.041 ppb	88.273 ppb	87.040 ppb
Concentration per Run 2	108.913 %	93.153 ppb	104.384 ppb	103.989 ppb	107.047 ppb	10,533.044 ppb	102.592 ppb	103.082 ppb	101.785 ppb
Concentration per Run 3	101.840 %	105.001 ppb	114.711 ppb	112.591 ppb	112.911 ppb	10,985.269 ppb	107.227 ppb	110.276 ppb	104.851 ppb
Recovery Percentage 1		96.006 %	103.844 %	103.523 %	104.316 %	102.922 %	99.954 %	100.544 %	97.892 %
Concentration RSD	3.5 %	8.3 %	10.7 %	9.0 %	9.8 %	8.2 %	8.9 %	11.2 %	9.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	97.649 ppb	90.983 %	99.325 ppb	101.863 ppb	101.889 ppb	102.478 ppb	87.968 %	101.368 ppb	100.700 ppb
Concentration per Run 1	88.363 ppb	92.621 %	90.388 ppb	96.441 ppb	92.386 ppb	89.732 ppb	90.189 %	92.983 ppb	90.377 ppb
Concentration per Run 2	100.524 ppb	91.179 %	105.923 ppb	108.779 ppb	107.258 ppb	109.093 ppb	87.573 %	104.653 ppb	104.175 ppb
Concentration per Run 3	104.062 ppb	89.151 %	101.664 ppb	100.370 ppb	106.022 ppb	108.607 ppb	86.142 %	106.468 ppb	107.547 ppb
Recovery Percentage 1	97.649 %		99.325 %	101.863 %	101.889 %	102.478 %		101.368 %	100.700 %
Concentration RSD	8.4 %	1.9 %	8.1 %	6.2 %	8.1 %	10.8 %	2.3 %	7.2 %	9.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.146 %	98.102 ppb	98.890 ppb	107.494 ppb	91.793 %	97.229 %	99.549 ppb	99.217 ppb	97.460 ppb
Concentration per Run 1	93.615 %	87.157 ppb	89.173 ppb	98.346 ppb	93.775 %	100.332 %	89.407 ppb	92.497 ppb	88.646 ppb
Concentration per Run 2	90.565 %	100.370 ppb	100.999 ppb	113.431 ppb	92.629 %	99.410 %	101.686 ppb	102.973 ppb	100.934 ppb
Concentration per Run 3	86.257 %	106.781 ppb	106.498 ppb	110.704 ppb	88.976 %	91.944 %	107.553 ppb	102.182 ppb	102.800 ppb
Recovery Percentage 1		98.102 %	98.890 %	107.494 %			99.549 %	99.217 %	97.460 %
Concentration RSD	4.1 %	10.2 %	9.0 %	7.5 %	2.7 %	4.7 %	9.3 %	5.9 %	7.9 %

Category	209Bi (KED AGD)
Concentration average	91.364 %
Concentration per Run 1	94.021 %
Concentration per Run 2	90.488 %
Concentration per Run 3	89.582 %
Recovery Percentage 1	
Concentration RSD	2.6 %

Analysis index:	55	Analysis started at:	3/7/2018 11:38:30 AM	Rack:	0
Analysis label:	XCCB	User name:	ALPHALAB\metals-instrument	Vial:	10

Analysis index: 56 Analysis started at: 3/7/2018 11:44:22 AM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.587 %	97.703 %	0.008 ppb	99.831 ppb	0.402 ppb	0.077 ppb	22.919 ppb	0.095 ppb	81.429 %
Concentration per Run 1	81.329 %	98.299 %	0.005 ppb	93.840 ppb	-0.738 ppb	0.270 ppb	20.152 ppb	1.429 ppb	81.273 %
Concentration per Run 2	81.093 %	98.873 %	0.007 ppb	83.549 ppb	1.519 ppb	-0.781 ppb	20.104 ppb	-0.677 ppb	79.662 %
Concentration per Run 3	82.338 %	95.939 %	0.012 ppb	122.105 ppb	0.424 ppb	0.741 ppb	28.501 ppb	-0.466 ppb	83.351 %
Recovery Percentage 1			1.543 %	99.831 %	0.402 %	0.767 %	22.919 %	0.095 %	
Concentration RSD	0.8 %	1.6 %	48.9 %	20.0 %	280.8 %	1,015.8 %	21.1 %	1,215.9 %	2.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.140 %	0.024 ppb	0.021 ppb	0.034 ppb	0.027 ppb	10.493 ppb	0.002 ppb	-0.102 ppb	0.007 ppb
Concentration per Run 1	88.755 %	-0.028 ppb	0.009 ppb	0.080 ppb	0.002 ppb	12.496 ppb	-0.004 ppb	-0.200 ppb	-0.029 ppb
Concentration per Run 2	96.648 %	-0.059 ppb	0.027 ppb	0.001 ppb	0.081 ppb	10.988 ppb	0.002 ppb	-0.053 ppb	0.006 ppb
Concentration per Run 3	94.017 %	0.160 ppb	0.028 ppb	0.021 ppb	-0.003 ppb	7.995 ppb	0.009 ppb	-0.051 ppb	0.044 ppb
Recovery Percentage 1		4.886 %	0.421 %	3.387 %	2.662 %	20.987 %	0.469 %	-5.080 %	0.704 %
Concentration RSD	4.3 %	484.3 %	50.8 %	121.0 %	177.6 %	21.8 %	265.8 %	83.8 %	516.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.047 ppb	90.368 %	0.056 ppb	0.142 ppb	0.024 ppb	0.093 ppb	91.727 %	0.015 ppb	-0.002 ppb
Concentration per Run 1	-0.089 ppb	87.853 %	0.036 ppb	-0.059 ppb	0.045 ppb	0.021 ppb	92.803 %	0.019 ppb	-0.004 ppb
Concentration per Run 2	-0.037 ppb	90.742 %	0.112 ppb	0.062 ppb	0.008 ppb	0.156 ppb	91.028 %	0.007 ppb	0.005 ppb
Concentration per Run 3	-0.016 ppb	92.509 %	0.021 ppb	0.424 ppb	0.021 ppb	0.101 ppb	91.349 %	0.021 ppb	-0.008 ppb
Recovery Percentage 1	-0.470 %		11.233 %	2.838 %	4.877 %	4.629 %		3.871 %	-1.062 %
Concentration RSD	80.3 %	2.6 %	86.3 %	177.1 %	77.3 %	73.3 %	1.0 %	50.1 %	299.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	91.277 %	1.392 ppb	0.411 ppb	-0.034 ppb	92.568 %	97.872 %	0.154 ppb	0.005 ppb	-0.010 ppb
Concentration per Run 1	91.137 %	1.260 ppb	0.342 ppb	-0.042 ppb	93.217 %	99.583 %	0.086 ppb	0.003 ppb	-0.010 ppb
Concentration per Run 2	91.909 %	1.372 ppb	0.447 ppb	-0.019 ppb	92.131 %	96.898 %	0.186 ppb	0.005 ppb	-0.008 ppb
Concentration per Run 3	90.785 %	1.544 ppb	0.445 ppb	-0.042 ppb	92.354 %	97.135 %	0.191 ppb	0.008 ppb	-0.012 ppb
Recovery Percentage 1		46.399 %	10.283 %	-6.871 %			7.712 %	1.049 %	-2.028 %
Concentration RSD	0.6 %	10.3 %	14.6 %	37.9 %	0.6 %	1.5 %	38.5 %	47.5 %	19.6 %

Category	209Bi (KED AGD)
Concentration average	94.655 %
Concentration per Run 1	95.773 %
Concentration per Run 2	93.584 %
Concentration per Run 3	94.609 %
Recovery Percentage 1	
Concentration RSD	1.2 %

Analysis index: 57 | Analysis started at: 3/7/2018 11:48:18 AM | Rack: 1
Analysis label: WG1095262-1D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 33

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.834 %	98.469 %	0.004 ppb	370.400 ppb	4.422 ppb	1.537 ppb	31.212 ppb	72.631 ppb	78.036 %
Concentration per Run 1	78.272 %	93.515 %	0.000 ppb	367.283 ppb	3.403 ppb	1.288 ppb	38.876 ppb	82.022 ppb	79.146 %
Concentration per Run 2	77.287 %	96.321 %	0.006 ppb	405.274 ppb	5.767 ppb	1.711 ppb	39.626 ppb	77.448 ppb	77.126 %
Concentration per Run 3	77.943 %	105.571 %	0.005 ppb	338.644 ppb	4.096 ppb	1.612 ppb	15.133 ppb	58.423 ppb	77.835 %
Concentration RSD	0.6 %	6.4 %	88.2 %	9.0 %	27.5 %	14.4 %	44.6 %	17.2 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	94.190 %	0.128 ppb	0.034 ppb	0.076 ppb	0.420 ppb	10.528 ppb	0.009 ppb	-0.313 ppb	0.056 ppb
Concentration per Run 1	93.124 %	0.235 ppb	-0.012 ppb	0.115 ppb	0.415 ppb	9.001 ppb	0.009 ppb	-0.335 ppb	0.040 ppb
Concentration per Run 2	89.906 %	0.039 ppb	0.051 ppb	0.065 ppb	0.491 ppb	11.957 ppb	0.016 ppb	-0.396 ppb	0.099 ppb
Concentration per Run 3	99.539 %	0.111 ppb	0.064 ppb	0.049 ppb	0.353 ppb	10.626 ppb	0.002 ppb	-0.209 ppb	0.028 ppb
Concentration RSD	5.2 %	77.4 %	119.8 %	44.9 %	16.5 %	14.1 %	76.5 %	30.5 %	69.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.591 ppb	87.818 %	0.023 ppb	0.126 ppb	0.140 ppb	0.115 ppb	88.073 %	0.035 ppb	0.000 ppb
Concentration per Run 1	0.513 ppb	85.832 %	-0.004 ppb	-0.056 ppb	0.170 ppb	0.106 ppb	88.938 %	0.023 ppb	0.005 ppb
Concentration per Run 2	0.701 ppb	84.424 %	0.051 ppb	0.013 ppb	0.109 ppb	0.098 ppb	84.713 %	0.041 ppb	-0.003 ppb
Concentration per Run 3	0.561 ppb	93.198 %	0.021 ppb	0.420 ppb	0.142 ppb	0.142 ppb	90.567 %	0.040 ppb	-0.004 ppb
Concentration RSD	16.5 %	5.4 %	121.3 %	204.5 %	21.9 %	20.3 %	3.4 %	29.5 %	1,058.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.274 %	1.642 ppb	0.394 ppb	0.167 ppb	89.056 %	95.715 %	0.215 ppb	0.005 ppb	0.005 ppb
Concentration per Run 1	88.285 %	1.326 ppb	0.326 ppb	0.287 ppb	88.617 %	94.967 %	0.185 ppb	0.003 ppb	-0.001 ppb
Concentration per Run 2	83.509 %	1.811 ppb	0.399 ppb	0.032 ppb	86.081 %	91.263 %	0.227 ppb	0.006 ppb	0.010 ppb
Concentration per Run 3	93.027 %	1.787 ppb	0.457 ppb	0.182 ppb	92.469 %	100.916 %	0.233 ppb	0.005 ppb	0.007 ppb
Concentration RSD	5.4 %	16.6 %	16.7 %	76.9 %	3.6 %	5.1 %	12.1 %	32.9 %	107.7 %

Category	209Bi (KED AGD)
Concentration average	92.609 %
Concentration per Run 1	91.877 %
Concentration per Run 2	90.700 %
Concentration per Run 3	95.250 %
Concentration RSD	2.6 %

Analysis index: 58 | Analysis started at: 3/7/2018 11:52:11 AM | Rack: 1
Analysis label: WG1095262-2D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 34

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.371 %	94.748 %	5.933 ppb	1,499.688 ppb	1,108.865 ppb	226.639 ppb	1,009.429 ppb	950.559 ppb	78.567 %
Concentration per Run 1	77.452 %	98.937 %	5.922 ppb	1,374.694 ppb	1,032.721 ppb	206.698 ppb	853.751 ppb	819.924 ppb	79.836 %
Concentration per Run 2	76.376 %	91.984 %	5.888 ppb	1,559.955 ppb	1,132.686 ppb	235.067 ppb	1,130.855 ppb	987.625 ppb	77.652 %
Concentration per Run 3	75.285 %	93.323 %	5.987 ppb	1,564.416 ppb	1,161.187 ppb	238.152 ppb	1,043.680 ppb	1,044.127 ppb	78.212 %
Concentration RSD	1.4 %	3.9 %	0.8 %	7.2 %	6.1 %	7.7 %	14.0 %	12.3 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	91.041 %	85.739 ppb	58.286 ppb	23.583 ppb	59.583 ppb	134.178 ppb	55.652 ppb	55.912 ppb	28.202 ppb
Concentration per Run 1	88.708 %	74.860 ppb	54.700 ppb	22.677 ppb	57.072 ppb	119.948 ppb	52.031 ppb	51.951 ppb	25.519 ppb
Concentration per Run 2	93.077 %	89.737 ppb	58.742 ppb	23.521 ppb	60.130 ppb	134.883 ppb	56.446 ppb	56.758 ppb	29.107 ppb
Concentration per Run 3	91.339 %	92.619 ppb	61.416 ppb	24.551 ppb	61.547 ppb	147.702 ppb	58.479 ppb	59.028 ppb	29.980 ppb
Concentration RSD	2.4 %	11.1 %	5.8 %	4.0 %	3.8 %	10.4 %	5.9 %	6.5 %	8.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	55.196 ppb	84.086 %	12.932 ppb	13.061 ppb	104.906 ppb	104.571 ppb	85.759 %	5.760 ppb	5.621 ppb
Concentration per Run 1	50.501 ppb	83.650 %	12.453 ppb	12.077 ppb	92.869 ppb	94.593 ppb	86.998 %	5.444 ppb	5.182 ppb
Concentration per Run 2	56.892 ppb	85.349 %	13.021 ppb	12.077 ppb	109.250 ppb	106.575 ppb	86.378 %	5.954 ppb	5.682 ppb
Concentration per Run 3	58.196 ppb	83.258 %	13.323 ppb	15.030 ppb	112.599 ppb	112.543 ppb	83.902 %	5.881 ppb	5.998 ppb
Concentration RSD	7.5 %	1.3 %	3.4 %	13.1 %	10.1 %	8.7 %	1.9 %	4.8 %	7.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.885 %	115.777 ppb	64.940 ppb	216.842 ppb	87.935 %	92.903 %	0.233 ppb	12.193 ppb	53.788 ppb
Concentration per Run 1	85.529 %	103.315 ppb	60.037 ppb	200.134 ppb	88.300 %	93.712 %	0.150 ppb	11.281 ppb	48.749 ppb
Concentration per Run 2	85.082 %	120.575 ppb	66.100 ppb	220.947 ppb	88.246 %	92.331 %	0.280 ppb	12.607 ppb	55.985 ppb
Concentration per Run 3	84.043 %	123.441 ppb	68.684 ppb	229.445 ppb	87.259 %	92.667 %	0.269 ppb	12.693 ppb	56.629 ppb
Concentration RSD	0.9 %	9.4 %	6.8 %	7.0 %	0.7 %	0.8 %	30.9 %	6.5 %	8.1 %

Category	209Bi (KED AGD)
Concentration average	89.755 %
Concentration per Run 1	89.562 %
Concentration per Run 2	90.333 %
Concentration per Run 3	89.371 %
Concentration RSD	0.6 %

Analysis index: 59 | Analysis started at: 3/7/2018 11:56:04 AM | Rack: 1
Analysis label: L1807334-01 2008TL | User name: ALPHALAB\metals-instrument | Vial: 30

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.584 %	87.710 %	0.402 ppb	286,572.849 ppb	8,007.720 ppb	2,429.205 ppb	20,999.093 ppb	44,762.616 ppb	78.438 %
Concentration per Run 1	72.275 %	87.773 %	0.408 ppb	270,040.483 ppb	7,315.793 ppb	2,236.994 ppb	19,379.705 ppb	41,201.753 ppb	77.835 %
Concentration per Run 2	73.021 %	92.685 %	0.408 ppb	286,975.679 ppb	8,051.703 ppb	2,481.331 ppb	20,603.134 ppb	43,923.295 ppb	78.916 %
Concentration per Run 3	72.454 %	82.670 %	0.389 ppb	302,702.385 ppb	8,655.665 ppb	2,569.288 ppb	23,014.439 ppb	49,162.800 ppb	78.562 %
Concentration RSD	0.5 %	5.7 %	2.7 %	5.7 %	8.4 %	7.1 %	8.8 %	9.0 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.167 %	95.961 ppb	9.809 ppb	47.330 ppb	183.889 ppb	10,960.961 ppb	3.922 ppb	19.818 ppb	168.987 ppb
Concentration per Run 1	85.466 %	87.531 ppb	9.132 ppb	43.512 ppb	174.377 ppb	10,175.645 ppb	3.412 ppb	18.910 ppb	157.292 ppb
Concentration per Run 2	88.849 %	91.002 ppb	10.090 ppb	50.025 ppb	190.404 ppb	11,426.781 ppb	4.067 ppb	19.368 ppb	176.072 ppb
Concentration per Run 3	90.187 %	109.351 ppb	10.206 ppb	48.451 ppb	186.886 ppb	11,280.457 ppb	4.285 ppb	21.175 ppb	173.597 ppb
Concentration RSD	2.8 %	12.2 %	6.0 %	7.2 %	4.6 %	6.2 %	11.6 %	6.0 %	6.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	952.805 ppb	78.959 %	6.244 ppb	0.862 ppb	205.300 ppb	3.879 ppb	78.110 %	0.949 ppb	4.950 ppb
Concentration per Run 1	879.835 ppb	78.931 %	6.279 ppb	0.954 ppb	185.491 ppb	3.803 ppb	79.704 %	0.846 ppb	4.414 ppb
Concentration per Run 2	987.446 ppb	79.500 %	5.877 ppb	0.811 ppb	211.150 ppb	3.554 ppb	76.738 %	0.984 ppb	5.204 ppb
Concentration per Run 3	991.134 ppb	78.445 %	6.574 ppb	0.820 ppb	219.259 ppb	4.282 ppb	77.890 %	1.018 ppb	5.232 ppb
Concentration RSD	6.6 %	0.7 %	5.6 %	9.3 %	8.6 %	9.5 %	1.9 %	9.6 %	9.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	75.726 %	8.520 ppb	1.640 ppb	123.848 ppb	79.994 %	91.580 %	1.112 ppb	0.164 ppb	78.250 ppb
Concentration per Run 1	76.906 %	8.241 ppb	1.519 ppb	112.249 ppb	80.799 %	93.136 %	0.857 ppb	0.141 ppb	70.339 ppb
Concentration per Run 2	74.408 %	8.533 ppb	1.588 ppb	132.585 ppb	79.382 %	90.674 %	1.202 ppb	0.174 ppb	81.263 ppb
Concentration per Run 3	75.864 %	8.785 ppb	1.813 ppb	126.710 ppb	79.802 %	90.929 %	1.277 ppb	0.177 ppb	83.147 ppb
Concentration RSD	1.7 %	3.2 %	9.4 %	8.5 %	0.9 %	1.5 %	20.1 %	12.1 %	8.8 %

Category	209Bi (KED AGD)
Concentration average	83.262 %
Concentration per Run 1	84.870 %
Concentration per Run 2	82.950 %
Concentration per Run 3	81.967 %
Concentration RSD	1.8 %

Analysis index: 60 | Analysis started at: 3/7/2018 11:59:55 AM | Rack: 1
Analysis label: L1807477-21 2008TL | User name: ALPHALAB\metals-instrument | Vial: 31

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.312 %	90.240 %	0.048 ppb	166,825.626 ppb	6,018.306 ppb	254.892 ppb	8,093.978 ppb	36,066.508 ppb	72.940 %
Concentration per Run 1	74.228 %	88.858 %	0.041 ppb	156,410.477 ppb	5,406.279 ppb	239.784 ppb	7,639.858 ppb	33,273.164 ppb	72.908 %
Concentration per Run 2	74.142 %	94.918 %	0.052 ppb	166,867.920 ppb	6,132.966 ppb	244.958 ppb	8,023.653 ppb	35,880.335 ppb	72.548 %
Concentration per Run 3	74.565 %	86.944 %	0.051 ppb	177,198.480 ppb	6,515.672 ppb	279.935 ppb	8,618.424 ppb	39,046.025 ppb	73.363 %
Concentration RSD	0.3 %	4.6 %	13.0 %	6.2 %	9.4 %	8.6 %	6.1 %	8.0 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	82.318 %	53.778 ppb	0.708 ppb	1.077 ppb	158.236 ppb	890.638 ppb	1.161 ppb	5.807 ppb	22.526 ppb
Concentration per Run 1	81.096 %	50.156 ppb	0.515 ppb	0.934 ppb	144.650 ppb	828.604 ppb	1.139 ppb	5.107 ppb	19.249 ppb
Concentration per Run 2	84.878 %	51.607 ppb	0.836 ppb	1.155 ppb	161.394 ppb	905.703 ppb	1.173 ppb	6.275 ppb	24.635 ppb
Concentration per Run 3	80.979 %	59.571 ppb	0.773 ppb	1.141 ppb	168.663 ppb	937.606 ppb	1.172 ppb	6.038 ppb	23.694 ppb
Concentration RSD	2.7 %	9.4 %	24.0 %	11.5 %	7.8 %	6.3 %	1.7 %	10.6 %	12.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	77.767 ppb	82.527 %	3.282 ppb	0.681 ppb	227.498 ppb	1.833 ppb	81.340 %	0.175 ppb	0.292 ppb
Concentration per Run 1	69.260 ppb	84.679 %	3.133 ppb	0.614 ppb	203.209 ppb	1.326 ppb	83.491 %	0.174 ppb	0.254 ppb
Concentration per Run 2	82.216 ppb	80.757 %	3.242 ppb	0.652 ppb	235.745 ppb	1.998 ppb	79.968 %	0.176 ppb	0.306 ppb
Concentration per Run 3	81.824 ppb	82.146 %	3.472 ppb	0.776 ppb	243.540 ppb	2.174 ppb	80.560 %	0.176 ppb	0.317 ppb
Concentration RSD	9.5 %	2.4 %	5.3 %	12.5 %	9.4 %	24.4 %	2.3 %	0.8 %	11.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	79.725 %	2.590 ppb	0.711 ppb	61.073 ppb	84.055 %	93.949 %	2.786 ppb	0.037 ppb	1.774 ppb
Concentration per Run 1	80.824 %	2.452 ppb	0.628 ppb	54.904 ppb	85.312 %	95.372 %	2.297 ppb	0.029 ppb	1.607 ppb
Concentration per Run 2	78.616 %	2.532 ppb	0.722 ppb	65.155 ppb	83.147 %	92.824 %	2.922 ppb	0.038 ppb	1.870 ppb
Concentration per Run 3	79.737 %	2.786 ppb	0.783 ppb	63.161 ppb	83.706 %	93.649 %	3.140 ppb	0.043 ppb	1.844 ppb
Concentration RSD	1.4 %	6.7 %	10.9 %	8.9 %	1.3 %	1.4 %	15.7 %	19.4 %	8.2 %

Category	209Bi (KED AGD)
Concentration average	86.510 %
Concentration per Run 1	88.054 %
Concentration per Run 2	85.906 %
Concentration per Run 3	85.570 %
Concentration RSD	1.6 %

Analysis index: 61
Analysis label: L1805926-18D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 12:03:47 PM
User name: ALPHALAB\metals-instrument
Rack: 1
Vial: 35

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.514 %	95.173 %	0.008 ppb	693.517 ppb	684.811 ppb	13.633 ppb	113.096 ppb	1,873.102 ppb	79.086 %
Concentration per Run 1	77.694 %	97.980 %	0.012 ppb	628.857 ppb	641.966 ppb	12.630 ppb	95.199 ppb	1,616.626 ppb	78.815 %
Concentration per Run 2	76.844 %	95.237 %	0.007 ppb	733.499 ppb	689.387 ppb	13.897 ppb	123.276 ppb	1,893.374 ppb	78.535 %
Concentration per Run 3	78.003 %	92.302 %	0.006 ppb	718.195 ppb	723.080 ppb	14.373 ppb	120.813 ppb	2,109.305 ppb	79.908 %
Concentration RSD	0.8 %	3.0 %	39.4 %	8.1 %	6.0 %	6.6 %	13.7 %	13.2 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	91.002 %	3.111 ppb	0.515 ppb	0.780 ppb	0.292 ppb	23.423 ppb	0.009 ppb	-0.333 ppb	0.086 ppb
Concentration per Run 1	89.154 %	2.603 ppb	0.431 ppb	0.582 ppb	0.457 ppb	18.370 ppb	0.003 ppb	-0.244 ppb	0.040 ppb
Concentration per Run 2	91.033 %	3.290 ppb	0.636 ppb	0.860 ppb	0.123 ppb	21.707 ppb	0.009 ppb	-0.464 ppb	0.112 ppb
Concentration per Run 3	92.819 %	3.438 ppb	0.479 ppb	0.897 ppb	0.296 ppb	30.192 ppb	0.016 ppb	-0.292 ppb	0.107 ppb
Concentration RSD	2.0 %	14.3 %	20.8 %	22.1 %	57.2 %	26.0 %	69.8 %	34.6 %	46.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.633 ppb	86.231 %	0.131 ppb	0.097 ppb	10.031 ppb	0.258 ppb	85.622 %	0.007 ppb	-0.005 ppb
Concentration per Run 1	0.477 ppb	87.643 %	0.116 ppb	0.007 ppb	9.181 ppb	0.181 ppb	85.535 %	0.007 ppb	-0.003 ppb
Concentration per Run 2	0.739 ppb	84.425 %	0.106 ppb	0.146 ppb	10.157 ppb	0.341 ppb	85.473 %	0.010 ppb	-0.003 ppb
Concentration per Run 3	0.684 ppb	86.625 %	0.171 ppb	0.139 ppb	10.754 ppb	0.252 ppb	85.859 %	0.002 ppb	-0.008 ppb
Concentration RSD	21.8 %	1.9 %	26.6 %	80.7 %	7.9 %	31.2 %	0.2 %	65.0 %	55.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.289 %	1.202 ppb	0.378 ppb	18.865 ppb	88.362 %	94.825 %	0.602 ppb	0.003 ppb	0.331 ppb
Concentration per Run 1	85.506 %	0.954 ppb	0.305 ppb	17.320 ppb	89.000 %	94.060 %	0.503 ppb	-0.001 ppb	0.294 ppb
Concentration per Run 2	84.044 %	1.334 ppb	0.368 ppb	19.008 ppb	87.215 %	95.269 %	0.702 ppb	0.003 ppb	0.352 ppb
Concentration per Run 3	86.316 %	1.317 ppb	0.460 ppb	20.266 ppb	88.871 %	95.147 %	0.602 ppb	0.006 ppb	0.347 ppb
Concentration RSD	1.3 %	17.9 %	20.6 %	7.8 %	1.1 %	0.7 %	16.5 %	144.9 %	9.7 %

Category	209Bi (KED AGD)
Concentration average	91.226 %
Concentration per Run 1	91.562 %
Concentration per Run 2	90.691 %
Concentration per Run 3	91.427 %
Concentration RSD	0.5 %

Analysis index: 62 | Analysis started at: 3/7/2018 12:07:41 PM | Rack: 1
Analysis label: L1805656-06D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 36

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.958 %	94.705 %	0.007 ppb	346.024 ppb	91.711 ppb	4.513 ppb	196.874 ppb	2,371.544 ppb	76.062 %
Concentration per Run 1	75.453 %	94.280 %	0.005 ppb	326.438 ppb	88.893 ppb	5.149 ppb	190.527 ppb	2,198.800 ppb	75.537 %
Concentration per Run 2	76.685 %	95.428 %	0.008 ppb	362.179 ppb	84.817 ppb	5.070 ppb	188.376 ppb	2,427.616 ppb	75.365 %
Concentration per Run 3	75.735 %	94.408 %	0.008 ppb	349.455 ppb	101.423 ppb	3.321 ppb	211.717 ppb	2,488.215 ppb	77.284 %
Concentration RSD	0.8 %	0.7 %	29.4 %	5.2 %	9.4 %	22.9 %	6.6 %	6.4 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.332 %	3.139 ppb	0.331 ppb	0.318 ppb	0.396 ppb	14.332 ppb	0.003 ppb	-0.326 ppb	0.002 ppb
Concentration per Run 1	87.509 %	2.629 ppb	0.442 ppb	0.325 ppb	0.472 ppb	6.150 ppb	-0.004 ppb	-0.212 ppb	-0.068 ppb
Concentration per Run 2	88.590 %	3.193 ppb	0.180 ppb	0.295 ppb	0.558 ppb	16.059 ppb	0.010 ppb	-0.418 ppb	0.016 ppb
Concentration per Run 3	88.896 %	3.596 ppb	0.372 ppb	0.332 ppb	0.157 ppb	20.786 ppb	0.003 ppb	-0.350 ppb	0.059 ppb
Concentration RSD	0.8 %	15.5 %	40.9 %	6.1 %	53.2 %	52.1 %	236.4 %	32.2 %	2,684.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.896 ppb	84.135 %	0.139 ppb	0.036 ppb	9.792 ppb	0.231 ppb	85.690 %	0.011 ppb	-0.002 ppb
Concentration per Run 1	0.707 ppb	83.886 %	0.121 ppb	0.147 ppb	8.902 ppb	0.192 ppb	88.312 %	0.014 ppb	-0.003 ppb
Concentration per Run 2	0.867 ppb	84.754 %	0.202 ppb	0.013 ppb	9.864 ppb	0.328 ppb	85.081 %	0.006 ppb	0.001 ppb
Concentration per Run 3	1.113 ppb	83.766 %	0.093 ppb	-0.052 ppb	10.611 ppb	0.172 ppb	83.678 %	0.013 ppb	-0.003 ppb
Concentration RSD	22.8 %	0.6 %	40.8 %	284.1 %	8.7 %	36.6 %	2.8 %	38.2 %	161.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.360 %	0.901 ppb	0.292 ppb	4.371 ppb	87.439 %	93.460 %	0.255 ppb	0.001 ppb	0.105 ppb
Concentration per Run 1	86.855 %	0.823 ppb	0.209 ppb	4.133 ppb	88.344 %	94.878 %	0.199 ppb	-0.002 ppb	0.100 ppb
Concentration per Run 2	83.216 %	1.011 ppb	0.308 ppb	4.345 ppb	87.289 %	93.090 %	0.258 ppb	0.001 ppb	0.102 ppb
Concentration per Run 3	83.011 %	0.869 ppb	0.359 ppb	4.636 ppb	86.685 %	92.411 %	0.308 ppb	0.003 ppb	0.113 ppb
Concentration RSD	2.6 %	10.9 %	26.2 %	5.8 %	1.0 %	1.4 %	21.3 %	334.8 %	6.3 %

Category	209Bi (KED AGD)
Concentration average	91.998 %
Concentration per Run 1	93.009 %
Concentration per Run 2	91.719 %
Concentration per Run 3	91.267 %
Concentration RSD	1.0 %

Analysis index: 63 | Analysis started at: 3/7/2018 12:11:34 PM | Rack: 1
Analysis label: L1805915-03D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 37

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.060 %	90.516 %	0.009 ppb	234.905 ppb	90.156 ppb	12.908 ppb	59.026 ppb	2,081.688 ppb	76.898 %
Concentration per Run 1	75.877 %	87.136 %	0.007 ppb	206.309 ppb	92.210 ppb	12.260 ppb	42.566 ppb	1,823.513 ppb	76.908 %
Concentration per Run 2	76.821 %	90.580 %	0.008 ppb	262.708 ppb	102.850 ppb	14.948 ppb	64.677 ppb	2,184.380 ppb	76.950 %
Concentration per Run 3	75.480 %	93.833 %	0.012 ppb	235.697 ppb	75.408 ppb	11.516 ppb	69.834 ppb	2,237.172 ppb	76.836 %
Concentration RSD	0.9 %	3.7 %	30.5 %	12.0 %	15.3 %	14.0 %	24.5 %	10.8 %	0.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.560 %	2.731 ppb	0.196 ppb	0.135 ppb	4.003 ppb	13.386 ppb	0.010 ppb	-0.270 ppb	0.041 ppb
Concentration per Run 1	81.076 %	2.744 ppb	0.268 ppb	0.223 ppb	3.591 ppb	15.602 ppb	0.018 ppb	-0.232 ppb	-0.001 ppb
Concentration per Run 2	87.157 %	2.499 ppb	0.075 ppb	0.130 ppb	4.124 ppb	11.677 ppb	0.003 ppb	-0.277 ppb	0.034 ppb
Concentration per Run 3	88.449 %	2.949 ppb	0.245 ppb	0.051 ppb	4.293 ppb	12.877 ppb	0.010 ppb	-0.302 ppb	0.089 ppb
Concentration RSD	4.6 %	8.2 %	54.0 %	64.1 %	9.2 %	15.0 %	74.1 %	13.2 %	112.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.756 ppb	80.688 %	0.063 ppb	0.044 ppb	2.361 ppb	0.247 ppb	83.863 %	0.016 ppb	-0.003 ppb
Concentration per Run 1	0.644 ppb	76.898 %	0.041 ppb	0.030 ppb	2.081 ppb	0.189 ppb	84.970 %	0.016 ppb	0.002 ppb
Concentration per Run 2	0.716 ppb	82.374 %	0.095 ppb	0.018 ppb	2.301 ppb	0.394 ppb	83.654 %	0.006 ppb	-0.008 ppb
Concentration per Run 3	0.909 ppb	82.793 %	0.052 ppb	0.085 ppb	2.701 ppb	0.159 ppb	82.964 %	0.025 ppb	-0.003 ppb
Concentration RSD	18.1 %	4.1 %	45.1 %	80.9 %	13.3 %	51.5 %	1.2 %	58.5 %	149.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.406 %	0.757 ppb	0.843 ppb	1.805 ppb	86.243 %	91.345 %	0.186 ppb	0.003 ppb	1.742 ppb
Concentration per Run 1	81.984 %	0.620 ppb	0.766 ppb	1.659 ppb	84.181 %	88.394 %	0.138 ppb	0.000 ppb	1.598 ppb
Concentration per Run 2	82.681 %	0.863 ppb	0.841 ppb	1.939 ppb	87.273 %	92.903 %	0.156 ppb	0.006 ppb	1.828 ppb
Concentration per Run 3	82.553 %	0.787 ppb	0.921 ppb	1.818 ppb	87.273 %	92.737 %	0.265 ppb	0.004 ppb	1.800 ppb
Concentration RSD	0.5 %	16.4 %	9.2 %	7.8 %	2.1 %	2.8 %	37.1 %	91.0 %	7.2 %

Category	209Bi (KED AGD)
Concentration average	88.446 %
Concentration per Run 1	86.420 %
Concentration per Run 2	89.025 %
Concentration per Run 3	89.891 %
Concentration RSD	2.0 %

Analysis index: 64 | Analysis started at: 3/7/2018 12:15:25 PM | Rack: 1
Analysis label: L1805915-05D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 38

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.858 %	88.709 %	0.007 ppb	496.189 ppb	151.786 ppb	8.562 ppb	109.118 ppb	2,350.767 ppb	77.639 %
Concentration per Run 1	77.105 %	86.753 %	0.005 ppb	449.413 ppb	149.848 ppb	7.397 ppb	91.864 ppb	2,151.629 ppb	77.099 %
Concentration per Run 2	76.500 %	90.070 %	0.009 ppb	511.614 ppb	133.090 ppb	10.119 ppb	122.650 ppb	2,351.967 ppb	78.408 %
Concentration per Run 3	76.969 %	89.304 %	0.007 ppb	527.538 ppb	172.418 ppb	8.169 ppb	112.841 ppb	2,548.706 ppb	77.411 %
Concentration RSD	0.4 %	2.0 %	27.3 %	8.3 %	13.0 %	16.4 %	14.4 %	8.4 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.424 %	3.091 ppb	0.159 ppb	0.068 ppb	6.818 ppb	9.009 ppb	0.033 ppb	-0.215 ppb	0.111 ppb
Concentration per Run 1	83.072 %	2.461 ppb	0.033 ppb	0.059 ppb	5.920 ppb	11.470 ppb	0.053 ppb	-0.244 ppb	0.097 ppb
Concentration per Run 2	90.657 %	3.183 ppb	0.199 ppb	0.109 ppb	7.765 ppb	9.387 ppb	0.036 ppb	-0.168 ppb	0.118 ppb
Concentration per Run 3	88.543 %	3.630 ppb	0.246 ppb	0.037 ppb	6.768 ppb	6.170 ppb	0.010 ppb	-0.233 ppb	0.119 ppb
Concentration RSD	4.5 %	19.1 %	70.3 %	54.2 %	13.5 %	29.6 %	65.9 %	18.9 %	11.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.499 ppb	81.569 %	0.186 ppb	0.733 ppb	11.464 ppb	0.246 ppb	82.141 %	0.008 ppb	-0.005 ppb
Concentration per Run 1	0.375 ppb	80.890 %	0.169 ppb	0.650 ppb	9.952 ppb	0.225 ppb	80.635 %	0.001 ppb	-0.003 ppb
Concentration per Run 2	0.469 ppb	81.906 %	0.209 ppb	1.118 ppb	11.988 ppb	0.278 ppb	83.283 %	0.004 ppb	-0.003 ppb
Concentration per Run 3	0.653 ppb	81.910 %	0.181 ppb	0.432 ppb	12.451 ppb	0.235 ppb	82.505 %	0.019 ppb	-0.008 ppb
Concentration RSD	28.3 %	0.7 %	11.1 %	47.8 %	11.6 %	11.3 %	1.7 %	123.5 %	60.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.047 %	0.653 ppb	0.593 ppb	4.429 ppb	86.184 %	92.039 %	0.465 ppb	0.000 ppb	1.148 ppb
Concentration per Run 1	77.919 %	0.330 ppb	0.460 ppb	4.280 ppb	83.620 %	89.281 %	0.086 ppb	0.000 ppb	1.011 ppb
Concentration per Run 2	83.065 %	0.925 ppb	0.678 ppb	4.420 ppb	87.361 %	93.672 %	0.210 ppb	0.001 ppb	1.174 ppb
Concentration per Run 3	82.155 %	0.704 ppb	0.641 ppb	4.586 ppb	87.571 %	93.165 %	1.101 ppb	-0.001 ppb	1.261 ppb
Concentration RSD	3.4 %	46.1 %	19.7 %	3.5 %	2.6 %	2.6 %	119.0 %	2,167.5 %	11.1 %

Category	209Bi (KED AGD)
Concentration average	89.267 %
Concentration per Run 1	87.458 %
Concentration per Run 2	91.281 %
Concentration per Run 3	89.063 %
Concentration RSD	2.2 %

Analysis index: 65
Analysis label: L1805915-12D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 12:19:16 PM
User name: ALPHALAB\metals-instrument
Rack: 1
Vial: 39

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.202 %	91.282 %	0.006 ppb	781.752 ppb	161.815 ppb	31.382 ppb	35.905 ppb	1,343.300 ppb	76.414 %
Concentration per Run 1	74.635 %	92.813 %	0.008 ppb	726.408 ppb	140.552 ppb	29.532 ppb	31.675 ppb	1,224.707 ppb	76.378 %
Concentration per Run 2	75.333 %	90.835 %	0.011 ppb	819.006 ppb	169.768 ppb	33.521 ppb	34.001 ppb	1,403.527 ppb	76.189 %
Concentration per Run 3	75.637 %	90.197 %	-0.001 ppb	799.843 ppb	175.126 ppb	31.093 ppb	42.039 ppb	1,401.667 ppb	76.676 %
Concentration RSD	0.7 %	1.5 %	107.6 %	6.3 %	11.5 %	6.4 %	15.1 %	7.6 %	0.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.349 %	2.383 ppb	0.165 ppb	2.215 ppb	1.243 ppb	30.309 ppb	0.020 ppb	-0.229 ppb	0.406 ppb
Concentration per Run 1	84.738 %	2.492 ppb	0.167 ppb	2.126 ppb	1.273 ppb	29.677 ppb	0.024 ppb	-0.173 ppb	0.336 ppb
Concentration per Run 2	81.333 %	1.955 ppb	0.151 ppb	2.252 ppb	1.198 ppb	25.974 ppb	0.018 ppb	-0.230 ppb	0.498 ppb
Concentration per Run 3	89.976 %	2.702 ppb	0.178 ppb	2.268 ppb	1.259 ppb	35.277 ppb	0.016 ppb	-0.283 ppb	0.383 ppb
Concentration RSD	5.1 %	16.2 %	8.1 %	3.5 %	3.2 %	15.5 %	21.7 %	24.1 %	20.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.388 ppb	79.501 %	0.108 ppb	0.050 ppb	3.646 ppb	0.178 ppb	81.803 %	0.009 ppb	-0.001 ppb
Concentration per Run 1	1.365 ppb	79.455 %	0.157 ppb	0.025 ppb	3.376 ppb	0.132 ppb	82.614 %	0.011 ppb	0.002 ppb
Concentration per Run 2	1.408 ppb	75.595 %	0.088 ppb	0.109 ppb	3.795 ppb	0.185 ppb	80.220 %	0.007 ppb	-0.003 ppb
Concentration per Run 3	1.390 ppb	83.451 %	0.080 ppb	0.016 ppb	3.766 ppb	0.219 ppb	82.577 %	0.008 ppb	-0.003 ppb
Concentration RSD	1.6 %	4.9 %	39.1 %	102.6 %	6.4 %	24.4 %	1.7 %	22.8 %	182.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	80.775 %	0.764 ppb	0.427 ppb	2.625 ppb	86.188 %	92.491 %	0.251 ppb	0.000 ppb	8.245 ppb
Concentration per Run 1	82.390 %	0.711 ppb	0.354 ppb	2.505 ppb	87.305 %	95.512 %	0.478 ppb	-0.001 ppb	7.488 ppb
Concentration per Run 2	78.286 %	0.863 ppb	0.465 ppb	2.296 ppb	83.468 %	89.396 %	0.109 ppb	-0.002 ppb	8.563 ppb
Concentration per Run 3	81.649 %	0.720 ppb	0.461 ppb	3.073 ppb	87.791 %	92.566 %	0.167 ppb	0.003 ppb	8.683 ppb
Concentration RSD	2.7 %	11.2 %	14.8 %	15.3 %	2.7 %	3.3 %	79.1 %	10,126.4 %	8.0 %

Category	209Bi (KED AGD)
Concentration average	89.244 %
Concentration per Run 1	89.727 %
Concentration per Run 2	87.658 %
Concentration per Run 3	90.347 %
Concentration RSD	1.6 %

Analysis index: 66 | Analysis started at: 3/7/2018 12:23:07 PM | Rack: 1
Analysis label: L1805915-22D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 40

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.350 %	88.581 %	0.004 ppb	549.870 ppb	477.109 ppb	5.657 ppb	64.051 ppb	1,625.150 ppb	75.670 %
Concentration per Run 1	75.130 %	91.984 %	0.003 ppb	502.999 ppb	449.166 ppb	5.001 ppb	53.594 ppb	1,432.640 ppb	75.870 %
Concentration per Run 2	75.701 %	82.734 %	0.004 ppb	596.118 ppb	484.220 ppb	7.404 ppb	60.068 ppb	1,763.498 ppb	75.422 %
Concentration per Run 3	75.219 %	91.027 %	0.006 ppb	550.492 ppb	497.942 ppb	4.566 ppb	78.491 ppb	1,679.313 ppb	75.717 %
Concentration RSD	0.4 %	5.7 %	35.3 %	8.5 %	5.3 %	27.0 %	20.2 %	10.6 %	0.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	82.859 %	2.551 ppb	0.469 ppb	1.048 ppb	0.076 ppb	6.150 ppb	0.003 ppb	-0.375 ppb	0.027 ppb
Concentration per Run 1	82.271 %	2.175 ppb	0.491 ppb	1.066 ppb	0.075 ppb	4.443 ppb	-0.004 ppb	-0.410 ppb	-0.021 ppb
Concentration per Run 2	80.347 %	2.772 ppb	0.466 ppb	1.103 ppb	0.050 ppb	4.870 ppb	-0.004 ppb	-0.373 ppb	0.006 ppb
Concentration per Run 3	85.959 %	2.705 ppb	0.452 ppb	0.975 ppb	0.102 ppb	9.138 ppb	0.017 ppb	-0.342 ppb	0.095 ppb
Concentration RSD	3.4 %	12.8 %	4.2 %	6.3 %	34.7 %	42.2 %	390.0 %	9.0 %	228.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.583 ppb	77.679 %	0.220 ppb	0.077 ppb	5.840 ppb	0.183 ppb	80.789 %	0.005 ppb	0.002 ppb
Concentration per Run 1	0.614 ppb	81.026 %	0.269 ppb	-0.048 ppb	4.967 ppb	0.145 ppb	83.126 %	0.005 ppb	-0.003 ppb
Concentration per Run 2	0.549 ppb	71.375 %	0.207 ppb	0.047 ppb	6.506 ppb	0.209 ppb	77.797 %	0.004 ppb	0.002 ppb
Concentration per Run 3	0.586 ppb	80.634 %	0.184 ppb	0.232 ppb	6.046 ppb	0.193 ppb	81.445 %	0.005 ppb	0.006 ppb
Concentration RSD	5.6 %	7.0 %	20.0 %	185.0 %	13.5 %	18.2 %	3.4 %	9.1 %	257.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	80.480 %	0.497 ppb	0.246 ppb	10.377 ppb	84.305 %	90.293 %	0.178 ppb	-0.002 ppb	0.445 ppb
Concentration per Run 1	84.148 %	0.391 ppb	0.150 ppb	8.794 ppb	86.120 %	93.081 %	0.171 ppb	-0.002 ppb	0.389 ppb
Concentration per Run 2	75.733 %	0.437 ppb	0.269 ppb	10.828 ppb	81.410 %	86.511 %	0.166 ppb	-0.001 ppb	0.474 ppb
Concentration per Run 3	81.559 %	0.664 ppb	0.319 ppb	11.509 ppb	85.385 %	91.288 %	0.196 ppb	-0.002 ppb	0.471 ppb
Concentration RSD	5.4 %	29.3 %	35.3 %	13.6 %	3.0 %	3.8 %	9.0 %	25.3 %	10.9 %

Category	209Bi (KED AGD)
Concentration average	87.898 %
Concentration per Run 1	90.496 %
Concentration per Run 2	84.848 %
Concentration per Run 3	88.350 %
Concentration RSD	3.2 %

Analysis index: 67 Analysis started at: 3/7/2018 12:26:58 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.661 %	91.580 %	109.563 ppb	10,416.860 ppb	10,320.327 ppb	99.305 ppb	9,469.209 ppb	9,920.654 ppb	88.711 %
Concentration per Run 1	79.341 %	95.875 %	108.898 ppb	9,834.615 ppb	9,545.204 ppb	93.944 ppb	8,475.049 ppb	8,498.113 ppb	88.722 %
Concentration per Run 2	78.122 %	88.411 %	109.421 ppb	10,730.084 ppb	10,760.702 ppb	104.841 ppb	9,972.874 ppb	10,594.570 ppb	88.104 %
Concentration per Run 3	78.522 %	90.453 %	110.370 ppb	10,685.881 ppb	10,655.075 ppb	99.129 ppb	9,959.703 ppb	10,669.278 ppb	89.306 %
Recovery Percentage 1			109.563 %	104.169 %	103.203 %	99.305 %	94.692 %	99.207 %	
Concentration RSD	0.8 %	4.2 %	0.7 %	4.8 %	6.5 %	5.5 %	9.1 %	12.4 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	98.661 %	96.515 ppb	105.184 ppb	106.292 ppb	103.946 ppb	10,457.975 ppb	102.856 ppb	101.114 ppb	102.408 ppb
Concentration per Run 1	91.339 %	83.031 ppb	100.423 ppb	101.897 ppb	98.360 ppb	9,831.572 ppb	97.472 ppb	94.866 ppb	95.052 ppb
Concentration per Run 2	101.418 %	102.485 ppb	107.818 ppb	110.356 ppb	105.201 ppb	10,696.307 ppb	106.078 ppb	105.249 ppb	105.453 ppb
Concentration per Run 3	103.227 %	104.029 ppb	107.312 ppb	106.623 ppb	108.276 ppb	10,846.046 ppb	105.018 ppb	103.228 ppb	106.718 ppb
Recovery Percentage 1		96.515 %	105.184 %	106.292 %	103.946 %	104.580 %	102.856 %	101.114 %	102.408 %
Concentration RSD	6.5 %	12.1 %	3.9 %	4.0 %	4.9 %	5.2 %	4.6 %	5.4 %	6.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	98.880 ppb	83.943 %	100.111 ppb	104.792 ppb	102.636 ppb	104.615 ppb	84.317 %	102.645 ppb	101.638 ppb
Concentration per Run 1	92.583 ppb	83.831 %	91.943 ppb	100.986 ppb	91.097 ppb	94.843 ppb	84.774 %	94.131 ppb	91.603 ppb
Concentration per Run 2	101.599 ppb	82.374 %	102.910 ppb	108.650 ppb	108.539 ppb	109.692 ppb	84.057 %	107.012 ppb	106.086 ppb
Concentration per Run 3	102.458 ppb	85.624 %	105.478 ppb	104.739 ppb	108.272 ppb	109.310 ppb	84.121 %	106.792 ppb	107.225 ppb
Recovery Percentage 1	98.880 %		100.111 %	104.792 %	102.636 %	104.615 %		102.645 %	101.638 %
Concentration RSD	5.5 %	1.9 %	7.2 %	3.7 %	9.7 %	8.1 %	0.5 %	7.2 %	8.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.961 %	94.259 ppb	100.112 ppb	105.586 ppb	90.309 %	95.801 %	99.483 ppb	100.057 ppb	97.758 ppb
Concentration per Run 1	86.650 %	81.375 ppb	88.200 ppb	93.999 ppb	90.777 %	96.127 %	89.900 ppb	92.184 ppb	89.512 ppb
Concentration per Run 2	83.727 %	97.526 ppb	103.446 ppb	111.434 ppb	89.986 %	95.973 %	104.997 ppb	104.290 ppb	101.146 ppb
Concentration per Run 3	84.504 %	103.877 ppb	108.688 ppb	111.325 ppb	90.164 %	95.304 %	103.551 ppb	103.697 ppb	102.616 ppb
Recovery Percentage 1		94.259 %	100.112 %	105.586 %			99.483 %	100.057 %	97.758 %
Concentration RSD	1.8 %	12.3 %	10.6 %	9.5 %	0.5 %	0.5 %	8.4 %	6.8 %	7.3 %

Category	209Bi (KED AGD)
Concentration average	91.857 %
Concentration per Run 1	92.917 %
Concentration per Run 2	91.270 %
Concentration per Run 3	91.384 %
Recovery Percentage 1	
Concentration RSD	1.0 %

Analysis index: 68 Analysis started at: 3/7/2018 12:30:54 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.260 %	97.363 %	0.011 ppb	72.030 ppb	0.845 ppb	-0.088 ppb	10.534 ppb	3.605 ppb	80.299 %
Concentration per Run 1	82.421 %	97.852 %	0.006 ppb	57.035 ppb	2.898 ppb	0.539 ppb	-5.113 ppb	-7.304 ppb	81.318 %
Concentration per Run 2	81.355 %	99.575 %	0.011 ppb	56.746 ppb	0.376 ppb	-0.693 ppb	23.418 ppb	8.627 ppb	80.161 %
Concentration per Run 3	80.004 %	94.663 %	0.015 ppb	102.309 ppb	-0.738 ppb	-0.110 ppb	13.297 ppb	9.490 ppb	79.417 %
Recovery Percentage 1			2.165 %	72.030 %	0.845 %	-0.880 %	10.534 %	3.605 %	
Concentration RSD	1.5 %	2.6 %	40.4 %	36.4 %	220.3 %	700.1 %	137.3 %	262.4 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.898 %	-0.100 ppb	0.003 ppb	0.095 ppb	0.021 ppb	17.737 ppb	0.012 ppb	-0.214 ppb	0.025 ppb
Concentration per Run 1	83.258 %	-0.319 ppb	0.033 ppb	0.116 ppb	0.040 ppb	16.840 ppb	0.017 ppb	-0.133 ppb	0.020 ppb
Concentration per Run 2	98.576 %	-0.119 ppb	-0.012 ppb	0.071 ppb	0.021 ppb	17.856 ppb	-0.004 ppb	-0.290 ppb	0.014 ppb
Concentration per Run 3	87.862 %	0.137 ppb	-0.012 ppb	0.098 ppb	0.002 ppb	18.516 ppb	0.023 ppb	-0.221 ppb	0.040 ppb
Recovery Percentage 1		-20.032 %	0.051 %	9.477 %	2.118 %	35.474 %	2.381 %	-10.713 %	2.482 %
Concentration RSD	8.7 %	228.0 %	1,023.1 %	23.8 %	87.9 %	4.8 %	117.1 %	36.8 %	54.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.002 ppb	88.506 %	0.045 ppb	0.091 ppb	-0.010 ppb	0.358 ppb	88.805 %	0.058 ppb	0.004 ppb
Concentration per Run 1	0.042 ppb	83.571 %	0.066 ppb	0.148 ppb	-0.025 ppb	0.221 ppb	88.370 %	0.044 ppb	0.001 ppb
Concentration per Run 2	-0.059 ppb	94.003 %	0.008 ppb	0.054 ppb	-0.016 ppb	0.380 ppb	91.063 %	0.065 ppb	0.009 ppb
Concentration per Run 3	0.022 ppb	87.943 %	0.062 ppb	0.070 ppb	0.012 ppb	0.473 ppb	86.982 %	0.064 ppb	0.001 ppb
Recovery Percentage 1	0.017 %		9.086 %	1.812 %	-1.921 %	17.894 %		14.386 %	1.774 %
Concentration RSD	3,170.5 %	5.9 %	70.6 %	55.3 %	196.7 %	35.6 %	2.3 %	20.6 %	124.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.332 %	4.764 ppb	2.173 ppb	0.011 ppb	91.761 %	98.827 %	1.087 ppb	0.021 ppb	0.003 ppb
Concentration per Run 1	89.891 %	4.087 ppb	1.994 ppb	0.027 ppb	91.188 %	97.681 %	0.759 ppb	0.021 ppb	0.000 ppb
Concentration per Run 2	94.775 %	4.627 ppb	2.105 ppb	0.002 ppb	94.814 %	103.209 %	0.886 ppb	0.021 ppb	0.005 ppb
Concentration per Run 3	86.331 %	5.578 ppb	2.419 ppb	0.005 ppb	89.280 %	95.591 %	1.616 ppb	0.022 ppb	0.005 ppb
Recovery Percentage 1		158.801 %	54.323 %	2.291 %			54.344 %	4.186 %	0.675 %
Concentration RSD	4.7 %	15.9 %	10.1 %	118.2 %	3.1 %	4.0 %	42.5 %	3.0 %	80.1 %

Category	209Bi (KED AGD)
Concentration average	95.310 %
Concentration per Run 1	93.930 %
Concentration per Run 2	99.928 %
Concentration per Run 3	92.071 %
Recovery Percentage 1	
Concentration RSD	4.3 %

Analysis index: 69 | Analysis started at: 3/7/2018 12:36:05 PM | Rack: 1
Analysis label: WG1095278-1D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 42

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.030 %	88.007 %	0.007 ppb	303.632 ppb	3.926 ppb	1.865 ppb	15.260 ppb	17.739 ppb	74.980 %
Concentration per Run 1	76.959 %	87.327 %	0.010 ppb	289.799 ppb	4.437 ppb	1.435 ppb	17.275 ppb	5.285 ppb	74.802 %
Concentration per Run 2	76.614 %	89.432 %	0.005 ppb	299.821 ppb	5.520 ppb	1.880 ppb	10.332 ppb	23.788 ppb	74.441 %
Concentration per Run 3	77.516 %	87.263 %	0.007 ppb	321.274 ppb	1.819 ppb	2.280 ppb	18.174 ppb	24.143 ppb	75.697 %
Concentration RSD	0.6 %	1.4 %	31.2 %	5.3 %	48.5 %	22.7 %	28.1 %	60.8 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.043 %	-0.051 ppb	0.024 ppb	0.147 ppb	-0.004 ppb	14.245 ppb	0.003 ppb	-0.272 ppb	0.002 ppb
Concentration per Run 1	83.023 %	-0.148 ppb	-0.012 ppb	0.164 ppb	0.040 ppb	7.154 ppb	0.010 ppb	-0.294 ppb	0.007 ppb
Concentration per Run 2	86.805 %	-0.217 ppb	0.097 ppb	0.022 ppb	-0.026 ppb	15.277 ppb	0.003 ppb	-0.297 ppb	0.051 ppb
Concentration per Run 3	85.301 %	0.213 ppb	-0.012 ppb	0.255 ppb	-0.025 ppb	20.305 ppb	-0.004 ppb	-0.224 ppb	-0.051 ppb
Concentration RSD	2.2 %	456.8 %	262.8 %	79.7 %	1,067.8 %	46.6 %	225.3 %	15.1 %	2,421.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.520 ppb	81.351 %	0.025 ppb	0.091 ppb	0.047 ppb	0.111 ppb	82.992 %	0.059 ppb	-0.001 ppb
Concentration per Run 1	0.388 ppb	82.718 %	0.010 ppb	-0.051 ppb	0.105 ppb	0.071 ppb	83.056 %	0.070 ppb	-0.003 ppb
Concentration per Run 2	0.584 ppb	80.547 %	0.054 ppb	0.232 ppb	-0.013 ppb	0.132 ppb	82.505 %	0.054 ppb	0.006 ppb
Concentration per Run 3	0.587 ppb	80.787 %	0.010 ppb	0.091 ppb	0.051 ppb	0.130 ppb	83.414 %	0.054 ppb	-0.008 ppb
Concentration RSD	21.9 %	1.5 %	101.4 %	155.6 %	124.2 %	31.4 %	0.6 %	16.0 %	476.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.018 %	2.152 ppb	0.667 ppb	0.039 ppb	87.446 %	93.936 %	0.268 ppb	0.007 ppb	0.101 ppb
Concentration per Run 1	82.626 %	1.812 ppb	0.639 ppb	0.032 ppb	87.016 %	90.830 %	0.235 ppb	0.008 ppb	0.090 ppb
Concentration per Run 2	81.865 %	2.433 ppb	0.694 ppb	0.032 ppb	87.260 %	94.758 %	0.268 ppb	0.007 ppb	0.110 ppb
Concentration per Run 3	84.563 %	2.212 ppb	0.669 ppb	0.054 ppb	88.060 %	96.220 %	0.299 ppb	0.005 ppb	0.103 ppb
Concentration RSD	1.7 %	14.6 %	4.2 %	33.3 %	0.6 %	3.0 %	11.9 %	28.8 %	9.8 %

Category	209Bi (KED AGD)
Concentration average	91.064 %
Concentration per Run 1	91.311 %
Concentration per Run 2	89.174 %
Concentration per Run 3	92.707 %
Concentration RSD	2.0 %

Analysis index: 70 | Analysis started at: 3/7/2018 12:39:57 PM | Rack: 1
Analysis label: WG1095170-1 6020TL | User name: ALPHALAB\metals-instrument | Vial: 47

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.103 %	91.686 %	0.005 ppb	84.273 ppb	0.732 ppb	0.852 ppb	11.716 ppb	-0.043 ppb	74.784 %
Concentration per Run 1	76.042 %	96.640 %	0.005 ppb	73.879 ppb	-0.129 ppb	-0.092 ppb	3.485 ppb	-0.604 ppb	75.495 %
Concentration per Run 2	76.003 %	89.751 %	0.008 ppb	78.086 ppb	1.149 ppb	0.811 ppb	3.636 ppb	0.230 ppb	74.159 %
Concentration per Run 3	76.264 %	88.666 %	0.002 ppb	100.853 ppb	1.176 ppb	1.838 ppb	28.027 ppb	0.245 ppb	74.698 %
Concentration RSD	0.2 %	4.7 %	66.1 %	17.2 %	101.9 %	113.3 %	120.6 %	1,120.9 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.479 %	-0.156 ppb	0.017 ppb	0.079 ppb	0.092 ppb	8.252 ppb	0.001 ppb	-0.413 ppb	0.045 ppb
Concentration per Run 1	83.798 %	-0.259 ppb	0.054 ppb	0.096 ppb	0.134 ppb	5.608 ppb	0.010 ppb	-0.415 ppb	0.060 ppb
Concentration per Run 2	85.536 %	-0.186 ppb	-0.012 ppb	0.095 ppb	0.135 ppb	7.089 ppb	-0.004 ppb	-0.412 ppb	0.008 ppb
Concentration per Run 3	84.103 %	-0.022 ppb	0.010 ppb	0.047 ppb	0.008 ppb	12.061 ppb	-0.004 ppb	-0.411 ppb	0.067 ppb
Concentration RSD	1.1 %	77.9 %	196.6 %	35.4 %	79.3 %	41.0 %	1,126.6 %	0.5 %	72.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.267 ppb	82.397 %	0.039 ppb	-0.027 ppb	0.046 ppb	0.027 ppb	83.801 %	0.015 ppb	-0.006 ppb
Concentration per Run 1	0.233 ppb	85.517 %	0.023 ppb	-0.055 ppb	0.036 ppb	-0.004 ppb	87.094 %	0.011 ppb	-0.008 ppb
Concentration per Run 2	0.397 ppb	80.607 %	0.054 ppb	0.092 ppb	0.044 ppb	0.028 ppb	81.638 %	0.012 ppb	-0.003 ppb
Concentration per Run 3	0.171 ppb	81.068 %	0.039 ppb	-0.117 ppb	0.059 ppb	0.057 ppb	82.673 %	0.021 ppb	-0.008 ppb
Concentration RSD	43.8 %	3.3 %	39.4 %	402.4 %	25.3 %	114.6 %	3.5 %	35.1 %	43.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.687 %	1.226 ppb	0.362 ppb	0.039 ppb	88.344 %	95.432 %	0.069 ppb	0.000 ppb	-0.015 ppb
Concentration per Run 1	88.169 %	1.023 ppb	0.298 ppb	-0.019 ppb	90.494 %	99.177 %	0.023 ppb	-0.001 ppb	-0.019 ppb
Concentration per Run 2	82.792 %	1.380 ppb	0.349 ppb	0.032 ppb	85.979 %	92.480 %	0.085 ppb	0.000 ppb	-0.013 ppb
Concentration per Run 3	83.099 %	1.273 ppb	0.439 ppb	0.103 ppb	88.560 %	94.638 %	0.100 ppb	0.000 ppb	-0.013 ppb
Concentration RSD	3.6 %	15.0 %	19.6 %	157.5 %	2.6 %	3.6 %	59.4 %	252.7 %	24.6 %

Category	209Bi (KED AGD)
Concentration average	93.780 %
Concentration per Run 1	95.814 %
Concentration per Run 2	91.693 %
Concentration per Run 3	93.834 %
Concentration RSD	2.2 %

Analysis index: 71 | Analysis started at: 3/7/2018 12:43:50 PM | Rack: 1
Analysis label: WG1095170-2D5 6020TL | User name: ALPHALAB\metals-instrument | Vial: 48

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.993 %	96.172 %	9.734 ppb	2,350.841 ppb	2,256.062 ppb	409.807 ppb	2,021.023 ppb	2,253.219 ppb	76.388 %
Concentration per Run 1	77.782 %	101.616 %	9.748 ppb	2,176.352 ppb	2,134.351 ppb	393.413 ppb	1,938.479 ppb	2,108.868 ppb	76.813 %
Concentration per Run 2	76.315 %	94.344 %	9.742 ppb	2,456.971 ppb	2,242.901 ppb	413.495 ppb	1,968.083 ppb	2,342.301 ppb	75.762 %
Concentration per Run 3	76.882 %	92.558 %	9.713 ppb	2,419.201 ppb	2,390.933 ppb	422.515 ppb	2,156.506 ppb	2,308.486 ppb	76.588 %
Concentration RSD	1.0 %	5.0 %	0.2 %	6.5 %	5.7 %	3.6 %	5.9 %	5.6 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.911 %	169.912 ppb	95.849 ppb	47.845 ppb	116.905 ppb	221.133 ppb	111.584 ppb	111.166 ppb	53.589 ppb
Concentration per Run 1	92.067 %	156.368 ppb	84.749 ppb	42.480 ppb	106.724 ppb	191.423 ppb	97.666 ppb	98.351 ppb	47.567 ppb
Concentration per Run 2	85.607 %	171.003 ppb	99.117 ppb	49.658 ppb	122.251 ppb	222.877 ppb	117.132 ppb	117.423 ppb	55.765 ppb
Concentration per Run 3	89.060 %	182.365 ppb	103.681 ppb	51.397 ppb	121.740 ppb	249.099 ppb	119.956 ppb	117.724 ppb	57.436 ppb
Concentration RSD	3.6 %	7.7 %	10.3 %	9.9 %	7.5 %	13.1 %	10.9 %	10.0 %	9.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	112.886 ppb	83.685 %	25.800 ppb	25.335 ppb	212.859 ppb	207.130 ppb	85.329 %	11.118 ppb	11.443 ppb
Concentration per Run 1	100.779 ppb	88.988 %	23.102 ppb	24.490 ppb	193.002 ppb	186.951 ppb	89.679 %	9.907 ppb	9.911 ppb
Concentration per Run 2	118.270 ppb	81.686 %	27.224 ppb	27.481 ppb	220.873 ppb	214.076 ppb	83.232 %	11.584 ppb	12.235 ppb
Concentration per Run 3	119.608 ppb	80.380 %	27.073 ppb	24.035 ppb	224.701 ppb	220.361 ppb	83.074 %	11.863 ppb	12.183 ppb
Concentration RSD	9.3 %	5.5 %	9.1 %	7.4 %	8.1 %	8.6 %	4.4 %	9.5 %	11.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.664 %	189.420 ppb	119.592 ppb	433.849 ppb	90.334 %	97.487 %	0.082 ppb	24.646 ppb	105.779 ppb
Concentration per Run 1	92.567 %	165.799 ppb	105.252 ppb	383.686 ppb	94.816 %	105.100 %	0.024 ppb	22.329 ppb	93.633 ppb
Concentration per Run 2	81.350 %	198.678 ppb	124.825 ppb	458.749 ppb	88.682 %	93.322 %	0.095 ppb	25.607 ppb	111.542 ppb
Concentration per Run 3	83.073 %	203.783 ppb	128.701 ppb	459.113 ppb	87.505 %	94.040 %	0.128 ppb	26.001 ppb	112.161 ppb
Concentration RSD	7.1 %	10.9 %	10.5 %	10.0 %	4.3 %	6.8 %	64.5 %	8.2 %	9.9 %

Category	209Bi (KED AGD)
Concentration average	92.577 %
Concentration per Run 1	98.668 %
Concentration per Run 2	89.076 %
Concentration per Run 3	89.986 %
Concentration RSD	5.7 %

Analysis index: 72 | Analysis started at: 3/7/2018 12:47:44 PM | Rack: 1
Analysis label: WG1095278-2D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 43

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.462 %	91.473 %	6.672 ppb	1,480.582 ppb	1,220.304 ppb	256.645 ppb	1,031.538 ppb	848.718 ppb	70.881 %
Concentration per Run 1	74.474 %	92.302 %	6.081 ppb	1,424.021 ppb	1,158.661 ppb	246.468 ppb	1,032.840 ppb	798.426 ppb	73.071 %
Concentration per Run 2	74.293 %	89.496 %	6.455 ppb	1,512.826 ppb	1,272.237 ppb	260.498 ppb	1,088.339 ppb	858.084 ppb	72.901 %
Concentration per Run 3	68.617 %	92.621 %	7.481 ppb	1,504.900 ppb	1,230.012 ppb	262.969 ppb	973.436 ppb	889.644 ppb	66.671 %
Concentration RSD	4.6 %	1.9 %	10.9 %	3.3 %	4.7 %	3.5 %	5.6 %	5.5 %	5.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.367 %	90.597 ppb	61.181 ppb	24.360 ppb	60.403 ppb	123.824 ppb	57.456 ppb	57.969 ppb	27.890 ppb
Concentration per Run 1	89.249 %	85.577 ppb	58.848 ppb	22.662 ppb	57.231 ppb	125.310 ppb	52.935 ppb	53.397 ppb	26.965 ppb
Concentration per Run 2	88.308 %	95.860 ppb	61.077 ppb	24.684 ppb	60.925 ppb	107.963 ppb	58.745 ppb	59.235 ppb	28.326 ppb
Concentration per Run 3	81.543 %	90.354 ppb	63.620 ppb	25.734 ppb	63.052 ppb	138.198 ppb	60.689 ppb	61.274 ppb	28.379 ppb
Concentration RSD	4.9 %	5.7 %	3.9 %	6.4 %	4.9 %	12.3 %	7.0 %	7.1 %	2.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	57.901 ppb	81.651 %	13.403 ppb	14.363 ppb	111.042 ppb	108.171 ppb	82.569 %	5.955 ppb	5.957 ppb
Concentration per Run 1	54.378 ppb	82.876 %	12.595 ppb	13.325 ppb	107.019 ppb	100.817 ppb	83.878 %	5.615 ppb	5.541 ppb
Concentration per Run 2	58.936 ppb	81.529 %	14.160 ppb	15.135 ppb	112.217 ppb	110.002 ppb	82.540 %	6.190 ppb	5.997 ppb
Concentration per Run 3	60.390 ppb	80.548 %	13.452 ppb	14.630 ppb	113.890 ppb	113.692 ppb	81.288 %	6.062 ppb	6.333 ppb
Concentration RSD	5.4 %	1.4 %	5.8 %	6.5 %	3.2 %	6.1 %	1.6 %	5.1 %	6.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.786 %	137.067 ppb	70.349 ppb	228.582 ppb	87.407 %	95.172 %	0.127 ppb	12.391 ppb	54.810 ppb
Concentration per Run 1	85.565 %	125.299 ppb	65.995 ppb	215.126 ppb	88.390 %	98.786 %	0.093 ppb	11.423 ppb	50.788 ppb
Concentration per Run 2	82.845 %	141.014 ppb	72.881 ppb	235.076 ppb	87.102 %	94.590 %	0.113 ppb	12.682 ppb	55.984 ppb
Concentration per Run 3	79.947 %	144.887 ppb	72.170 ppb	235.543 ppb	86.728 %	92.139 %	0.174 ppb	13.068 ppb	57.658 ppb
Concentration RSD	3.4 %	7.6 %	5.4 %	5.1 %	1.0 %	3.5 %	33.5 %	6.9 %	6.5 %

Category	209Bi (KED AGD)
Concentration average	91.670 %
Concentration per Run 1	93.546 %
Concentration per Run 2	91.631 %
Concentration per Run 3	89.833 %
Concentration RSD	2.0 %

Analysis index: 73 | Analysis started at: 3/7/2018 12:51:36 PM | Rack: 1
Analysis label: L1807395-03 6020TL | User name: ALPHALAB\metals-instrument | Vial: 49

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.635 %	94.663 %	0.031 ppb	15,586.538 ppb	4,298.479 ppb	181.355 ppb	1,992.089 ppb	8,122.368 ppb	77.075 %
Concentration per Run 1	76.394 %	97.725 %	0.034 ppb	13,975.039 ppb	3,848.846 ppb	154.021 ppb	1,665.664 ppb	6,949.215 ppb	77.856 %
Concentration per Run 2	75.271 %	97.023 %	0.034 ppb	16,411.093 ppb	4,577.549 ppb	206.070 ppb	2,203.134 ppb	8,987.843 ppb	76.269 %
Concentration per Run 3	75.240 %	89.240 %	0.023 ppb	16,373.483 ppb	4,469.043 ppb	183.973 ppb	2,107.468 ppb	8,430.045 ppb	77.100 %
Concentration RSD	0.9 %	5.0 %	21.1 %	9.0 %	9.1 %	14.4 %	14.4 %	13.0 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.919 %	17.356 ppb	0.559 ppb	2.245 ppb	37.106 ppb	2,953.150 ppb	0.468 ppb	0.569 ppb	1.261 ppb
Concentration per Run 1	83.680 %	13.012 ppb	0.553 ppb	2.085 ppb	31.838 ppb	2,773.487 ppb	0.379 ppb	0.663 ppb	1.079 ppb
Concentration per Run 2	94.370 %	18.481 ppb	0.529 ppb	2.237 ppb	39.909 ppb	2,981.677 ppb	0.480 ppb	0.313 ppb	1.310 ppb
Concentration per Run 3	88.708 %	20.575 ppb	0.594 ppb	2.414 ppb	39.572 ppb	3,104.285 ppb	0.543 ppb	0.730 ppb	1.392 ppb
Concentration RSD	6.0 %	22.5 %	5.8 %	7.3 %	12.3 %	5.7 %	17.7 %	39.3 %	12.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.701 ppb	82.913 %	4.615 ppb	0.157 ppb	41.941 ppb	1.124 ppb	83.237 %	0.018 ppb	0.017 ppb
Concentration per Run 1	1.520 ppb	79.904 %	4.362 ppb	0.164 ppb	36.530 ppb	0.843 ppb	83.462 %	0.022 ppb	0.020 ppb
Concentration per Run 2	1.856 ppb	90.189 %	4.681 ppb	0.065 ppb	44.767 ppb	1.279 ppb	84.226 %	0.017 ppb	0.014 ppb
Concentration per Run 3	1.727 ppb	78.646 %	4.801 ppb	0.241 ppb	44.525 ppb	1.251 ppb	82.023 %	0.014 ppb	0.016 ppb
Concentration RSD	10.0 %	7.6 %	4.9 %	56.1 %	11.2 %	21.7 %	1.3 %	23.1 %	17.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.510 %	8.896 ppb	0.781 ppb	3.780 ppb	88.201 %	96.261 %	1.207 ppb	0.045 ppb	0.191 ppb
Concentration per Run 1	83.629 %	8.381 ppb	0.632 ppb	3.565 ppb	86.904 %	94.297 %	1.089 ppb	0.033 ppb	0.174 ppb
Concentration per Run 2	88.009 %	8.886 ppb	0.871 ppb	4.009 ppb	90.506 %	100.697 %	1.212 ppb	0.050 ppb	0.205 ppb
Concentration per Run 3	81.891 %	9.420 ppb	0.842 ppb	3.768 ppb	87.193 %	93.789 %	1.320 ppb	0.052 ppb	0.194 ppb
Concentration RSD	3.7 %	5.8 %	16.7 %	5.9 %	2.3 %	4.0 %	9.6 %	23.0 %	8.0 %

Category	209Bi (KED AGD)
Concentration average	92.097 %
Concentration per Run 1	91.763 %
Concentration per Run 2	95.286 %
Concentration per Run 3	89.242 %
Concentration RSD	3.3 %

Analysis index: 74 | Analysis started at: 3/7/2018 12:55:27 PM | Rack: 1
Analysis label: L1807553-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 50

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.975 %	94.556 %	0.008 ppb	2,035.452 ppb	3,628.923 ppb	32.802 ppb	468.768 ppb	29,736.832 ppb	74.944 %
Concentration per Run 1	76.209 %	92.047 %	0.010 ppb	1,891.068 ppb	3,374.968 ppb	29.066 ppb	415.538 ppb	27,203.663 ppb	75.353 %
Concentration per Run 2	74.319 %	95.747 %	0.010 ppb	2,084.897 ppb	3,756.139 ppb	34.494 ppb	440.003 ppb	28,833.951 ppb	74.254 %
Concentration per Run 3	74.397 %	95.875 %	0.003 ppb	2,130.392 ppb	3,755.662 ppb	34.847 ppb	550.763 ppb	33,172.882 ppb	75.226 %
Concentration RSD	1.4 %	2.3 %	49.8 %	6.2 %	6.1 %	9.9 %	15.4 %	10.4 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.852 %	40.941 ppb	0.038 ppb	0.281 ppb	8.825 ppb	22.044 ppb	0.003 ppb	-0.331 ppb	14.276 ppb
Concentration per Run 1	83.258 %	37.234 ppb	0.056 ppb	0.283 ppb	7.767 ppb	16.470 ppb	-0.004 ppb	-0.386 ppb	13.064 ppb
Concentration per Run 2	82.177 %	39.939 ppb	0.010 ppb	0.279 ppb	9.952 ppb	22.851 ppb	0.010 ppb	-0.315 ppb	15.032 ppb
Concentration per Run 3	95.122 %	45.651 ppb	0.048 ppb	0.280 ppb	8.755 ppb	26.810 ppb	0.003 ppb	-0.292 ppb	14.731 ppb
Concentration RSD	8.3 %	10.5 %	63.7 %	0.7 %	12.4 %	23.7 %	236.2 %	14.7 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	10.530 ppb	82.035 %	0.152 ppb	-0.006 ppb	58.136 ppb	0.195 ppb	82.363 %	0.005 ppb	0.044 ppb
Concentration per Run 1	9.937 ppb	79.994 %	0.112 ppb	-0.187 ppb	52.606 ppb	0.117 ppb	82.381 %	0.011 ppb	0.033 ppb
Concentration per Run 2	11.212 ppb	81.476 %	0.182 ppb	0.090 ppb	58.792 ppb	0.266 ppb	82.247 %	0.002 ppb	0.024 ppb
Concentration per Run 3	10.443 ppb	84.634 %	0.161 ppb	0.081 ppb	63.011 ppb	0.203 ppb	82.460 %	0.002 ppb	0.075 ppb
Concentration RSD	6.1 %	2.9 %	23.5 %	2,820.0 %	9.0 %	38.2 %	0.1 %	99.5 %	60.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.131 %	3.897 ppb	0.404 ppb	163.663 ppb	89.990 %	96.665 %	0.058 ppb	0.009 ppb	0.143 ppb
Concentration per Run 1	84.041 %	3.104 ppb	0.343 ppb	147.926 ppb	87.442 %	93.987 %	0.042 ppb	0.003 ppb	0.126 ppb
Concentration per Run 2	83.715 %	4.354 ppb	0.417 ppb	169.109 ppb	89.527 %	95.958 %	0.073 ppb	0.013 ppb	0.147 ppb
Concentration per Run 3	90.636 %	4.233 ppb	0.452 ppb	173.954 ppb	93.000 %	100.050 %	0.060 ppb	0.011 ppb	0.155 ppb
Concentration RSD	4.5 %	17.7 %	13.7 %	8.5 %	3.1 %	3.2 %	26.2 %	56.0 %	10.6 %

Category	209Bi (KED AGD)
Concentration average	91.082 %
Concentration per Run 1	90.891 %
Concentration per Run 2	90.175 %
Concentration per Run 3	92.181 %
Concentration RSD	1.1 %

Analysis index: 75
Analysis label: L1805915-25D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 12:59:19 PM
User name: ALPHALAB\metals-instrument
Rack: 1
Vial: 41

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.627 %	89.262 %	0.009 ppb	613.135 ppb	189.701 ppb	16.767 ppb	65.120 ppb	3,419.647 ppb	75.271 %
Concentration per Run 1	75.843 %	94.535 %	0.008 ppb	496.096 ppb	152.330 ppb	12.092 ppb	32.055 ppb	2,880.214 ppb	74.423 %
Concentration per Run 2	76.482 %	81.905 %	0.007 ppb	665.269 ppb	206.869 ppb	18.409 ppb	82.397 ppb	3,717.629 ppb	74.725 %
Concentration per Run 3	77.555 %	91.346 %	0.013 ppb	678.040 ppb	209.905 ppb	19.799 ppb	80.909 ppb	3,661.097 ppb	76.665 %
Concentration RSD	1.1 %	7.4 %	34.2 %	16.6 %	17.1 %	24.5 %	44.0 %	13.7 %	1.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.920 %	4.961 ppb	0.305 ppb	0.684 ppb	0.399 ppb	14.088 ppb	0.003 ppb	-0.356 ppb	0.458 ppb
Concentration per Run 1	81.942 %	4.257 ppb	0.309 ppb	0.683 ppb	0.440 ppb	9.488 ppb	-0.004 ppb	-0.409 ppb	0.413 ppb
Concentration per Run 2	83.633 %	4.796 ppb	0.350 ppb	0.736 ppb	0.400 ppb	10.768 ppb	0.003 ppb	-0.434 ppb	0.484 ppb
Concentration per Run 3	92.185 %	5.829 ppb	0.256 ppb	0.632 ppb	0.359 ppb	22.009 ppb	0.009 ppb	-0.224 ppb	0.479 ppb
Concentration RSD	6.4 %	16.1 %	15.4 %	7.6 %	10.1 %	48.9 %	230.1 %	32.1 %	8.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.380 ppb	82.045 %	0.120 ppb	0.105 ppb	6.348 ppb	0.242 ppb	84.069 %	0.003 ppb	0.003 ppb
Concentration per Run 1	1.334 ppb	80.143 %	0.112 ppb	-0.117 ppb	5.310 ppb	0.173 ppb	84.398 %	0.001 ppb	0.006 ppb
Concentration per Run 2	1.545 ppb	80.038 %	0.185 ppb	0.094 ppb	6.754 ppb	0.328 ppb	82.050 %	0.008 ppb	0.002 ppb
Concentration per Run 3	1.261 ppb	85.952 %	0.064 ppb	0.338 ppb	6.980 ppb	0.224 ppb	85.758 %	0.000 ppb	0.001 ppb
Concentration RSD	10.7 %	4.1 %	50.7 %	216.9 %	14.3 %	32.6 %	2.2 %	139.1 %	95.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.824 %	2.197 ppb	0.424 ppb	13.206 ppb	88.442 %	96.393 %	0.129 ppb	0.003 ppb	3.156 ppb
Concentration per Run 1	83.002 %	1.850 ppb	0.358 ppb	11.232 ppb	88.036 %	95.539 %	0.095 ppb	-0.001 ppb	2.770 ppb
Concentration per Run 2	82.284 %	2.374 ppb	0.402 ppb	13.440 ppb	85.410 %	92.215 %	0.130 ppb	0.002 ppb	3.329 ppb
Concentration per Run 3	89.185 %	2.367 ppb	0.513 ppb	14.946 ppb	91.880 %	101.426 %	0.164 ppb	0.008 ppb	3.369 ppb
Concentration RSD	4.5 %	13.7 %	18.8 %	14.1 %	3.7 %	4.8 %	26.7 %	148.0 %	10.6 %

Category	209Bi (KED AGD)
Concentration average	92.978 %
Concentration per Run 1	93.572 %
Concentration per Run 2	89.807 %
Concentration per Run 3	95.555 %
Concentration RSD	3.1 %

Analysis index: 76 | Analysis started at: 3/7/2018 1:03:10 PM | Rack: 1
Analysis label: L1805656-03D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 44

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.620 %	88.688 %	0.015 ppb	1,516.173 ppb	188.402 ppb	191.543 ppb	50.622 ppb	1,181.115 ppb	73.798 %
Concentration per Run 1	74.555 %	88.156 %	0.013 ppb	1,410.365 ppb	163.529 ppb	166.933 ppb	44.779 ppb	1,048.572 ppb	73.958 %
Concentration per Run 2	74.902 %	93.515 %	0.016 ppb	1,506.921 ppb	183.213 ppb	195.274 ppb	40.379 ppb	1,197.686 ppb	74.003 %
Concentration per Run 3	74.402 %	84.392 %	0.017 ppb	1,631.234 ppb	218.463 ppb	212.422 ppb	66.707 ppb	1,297.088 ppb	73.433 %
Concentration RSD	0.3 %	5.2 %	13.0 %	7.3 %	14.8 %	12.0 %	27.9 %	10.6 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.369 %	7.091 ppb	1.180 ppb	0.803 ppb	14.420 ppb	195.672 ppb	0.176 ppb	-0.164 ppb	1.000 ppb
Concentration per Run 1	84.291 %	5.339 ppb	1.071 ppb	0.588 ppb	12.952 ppb	179.477 ppb	0.160 ppb	-0.193 ppb	0.911 ppb
Concentration per Run 2	83.375 %	5.624 ppb	1.259 ppb	0.778 ppb	15.299 ppb	202.107 ppb	0.210 ppb	-0.147 ppb	1.067 ppb
Concentration per Run 3	85.442 %	10.310 ppb	1.210 ppb	1.042 ppb	15.008 ppb	205.433 ppb	0.157 ppb	-0.153 ppb	1.021 ppb
Concentration RSD	1.2 %	39.4 %	8.2 %	28.4 %	8.9 %	7.2 %	16.8 %	15.4 %	8.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	3.957 ppb	79.525 %	0.221 ppb	0.048 ppb	3.932 ppb	0.184 ppb	81.383 %	0.018 ppb	0.017 ppb
Concentration per Run 1	3.688 ppb	78.407 %	0.218 ppb	0.099 ppb	4.015 ppb	0.133 ppb	82.177 %	0.022 ppb	0.016 ppb
Concentration per Run 2	4.221 ppb	79.754 %	0.273 ppb	-0.187 ppb	3.825 ppb	0.135 ppb	80.452 %	0.014 ppb	0.021 ppb
Concentration per Run 3	3.961 ppb	80.413 %	0.170 ppb	0.233 ppb	3.954 ppb	0.284 ppb	81.519 %	0.017 ppb	0.016 ppb
Concentration RSD	6.7 %	1.3 %	23.5 %	443.5 %	2.5 %	46.9 %	1.1 %	23.4 %	16.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.169 %	1.953 ppb	0.365 ppb	5.412 ppb	86.136 %	92.420 %	0.078 ppb	0.003 ppb	29.199 ppb
Concentration per Run 1	82.138 %	1.677 ppb	0.294 ppb	4.470 ppb	87.334 %	92.666 %	0.060 ppb	0.001 ppb	26.696 ppb
Concentration per Run 2	80.429 %	2.213 ppb	0.386 ppb	6.044 ppb	85.491 %	93.228 %	0.088 ppb	0.003 ppb	30.476 ppb
Concentration per Run 3	80.940 %	1.968 ppb	0.416 ppb	5.723 ppb	85.584 %	91.367 %	0.086 ppb	0.005 ppb	30.423 ppb
Concentration RSD	1.1 %	13.8 %	17.4 %	15.4 %	1.2 %	1.0 %	20.4 %	63.8 %	7.4 %

Category	209Bi (KED AGD)
Concentration average	90.276 %
Concentration per Run 1	90.805 %
Concentration per Run 2	89.054 %
Concentration per Run 3	90.970 %
Concentration RSD	1.2 %

Analysis index: 77 | Analysis started at: 3/7/2018 1:07:02 PM | Rack: 1
Analysis label: L1805656-09D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 45

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.241 %	86.923 %	0.010 ppb	1,230.406 ppb	76.744 ppb	86.276 ppb	34.398 ppb	1,023.335 ppb	74.025 %
Concentration per Run 1	74.457 %	88.794 %	0.006 ppb	1,162.338 ppb	64.480 ppb	77.704 ppb	27.036 ppb	916.521 ppb	73.506 %
Concentration per Run 2	73.933 %	87.582 %	0.013 ppb	1,243.372 ppb	82.860 ppb	88.437 ppb	37.772 ppb	1,102.837 ppb	74.186 %
Concentration per Run 3	74.334 %	84.392 %	0.012 ppb	1,285.508 ppb	82.890 ppb	92.688 ppb	38.385 ppb	1,050.646 ppb	74.382 %
Concentration RSD	0.4 %	2.6 %	34.8 %	5.1 %	13.8 %	9.0 %	18.6 %	9.4 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	82.749 %	3.282 ppb	0.567 ppb	0.284 ppb	1.833 ppb	65.393 ppb	0.030 ppb	-0.280 ppb	0.255 ppb
Concentration per Run 1	79.805 %	2.750 ppb	0.669 ppb	0.218 ppb	1.764 ppb	55.496 ppb	0.033 ppb	-0.235 ppb	0.313 ppb
Concentration per Run 2	85.254 %	3.742 ppb	0.568 ppb	0.250 ppb	1.331 ppb	68.058 ppb	0.024 ppb	-0.340 ppb	0.187 ppb
Concentration per Run 3	83.187 %	3.355 ppb	0.465 ppb	0.385 ppb	2.405 ppb	72.626 ppb	0.032 ppb	-0.265 ppb	0.264 ppb
Concentration RSD	3.3 %	15.2 %	18.0 %	31.4 %	29.5 %	13.6 %	15.4 %	19.2 %	25.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.860 ppb	79.593 %	0.089 ppb	0.096 ppb	1.995 ppb	0.079 ppb	81.378 %	0.005 ppb	-0.006 ppb
Concentration per Run 1	0.702 ppb	79.751 %	0.054 ppb	-0.046 ppb	1.745 ppb	0.028 ppb	82.034 %	0.004 ppb	-0.003 ppb
Concentration per Run 2	0.976 ppb	79.485 %	0.099 ppb	0.096 ppb	2.326 ppb	0.073 ppb	81.571 %	0.009 ppb	-0.008 ppb
Concentration per Run 3	0.903 ppb	79.545 %	0.113 ppb	0.238 ppb	1.913 ppb	0.135 ppb	80.529 %	0.002 ppb	-0.008 ppb
Concentration RSD	16.5 %	0.2 %	34.5 %	148.0 %	15.0 %	68.7 %	0.9 %	70.7 %	44.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.107 %	1.588 ppb	0.290 ppb	1.413 ppb	84.518 %	91.483 %	0.085 ppb	0.001 ppb	2.195 ppb
Concentration per Run 1	80.923 %	1.142 ppb	0.187 ppb	1.313 ppb	84.709 %	90.952 %	0.038 ppb	-0.001 ppb	1.981 ppb
Concentration per Run 2	82.473 %	2.069 ppb	0.313 ppb	1.339 ppb	83.082 %	91.520 %	0.104 ppb	0.002 ppb	2.324 ppb
Concentration per Run 3	79.924 %	1.552 ppb	0.369 ppb	1.588 ppb	85.764 %	91.978 %	0.113 ppb	0.003 ppb	2.280 ppb
Concentration RSD	1.6 %	29.3 %	32.3 %	10.8 %	1.6 %	0.6 %	48.3 %	156.4 %	8.5 %

Category	209Bi (KED AGD)
Concentration average	89.161 %
Concentration per Run 1	90.154 %
Concentration per Run 2	87.781 %
Concentration per Run 3	89.548 %
Concentration RSD	1.4 %

Analysis index: 78
Analysis label: L1805656-13D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 1:10:55 PM
User name: ALPHALAB\metals-instrument
Rack: 1
Vial: 46

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.804 %	88.773 %	0.006 ppb	1,293.406 ppb	137.780 ppb	19.740 ppb	40.195 ppb	1,219.769 ppb	74.620 %
Concentration per Run 1	74.671 %	93.259 %	0.004 ppb	1,119.956 ppb	121.432 ppb	18.705 ppb	37.778 ppb	1,025.959 ppb	74.497 %
Concentration per Run 2	75.139 %	85.030 %	0.010 ppb	1,409.758 ppb	134.268 ppb	18.564 ppb	52.975 ppb	1,272.149 ppb	75.527 %
Concentration per Run 3	74.603 %	88.028 %	0.004 ppb	1,350.503 ppb	157.640 ppb	21.951 ppb	29.831 ppb	1,361.198 ppb	73.836 %
Concentration RSD	0.4 %	4.7 %	57.0 %	11.8 %	13.3 %	9.7 %	29.3 %	14.2 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	83.712 %	1.761 ppb	0.434 ppb	0.234 ppb	0.424 ppb	23.160 ppb	0.032 ppb	-0.224 ppb	0.470 ppb
Concentration per Run 1	83.093 %	1.373 ppb	0.422 ppb	0.117 ppb	0.208 ppb	21.692 ppb	0.011 ppb	-0.117 ppb	0.254 ppb
Concentration per Run 2	84.197 %	1.912 ppb	0.462 ppb	0.326 ppb	0.531 ppb	27.052 ppb	0.074 ppb	-0.242 ppb	0.488 ppb
Concentration per Run 3	83.845 %	1.997 ppb	0.418 ppb	0.259 ppb	0.532 ppb	20.736 ppb	0.010 ppb	-0.313 ppb	0.668 ppb
Concentration RSD	0.7 %	19.2 %	5.6 %	45.7 %	44.1 %	14.7 %	116.2 %	44.3 %	44.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.567 ppb	78.662 %	0.109 ppb	0.122 ppb	2.668 ppb	0.348 ppb	81.208 %	0.007 ppb	0.003 ppb
Concentration per Run 1	1.569 ppb	78.018 %	0.100 ppb	-0.043 ppb	2.241 ppb	0.271 ppb	81.655 %	0.004 ppb	-0.003 ppb
Concentration per Run 2	1.765 ppb	78.946 %	0.114 ppb	0.098 ppb	2.891 ppb	0.381 ppb	80.263 %	0.014 ppb	0.021 ppb
Concentration per Run 3	1.369 ppb	79.021 %	0.114 ppb	0.310 ppb	2.872 ppb	0.391 ppb	81.705 %	0.004 ppb	-0.008 ppb
Concentration RSD	12.6 %	0.7 %	7.1 %	146.2 %	13.9 %	19.1 %	1.0 %	82.6 %	453.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.223 %	1.275 ppb	0.606 ppb	5.687 ppb	86.088 %	93.391 %	1.790 ppb	0.011 ppb	4.936 ppb
Concentration per Run 1	82.124 %	1.078 ppb	0.495 ppb	5.820 ppb	87.305 %	94.487 %	1.540 ppb	0.000 ppb	4.561 ppb
Concentration per Run 2	80.482 %	1.289 ppb	0.686 ppb	5.826 ppb	85.248 %	92.155 %	1.781 ppb	0.030 ppb	5.099 ppb
Concentration per Run 3	81.064 %	1.457 ppb	0.637 ppb	5.415 ppb	85.712 %	93.530 %	2.049 ppb	0.003 ppb	5.147 ppb
Concentration RSD	1.0 %	14.9 %	16.4 %	4.1 %	1.3 %	1.3 %	14.2 %	147.7 %	6.6 %

Category	209Bi (KED AGD)
Concentration average	90.939 %
Concentration per Run 1	90.383 %
Concentration per Run 2	91.285 %
Concentration per Run 3	91.149 %
Concentration RSD	0.5 %

Analysis index: 79 Analysis started at: 3/7/2018 1:14:48 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.836 %	92.728 %	108.714 ppb	10,087.059 ppb	10,083.511 ppb	101.165 ppb	9,311.705 ppb	9,589.952 ppb	87.359 %
Concentration per Run 1	78.701 %	95.364 %	108.548 ppb	9,450.013 ppb	9,443.579 ppb	91.133 ppb	8,401.617 ppb	8,406.546 ppb	88.164 %
Concentration per Run 2	79.134 %	88.666 %	108.695 ppb	10,517.437 ppb	10,544.711 ppb	105.088 ppb	9,907.179 ppb	10,525.581 ppb	87.592 %
Concentration per Run 3	78.672 %	94.152 %	108.897 ppb	10,293.728 ppb	10,262.244 ppb	107.274 ppb	9,626.319 ppb	9,837.728 ppb	86.321 %
Recovery Percentage 1			108.714 %	100.871 %	100.835 %	101.165 %	93.117 %	95.900 %	
Concentration RSD	0.3 %	3.8 %	0.2 %	5.6 %	5.7 %	8.7 %	8.6 %	11.3 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	98.802 %	96.768 ppb	102.981 ppb	105.484 ppb	102.436 ppb	10,219.569 ppb	102.114 ppb	102.027 ppb	101.140 ppb
Concentration per Run 1	92.842 %	86.001 ppb	99.094 ppb	100.585 ppb	100.087 ppb	9,843.603 ppb	96.640 ppb	97.219 ppb	96.716 ppb
Concentration per Run 2	100.290 %	103.159 ppb	104.230 ppb	107.922 ppb	104.686 ppb	10,387.129 ppb	106.355 ppb	104.146 ppb	104.170 ppb
Concentration per Run 3	103.274 %	101.143 ppb	105.618 ppb	107.943 ppb	102.534 ppb	10,427.974 ppb	103.347 ppb	104.715 ppb	102.534 ppb
Recovery Percentage 1		96.768 %	102.981 %	105.484 %	102.436 %	102.196 %	102.114 %	102.027 %	101.140 %
Concentration RSD	5.4 %	9.7 %	3.3 %	4.0 %	2.2 %	3.2 %	4.9 %	4.1 %	3.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	98.907 ppb	83.538 %	100.168 ppb	103.163 ppb	101.711 ppb	103.800 ppb	84.187 %	102.981 ppb	101.063 ppb
Concentration per Run 1	93.080 ppb	81.135 %	93.982 ppb	96.929 ppb	93.624 ppb	95.348 ppb	84.135 %	95.913 ppb	91.536 ppb
Concentration per Run 2	102.725 ppb	83.633 %	106.085 ppb	107.223 ppb	104.161 ppb	106.485 ppb	83.004 %	106.601 ppb	105.194 ppb
Concentration per Run 3	100.915 ppb	85.845 %	100.437 ppb	105.338 ppb	107.349 ppb	109.567 ppb	85.421 %	106.430 ppb	106.460 ppb
Recovery Percentage 1	98.907 %		100.168 %	103.163 %	101.711 %	103.800 %		102.981 %	101.063 %
Concentration RSD	5.2 %	2.8 %	6.0 %	5.3 %	7.1 %	7.2 %	1.4 %	5.9 %	8.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.570 %	93.241 ppb	99.092 ppb	104.349 ppb	90.647 %	96.408 %	97.545 ppb	99.765 ppb	98.072 ppb
Concentration per Run 1	85.874 %	81.385 ppb	89.264 ppb	95.181 ppb	90.312 %	96.030 %	88.716 ppb	92.682 ppb	89.242 ppb
Concentration per Run 2	86.007 %	95.705 ppb	102.565 ppb	109.686 ppb	89.525 %	95.484 %	100.002 ppb	103.321 ppb	101.985 ppb
Concentration per Run 3	87.830 %	102.635 ppb	105.446 ppb	108.180 ppb	92.105 %	97.710 %	103.918 ppb	103.291 ppb	102.988 ppb
Recovery Percentage 1		93.241 %	99.092 %	104.349 %			97.545 %	99.765 %	98.072 %
Concentration RSD	1.3 %	11.6 %	8.7 %	7.6 %	1.5 %	1.2 %	8.1 %	6.1 %	7.8 %

Category	209Bi (KED AGD)
Concentration average	92.912 %
Concentration per Run 1	93.653 %
Concentration per Run 2	91.156 %
Concentration per Run 3	93.926 %
Recovery Percentage 1	
Concentration RSD	1.6 %

Analysis index: 80 Analysis started at: 3/7/2018 1:18:43 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.919 %	90.431 %	0.011 ppb	54.217 ppb	0.482 ppb	0.499 ppb	14.439 ppb	-3.832 ppb	76.345 %
Concentration per Run 1	80.175 %	96.130 %	0.012 ppb	24.812 ppb	2.920 ppb	0.547 ppb	1.898 ppb	-5.021 ppb	76.085 %
Concentration per Run 2	81.580 %	88.539 %	0.008 ppb	57.278 ppb	-0.738 ppb	0.894 ppb	2.819 ppb	-4.020 ppb	76.782 %
Concentration per Run 3	81.002 %	86.625 %	0.012 ppb	80.562 ppb	-0.738 ppb	0.056 ppb	38.600 ppb	-2.454 ppb	76.169 %
Recovery Percentage 1			2.138 %	54.217 %	0.482 %	4.988 %	14.439 %	-3.832 %	
Concentration RSD	0.9 %	5.6 %	21.7 %	51.6 %	438.4 %	84.4 %	144.9 %	33.8 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.664 %	0.008 ppb	-0.005 ppb	0.035 ppb	-0.048 ppb	17.568 ppb	0.008 ppb	-0.147 ppb	-0.038 ppb
Concentration per Run 1	84.033 %	-0.139 ppb	0.010 ppb	0.060 ppb	-0.057 ppb	16.115 ppb	0.024 ppb	-0.179 ppb	0.020 ppb
Concentration per Run 2	88.496 %	-0.054 ppb	-0.012 ppb	0.066 ppb	-0.058 ppb	19.691 ppb	0.003 ppb	-0.049 ppb	-0.038 ppb
Concentration per Run 3	87.462 %	0.218 ppb	-0.012 ppb	-0.021 ppb	-0.027 ppb	16.898 ppb	-0.004 ppb	-0.213 ppb	-0.096 ppb
Recovery Percentage 1		1.642 %	-0.100 %	3.503 %	-4.752 %	35.136 %	1.536 %	-7.356 %	-3.799 %
Concentration RSD	2.7 %	2,268.9 %	258.3 %	139.1 %	37.1 %	10.7 %	189.1 %	58.6 %	153.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.061 ppb	83.067 %	0.079 ppb	0.330 ppb	0.012 ppb	0.369 ppb	86.180 %	0.075 ppb	0.008 ppb
Concentration per Run 1	-0.036 ppb	82.793 %	0.052 ppb	0.151 ppb	-0.001 ppb	0.250 ppb	87.924 %	0.063 ppb	0.014 ppb
Concentration per Run 2	0.102 ppb	81.984 %	0.039 ppb	0.293 ppb	-0.054 ppb	0.318 ppb	84.366 %	0.083 ppb	0.010 ppb
Concentration per Run 3	0.118 ppb	84.425 %	0.148 ppb	0.545 ppb	0.091 ppb	0.539 ppb	86.250 %	0.078 ppb	0.001 ppb
Recovery Percentage 1	0.614 %		15.897 %	6.591 %	2.403 %	18.456 %		18.711 %	4.242 %
Concentration RSD	137.5 %	1.5 %	74.8 %	60.7 %	613.0 %	40.8 %	2.1 %	14.0 %	78.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.592 %	4.898 ppb	2.121 ppb	0.115 ppb	89.832 %	95.588 %	0.907 ppb	0.023 ppb	0.012 ppb
Concentration per Run 1	87.424 %	4.446 ppb	2.078 ppb	0.098 ppb	91.013 %	98.359 %	0.762 ppb	0.027 ppb	0.013 ppb
Concentration per Run 2	86.057 %	5.034 ppb	2.190 ppb	0.196 ppb	88.983 %	93.837 %	0.925 ppb	0.020 ppb	0.011 ppb
Concentration per Run 3	86.294 %	5.214 ppb	2.094 ppb	0.053 ppb	89.502 %	94.568 %	1.036 ppb	0.023 ppb	0.012 ppb
Recovery Percentage 1		163.265 %	53.017 %	23.071 %			45.368 %	4.620 %	2.329 %
Concentration RSD	0.8 %	8.2 %	2.9 %	63.3 %	1.2 %	2.5 %	15.2 %	14.3 %	9.5 %

Category	209Bi (KED AGD)
Concentration average	93.154 %
Concentration per Run 1	93.766 %
Concentration per Run 2	93.091 %
Concentration per Run 3	92.604 %
Recovery Percentage 1	
Concentration RSD	0.6 %

Analysis index: 81 | Analysis started at: 3/7/2018 1:22:39 PM | Rack: 1
Analysis label: L1807597-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.603 %	89.028 %	0.008 ppb	79.178 ppb	2.674 ppb	2.001 ppb	12.067 ppb	60.704 ppb	73.281 %
Concentration per Run 1	75.929 %	89.304 %	0.007 ppb	71.484 ppb	3.125 ppb	2.324 ppb	7.356 ppb	66.527 ppb	73.356 %
Concentration per Run 2	75.431 %	87.518 %	0.011 ppb	76.810 ppb	1.832 ppb	1.525 ppb	26.634 ppb	55.216 ppb	72.873 %
Concentration per Run 3	75.448 %	90.261 %	0.005 ppb	89.240 ppb	3.064 ppb	2.154 ppb	2.211 ppb	60.369 ppb	73.614 %
Concentration RSD	0.4 %	1.6 %	45.0 %	11.5 %	27.3 %	21.1 %	106.7 %	9.3 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	83.046 %	-0.121 ppb	0.056 ppb	0.355 ppb	0.129 ppb	9.887 ppb	0.006 ppb	-0.417 ppb	0.054 ppb
Concentration per Run 1	81.613 %	-0.185 ppb	0.057 ppb	0.378 ppb	0.175 ppb	10.195 ppb	0.003 ppb	-0.457 ppb	0.009 ppb
Concentration per Run 2	84.080 %	-0.181 ppb	0.078 ppb	0.287 ppb	0.106 ppb	8.634 ppb	0.010 ppb	-0.386 ppb	0.084 ppb
Concentration per Run 3	83.446 %	0.003 ppb	0.033 ppb	0.400 ppb	0.107 ppb	10.832 ppb	0.003 ppb	-0.409 ppb	0.070 ppb
Concentration RSD	1.5 %	89.0 %	40.2 %	16.9 %	30.5 %	11.4 %	72.3 %	8.6 %	72.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.276 ppb	79.909 %	0.045 ppb	0.071 ppb	0.112 ppb	0.113 ppb	82.098 %	0.057 ppb	0.000 ppb
Concentration per Run 1	1.143 ppb	80.727 %	0.054 ppb	0.022 ppb	0.107 ppb	0.042 ppb	82.966 %	0.050 ppb	0.011 ppb
Concentration per Run 2	1.475 ppb	79.694 %	0.011 ppb	0.095 ppb	0.086 ppb	0.119 ppb	81.277 %	0.056 ppb	-0.003 ppb
Concentration per Run 3	1.209 ppb	79.305 %	0.069 ppb	0.096 ppb	0.143 ppb	0.178 ppb	82.052 %	0.066 ppb	-0.008 ppb
Concentration RSD	13.8 %	0.9 %	68.2 %	60.0 %	25.6 %	60.6 %	1.0 %	14.2 %	20,994.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.311 %	3.298 ppb	0.919 ppb	0.016 ppb	86.688 %	92.630 %	0.273 ppb	0.008 ppb	0.002 ppb
Concentration per Run 1	82.366 %	2.899 ppb	0.784 ppb	0.007 ppb	86.448 %	92.761 %	0.240 ppb	0.013 ppb	-0.001 ppb
Concentration per Run 2	81.691 %	3.854 ppb	0.942 ppb	0.057 ppb	86.373 %	92.413 %	0.272 ppb	0.005 ppb	0.002 ppb
Concentration per Run 3	82.877 %	3.141 ppb	1.032 ppb	-0.017 ppb	87.244 %	92.717 %	0.308 ppb	0.005 ppb	0.005 ppb
Concentration RSD	0.7 %	15.1 %	13.6 %	242.5 %	0.6 %	0.2 %	12.3 %	57.0 %	159.2 %

Category	209Bi (KED AGD)
Concentration average	91.450 %
Concentration per Run 1	92.279 %
Concentration per Run 2	89.972 %
Concentration per Run 3	92.098 %
Concentration RSD	1.4 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.807 %	88.560 %	0.009 ppb	80.457 ppb	4.015 ppb	2.276 ppb	3.054 ppb	27.196 ppb	72.104 %
Concentration per Run 1	74.456 %	94.152 %	0.009 ppb	42.055 ppb	3.632 ppb	1.574 ppb	5.756 ppb	23.792 ppb	71.868 %
Concentration per Run 2	75.277 %	87.199 %	0.011 ppb	81.119 ppb	3.806 ppb	2.458 ppb	-5.917 ppb	21.605 ppb	72.666 %
Concentration per Run 3	74.688 %	84.329 %	0.009 ppb	118.198 ppb	4.608 ppb	2.798 ppb	9.321 ppb	36.190 ppb	71.778 %
Concentration RSD	0.6 %	5.7 %	17.3 %	47.3 %	13.0 %	27.8 %	261.0 %	28.9 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	81.637 %	-0.110 ppb	0.026 ppb	0.341 ppb	0.256 ppb	12.032 ppb	0.006 ppb	-0.342 ppb	0.037 ppb
Concentration per Run 1	81.754 %	-0.012 ppb	0.057 ppb	0.206 ppb	0.143 ppb	9.515 ppb	0.003 ppb	-0.360 ppb	0.025 ppb
Concentration per Run 2	82.529 %	-0.213 ppb	0.011 ppb	0.420 ppb	0.244 ppb	10.349 ppb	0.003 ppb	-0.357 ppb	0.044 ppb
Concentration per Run 3	80.627 %	-0.106 ppb	0.011 ppb	0.398 ppb	0.382 ppb	16.232 ppb	0.011 ppb	-0.308 ppb	0.043 ppb
Concentration RSD	1.2 %	91.0 %	101.8 %	34.4 %	46.8 %	30.4 %	73.1 %	8.5 %	28.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.531 ppb	78.502 %	0.025 ppb	0.123 ppb	0.063 ppb	0.049 ppb	81.222 %	0.006 ppb	0.003 ppb
Concentration per Run 1	0.470 ppb	79.949 %	0.040 ppb	0.094 ppb	0.076 ppb	0.012 ppb	83.104 %	0.011 ppb	0.002 ppb
Concentration per Run 2	0.533 ppb	76.955 %	-0.004 ppb	0.177 ppb	0.049 ppb	0.107 ppb	79.935 %	0.009 ppb	-0.003 ppb
Concentration per Run 3	0.590 ppb	78.602 %	0.040 ppb	0.099 ppb	0.063 ppb	0.029 ppb	80.628 %	0.000 ppb	0.011 ppb
Concentration RSD	11.3 %	1.9 %	100.1 %	38.0 %	21.5 %	102.9 %	2.1 %	93.9 %	213.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	79.486 %	1.873 ppb	0.468 ppb	0.000 ppb	85.902 %	91.860 %	0.140 ppb	0.001 ppb	-0.007 ppb
Concentration per Run 1	81.896 %	1.368 ppb	0.378 ppb	0.032 ppb	86.673 %	92.984 %	0.089 ppb	0.000 ppb	-0.008 ppb
Concentration per Run 2	77.157 %	2.059 ppb	0.490 ppb	-0.016 ppb	84.425 %	90.849 %	0.148 ppb	0.001 ppb	-0.005 ppb
Concentration per Run 3	79.404 %	2.192 ppb	0.537 ppb	-0.017 ppb	86.608 %	91.747 %	0.183 ppb	0.001 ppb	-0.008 ppb
Concentration RSD	3.0 %	23.6 %	17.5 %	9,026.8 %	1.5 %	1.2 %	34.1 %	47.8 %	25.2 %

Category	209Bi (KED AGD)
Concentration average	88.893 %
Concentration per Run 1	90.887 %
Concentration per Run 2	87.365 %
Concentration per Run 3	88.425 %
Concentration RSD	2.0 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.242 %	91.239 %	5.877 ppb	1,195.705 ppb	1,184.089 ppb	237.519 ppb	982.987 ppb	803.947 ppb	75.180 %
Concentration per Run 1	78.642 %	94.216 %	5.889 ppb	1,053.188 ppb	1,037.022 ppb	202.407 ppb	832.642 ppb	659.092 ppb	74.965 %
Concentration per Run 2	77.273 %	87.454 %	5.875 ppb	1,263.669 ppb	1,293.049 ppb	250.237 ppb	1,068.865 ppb	916.731 ppb	74.058 %
Concentration per Run 3	78.809 %	92.047 %	5.867 ppb	1,270.257 ppb	1,222.196 ppb	259.914 ppb	1,047.453 ppb	836.017 ppb	76.515 %
Concentration RSD	1.1 %	3.8 %	0.2 %	10.3 %	11.2 %	13.0 %	13.3 %	16.4 %	1.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.763 %	86.998 ppb	60.344 ppb	24.172 ppb	59.345 ppb	133.752 ppb	57.415 ppb	57.053 ppb	28.308 ppb
Concentration per Run 1	84.949 %	74.799 ppb	53.943 ppb	21.598 ppb	52.974 ppb	124.507 ppb	50.071 ppb	51.763 ppb	24.600 ppb
Concentration per Run 2	86.664 %	96.894 ppb	64.577 ppb	24.940 ppb	62.990 ppb	150.282 ppb	60.637 ppb	58.632 ppb	29.763 ppb
Concentration per Run 3	85.677 %	89.301 ppb	62.512 ppb	25.980 ppb	62.070 ppb	126.465 ppb	61.535 ppb	60.762 ppb	30.561 ppb
Concentration RSD	1.0 %	12.9 %	9.3 %	9.5 %	9.3 %	10.7 %	11.1 %	8.2 %	11.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	57.365 ppb	81.721 %	13.704 ppb	13.306 ppb	106.005 ppb	105.559 ppb	84.066 %	5.686 ppb	5.737 ppb
Concentration per Run 1	48.893 ppb	83.647 %	11.451 ppb	11.334 ppb	91.516 ppb	89.135 ppb	87.331 %	4.749 ppb	4.743 ppb
Concentration per Run 2	61.480 ppb	79.830 %	14.714 ppb	14.506 ppb	112.703 ppb	110.960 ppb	82.347 %	6.284 ppb	6.104 ppb
Concentration per Run 3	61.720 ppb	81.686 %	14.946 ppb	14.077 ppb	113.797 ppb	116.583 ppb	82.519 %	6.026 ppb	6.363 ppb
Concentration RSD	12.8 %	2.3 %	14.3 %	12.9 %	11.8 %	13.7 %	3.4 %	14.5 %	15.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.601 %	89.765 ppb	62.052 ppb	215.756 ppb	88.709 %	94.614 %	0.088 ppb	12.474 ppb	53.618 ppb
Concentration per Run 1	87.064 %	77.078 ppb	52.039 ppb	183.604 ppb	91.075 %	96.084 %	0.013 ppb	10.946 ppb	45.481 ppb
Concentration per Run 2	83.484 %	94.906 ppb	65.336 ppb	229.328 ppb	87.343 %	94.191 %	0.106 ppb	13.387 ppb	57.467 ppb
Concentration per Run 3	83.254 %	97.310 ppb	68.782 ppb	234.337 ppb	87.709 %	93.568 %	0.145 ppb	13.089 ppb	57.906 ppb
Concentration RSD	2.5 %	12.3 %	14.2 %	13.0 %	2.3 %	1.4 %	77.4 %	10.7 %	13.1 %

Category	209Bi (KED AGD)
Concentration average	93.274 %
Concentration per Run 1	96.670 %
Concentration per Run 2	91.001 %
Concentration per Run 3	92.152 %
Concentration RSD	3.2 %

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Analysis label: WG1095170-5D10 6020TL | User name: ALPHALAB\metals-instrument | Vial: 54

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.911 %	95.322 %	58.218 ppb	5,658.870 ppb	5,725.007 ppb	60.688 ppb	5,122.532 ppb	5,233.428 ppb	85.812 %
Concentration per Run 1	79.509 %	97.916 %	58.140 ppb	5,067.845 ppb	5,044.970 ppb	50.157 ppb	4,360.509 ppb	4,321.344 ppb	85.069 %
Concentration per Run 2	82.035 %	97.214 %	57.930 ppb	5,899.585 ppb	6,068.895 ppb	68.620 ppb	5,613.093 ppb	5,753.931 ppb	85.827 %
Concentration per Run 3	81.190 %	90.835 %	58.583 ppb	6,009.181 ppb	6,061.157 ppb	63.287 ppb	5,393.996 ppb	5,625.009 ppb	86.541 %
Concentration RSD	1.6 %	4.1 %	0.6 %	9.1 %	10.3 %	15.7 %	13.1 %	15.1 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	96.202 %	51.139 ppb	56.697 ppb	57.694 ppb	58.173 ppb	5,701.075 ppb	56.552 ppb	56.573 ppb	55.885 ppb
Concentration per Run 1	88.402 %	41.795 ppb	52.211 ppb	54.053 ppb	53.790 ppb	5,329.126 ppb	52.711 ppb	51.924 ppb	52.327 ppb
Concentration per Run 2	102.428 %	55.094 ppb	58.584 ppb	58.443 ppb	60.581 ppb	5,867.674 ppb	57.924 ppb	57.741 ppb	56.509 ppb
Concentration per Run 3	97.776 %	56.529 ppb	59.295 ppb	60.585 ppb	60.148 ppb	5,906.423 ppb	59.021 ppb	60.055 ppb	58.818 ppb
Concentration RSD	7.4 %	15.9 %	6.9 %	5.8 %	6.5 %	5.7 %	6.0 %	7.4 %	5.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	57.279 ppb	85.656 %	54.052 ppb	57.440 ppb	55.265 ppb	53.863 ppb	86.267 %	8.350 ppb	54.146 ppb
Concentration per Run 1	51.769 ppb	83.805 %	49.234 ppb	51.632 ppb	48.188 ppb	47.487 ppb	86.620 %	7.858 ppb	48.075 ppb
Concentration per Run 2	58.613 ppb	89.436 %	56.399 ppb	62.446 ppb	59.439 ppb	56.947 ppb	86.971 %	8.527 ppb	56.423 ppb
Concentration per Run 3	61.455 ppb	83.727 %	56.522 ppb	58.241 ppb	58.167 ppb	57.154 ppb	85.212 %	8.666 ppb	57.940 ppb
Concentration RSD	8.7 %	3.8 %	7.7 %	9.5 %	11.1 %	10.3 %	1.1 %	5.2 %	9.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.735 %	57.867 ppb	69.188 ppb	54.880 ppb	91.487 %	98.235 %	32.914 ppb	52.299 ppb	51.839 ppb
Concentration per Run 1	86.315 %	52.110 ppb	61.497 ppb	48.818 ppb	88.941 %	94.338 %	30.901 ppb	48.251 ppb	46.368 ppb
Concentration per Run 2	91.012 %	59.827 ppb	73.039 ppb	58.946 ppb	93.486 %	103.213 %	32.764 ppb	53.624 ppb	53.351 ppb
Concentration per Run 3	85.878 %	61.665 ppb	73.028 ppb	56.876 ppb	92.035 %	97.155 %	35.078 ppb	55.023 ppb	55.799 ppb
Concentration RSD	3.2 %	8.8 %	9.6 %	9.8 %	2.5 %	4.6 %	6.4 %	6.8 %	9.4 %

Category	209Bi (KED AGD)
Concentration average	95.613 %
Concentration per Run 1	95.444 %
Concentration per Run 2	97.832 %
Concentration per Run 3	93.563 %
Concentration RSD	2.2 %

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Analysis label: L1807553-02 6020TL | User name: ALPHALAB\metals-instrument | Vial: 56

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.903 %	93.281 %	0.014 ppb	6,007.769 ppb	8,241.163 ppb	5.015 ppb	758.926 ppb	51,019.526 ppb	76.425 %
Concentration per Run 1	78.888 %	96.513 %	0.018 ppb	5,351.720 ppb	7,199.363 ppb	4.120 ppb	662.984 ppb	42,358.455 ppb	77.765 %
Concentration per Run 2	78.196 %	87.837 %	0.014 ppb	6,341.608 ppb	8,756.403 ppb	5.704 ppb	783.443 ppb	53,600.238 ppb	75.858 %
Concentration per Run 3	76.624 %	95.492 %	0.010 ppb	6,329.978 ppb	8,767.723 ppb	5.221 ppb	830.351 ppb	57,099.885 ppb	75.652 %
Concentration RSD	1.5 %	5.1 %	29.3 %	9.5 %	10.9 %	16.2 %	11.4 %	15.1 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	90.102 %	70.316 ppb	0.021 ppb	0.408 ppb	1.391 ppb	45.127 ppb	0.029 ppb	-0.227 ppb	8.014 ppb
Concentration per Run 1	84.925 %	59.712 ppb	-0.012 ppb	0.332 ppb	1.018 ppb	31.505 ppb	0.010 ppb	-0.324 ppb	7.001 ppb
Concentration per Run 2	87.322 %	73.572 ppb	0.031 ppb	0.452 ppb	1.493 ppb	57.089 ppb	0.058 ppb	-0.088 ppb	8.752 ppb
Concentration per Run 3	98.058 %	77.665 ppb	0.045 ppb	0.441 ppb	1.662 ppb	46.785 ppb	0.020 ppb	-0.269 ppb	8.289 ppb
Concentration RSD	7.8 %	13.4 %	141.1 %	16.3 %	24.0 %	28.5 %	86.6 %	54.4 %	11.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	26.202 ppb	86.561 %	0.286 ppb	0.243 ppb	112.184 ppb	0.496 ppb	84.756 %	0.078 ppb	0.014 ppb
Concentration per Run 1	23.916 ppb	85.053 %	0.215 ppb	0.408 ppb	96.457 ppb	0.466 ppb	86.296 %	0.065 ppb	0.023 ppb
Concentration per Run 2	28.140 ppb	80.518 %	0.300 ppb	0.023 ppb	116.841 ppb	0.568 ppb	81.866 %	0.092 ppb	0.001 ppb
Concentration per Run 3	26.549 ppb	94.111 %	0.344 ppb	0.298 ppb	123.254 ppb	0.453 ppb	86.106 %	0.077 ppb	0.017 ppb
Concentration RSD	8.1 %	8.0 %	22.8 %	81.7 %	12.5 %	12.8 %	3.0 %	17.1 %	81.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.558 %	7.369 ppb	0.612 ppb	334.559 ppb	94.465 %	99.011 %	0.464 ppb	0.022 ppb	0.537 ppb
Concentration per Run 1	88.698 %	7.058 ppb	0.408 ppb	293.287 ppb	93.507 %	96.342 %	0.401 ppb	0.022 ppb	0.469 ppb
Concentration per Run 2	87.774 %	7.776 ppb	0.622 ppb	350.232 ppb	91.852 %	95.003 %	0.536 ppb	0.020 ppb	0.560 ppb
Concentration per Run 3	95.201 %	7.272 ppb	0.807 ppb	360.159 ppb	98.037 %	105.688 %	0.455 ppb	0.023 ppb	0.581 ppb
Concentration RSD	4.5 %	5.0 %	32.6 %	10.8 %	3.4 %	5.9 %	14.7 %	7.4 %	11.2 %

Category	209Bi (KED AGD)
Concentration average	95.711 %
Concentration per Run 1	95.989 %
Concentration per Run 2	92.913 %
Concentration per Run 3	98.232 %
Concentration RSD	2.8 %

Analysis index: 86 | Analysis started at: 3/7/2018 1:41:57 PM | Rack: 1
Analysis label: L1807553-03 6020TL | User name: ALPHALAB\metals-instrument | Vial: 57

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.099 %	92.940 %	0.014 ppb	7,158.257 ppb	2,401.200 ppb	114.485 ppb	1,176.528 ppb	13,455.805 ppb	76.231 %
Concentration per Run 1	78.625 %	97.023 %	0.012 ppb	6,592.098 ppb	2,191.830 ppb	93.820 ppb	1,051.870 ppb	11,528.668 ppb	75.447 %
Concentration per Run 2	77.704 %	89.049 %	0.014 ppb	7,521.442 ppb	2,526.957 ppb	132.286 ppb	1,253.938 ppb	14,506.744 ppb	76.716 %
Concentration per Run 3	77.966 %	92.749 %	0.014 ppb	7,361.232 ppb	2,484.814 ppb	117.348 ppb	1,223.775 ppb	14,332.003 ppb	76.530 %
Concentration RSD	0.6 %	4.3 %	9.8 %	6.9 %	7.6 %	16.9 %	9.3 %	12.4 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.875 %	19.715 ppb	0.241 ppb	0.375 ppb	34.224 ppb	213.423 ppb	0.122 ppb	-0.069 ppb	0.834 ppb
Concentration per Run 1	83.704 %	15.382 ppb	0.189 ppb	0.387 ppb	32.479 ppb	202.187 ppb	0.086 ppb	-0.088 ppb	0.665 ppb
Concentration per Run 2	87.909 %	22.099 ppb	0.205 ppb	0.375 ppb	36.353 ppb	218.813 ppb	0.114 ppb	-0.041 ppb	0.898 ppb
Concentration per Run 3	89.013 %	21.665 ppb	0.329 ppb	0.362 ppb	33.840 ppb	219.270 ppb	0.165 ppb	-0.077 ppb	0.940 ppb
Concentration RSD	3.2 %	19.1 %	31.9 %	3.4 %	5.7 %	4.6 %	32.8 %	35.5 %	17.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.204 ppb	82.334 %	0.431 ppb	0.175 ppb	34.119 ppb	0.243 ppb	83.914 %	0.055 ppb	0.001 ppb
Concentration per Run 1	1.102 ppb	84.020 %	0.301 ppb	0.281 ppb	30.290 ppb	0.124 ppb	86.802 %	0.048 ppb	-0.003 ppb
Concentration per Run 2	1.255 ppb	79.949 %	0.476 ppb	0.024 ppb	35.894 ppb	0.373 ppb	82.118 %	0.065 ppb	-0.003 ppb
Concentration per Run 3	1.254 ppb	83.033 %	0.515 ppb	0.221 ppb	36.174 ppb	0.233 ppb	82.823 %	0.052 ppb	0.011 ppb
Concentration RSD	7.3 %	2.6 %	26.5 %	76.7 %	9.7 %	51.3 %	3.0 %	16.1 %	544.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.154 %	3.397 ppb	0.424 ppb	77.219 ppb	89.592 %	94.886 %	0.186 ppb	0.005 ppb	0.137 ppb
Concentration per Run 1	86.313 %	3.074 ppb	0.329 ppb	67.494 ppb	90.660 %	95.104 %	0.154 ppb	0.004 ppb	0.121 ppb
Concentration per Run 2	83.593 %	3.650 ppb	0.461 ppb	83.795 ppb	88.289 %	94.569 %	0.190 ppb	0.007 ppb	0.143 ppb
Concentration per Run 3	82.555 %	3.468 ppb	0.483 ppb	80.368 ppb	89.825 %	94.985 %	0.215 ppb	0.005 ppb	0.148 ppb
Concentration RSD	2.3 %	8.7 %	19.7 %	11.1 %	1.3 %	0.3 %	16.4 %	36.2 %	10.6 %

Category	209Bi (KED AGD)
Concentration average	91.061 %
Concentration per Run 1	94.315 %
Concentration per Run 2	89.311 %
Concentration per Run 3	89.559 %
Concentration RSD	3.1 %

Analysis index: 87 | Analysis started at: 3/7/2018 1:45:50 PM | Rack: 1
Analysis label: L1807553-04 6020TL | User name: ALPHALAB\metals-instrument | Vial: 58

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.256 %	88.836 %	0.018 ppb	9,269.922 ppb	2,551.247 ppb	99.471 ppb	984.875 ppb	14,814.046 ppb	74.014 %
Concentration per Run 1	74.658 %	90.708 %	0.019 ppb	8,535.410 ppb	2,301.385 ppb	88.644 ppb	881.540 ppb	12,937.270 ppb	73.456 %
Concentration per Run 2	75.549 %	89.113 %	0.019 ppb	9,525.686 ppb	2,589.128 ppb	100.423 ppb	1,059.536 ppb	15,791.802 ppb	74.345 %
Concentration per Run 3	75.561 %	86.689 %	0.016 ppb	9,748.669 ppb	2,763.229 ppb	109.346 ppb	1,013.547 ppb	15,713.067 ppb	74.240 %
Concentration RSD	0.7 %	2.3 %	7.6 %	7.0 %	9.1 %	10.4 %	9.4 %	11.0 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	82.498 %	21.328 ppb	0.238 ppb	0.455 ppb	34.108 ppb	219.713 ppb	0.072 ppb	-0.211 ppb	0.733 ppb
Concentration per Run 1	81.026 %	19.005 ppb	0.196 ppb	0.502 ppb	30.721 ppb	238.935 ppb	0.083 ppb	-0.190 ppb	0.714 ppb
Concentration per Run 2	84.526 %	21.312 ppb	0.301 ppb	0.380 ppb	35.755 ppb	207.890 ppb	0.073 ppb	-0.318 ppb	0.797 ppb
Concentration per Run 3	81.942 %	23.669 ppb	0.217 ppb	0.483 ppb	35.847 ppb	212.314 ppb	0.060 ppb	-0.124 ppb	0.687 ppb
Concentration RSD	2.2 %	10.9 %	23.2 %	14.5 %	8.6 %	7.6 %	15.7 %	46.8 %	7.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.734 ppb	81.021 %	0.355 ppb	0.114 ppb	38.249 ppb	0.178 ppb	81.210 %	0.045 ppb	0.010 ppb
Concentration per Run 1	1.441 ppb	80.188 %	0.315 ppb	0.093 ppb	34.029 ppb	0.132 ppb	82.362 %	0.033 ppb	0.001 ppb
Concentration per Run 2	2.075 ppb	81.356 %	0.454 ppb	0.297 ppb	39.362 ppb	0.236 ppb	82.315 %	0.039 ppb	0.002 ppb
Concentration per Run 3	1.685 ppb	81.520 %	0.296 ppb	-0.048 ppb	41.356 ppb	0.167 ppb	78.952 %	0.063 ppb	0.026 ppb
Concentration RSD	18.5 %	0.9 %	24.2 %	151.9 %	9.9 %	29.6 %	2.4 %	34.7 %	145.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.128 %	2.062 ppb	0.331 ppb	75.430 ppb	88.007 %	93.738 %	0.128 ppb	0.002 ppb	0.136 ppb
Concentration per Run 1	83.766 %	1.744 ppb	0.281 ppb	68.637 ppb	88.019 %	94.485 %	0.089 ppb	0.003 ppb	0.113 ppb
Concentration per Run 2	82.135 %	2.217 ppb	0.326 ppb	75.837 ppb	87.657 %	94.060 %	0.111 ppb	0.001 ppb	0.155 ppb
Concentration per Run 3	80.482 %	2.225 ppb	0.387 ppb	81.814 ppb	88.344 %	92.668 %	0.185 ppb	0.002 ppb	0.141 ppb
Concentration RSD	2.0 %	13.4 %	16.1 %	8.7 %	0.4 %	1.0 %	39.4 %	45.0 %	15.5 %

Category	209Bi (KED AGD)
Concentration average	90.318 %
Concentration per Run 1	91.342 %
Concentration per Run 2	89.865 %
Concentration per Run 3	89.748 %
Concentration RSD	1.0 %

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Analysis label: L1807597-02 6020TL | User name: ALPHALAB\metals-instrument | Vial: 59

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.332 %	89.474 %	0.009 ppb	68.587 ppb	2.809 ppb	9.088 ppb	6.386 ppb	18.125 ppb	74.141 %
Concentration per Run 1	76.012 %	88.284 %	0.010 ppb	63.644 ppb	2.507 ppb	7.759 ppb	11.907 ppb	0.424 ppb	74.063 %
Concentration per Run 2	76.383 %	89.815 %	0.011 ppb	54.215 ppb	3.042 ppb	7.692 ppb	5.120 ppb	26.064 ppb	74.290 %
Concentration per Run 3	76.602 %	90.325 %	0.007 ppb	87.902 ppb	2.879 ppb	11.812 ppb	2.131 ppb	27.887 ppb	74.071 %
Concentration RSD	0.4 %	1.2 %	19.8 %	25.3 %	9.8 %	26.0 %	78.4 %	84.7 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.484 %	-0.110 ppb	0.113 ppb	0.544 ppb	0.173 ppb	21.418 ppb	0.008 ppb	-0.406 ppb	0.228 ppb
Concentration per Run 1	81.331 %	-0.085 ppb	0.127 ppb	0.562 ppb	0.079 ppb	20.584 ppb	0.003 ppb	-0.455 ppb	0.258 ppb
Concentration per Run 2	85.090 %	-0.122 ppb	0.122 ppb	0.554 ppb	0.204 ppb	20.027 ppb	0.010 ppb	-0.361 ppb	0.253 ppb
Concentration per Run 3	93.031 %	-0.124 ppb	0.090 ppb	0.517 ppb	0.235 ppb	23.642 ppb	0.009 ppb	-0.402 ppb	0.173 ppb
Concentration RSD	6.9 %	19.6 %	18.1 %	4.4 %	48.1 %	9.1 %	48.5 %	11.6 %	20.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.490 ppb	80.772 %	0.024 ppb	0.092 ppb	0.037 ppb	0.021 ppb	82.951 %	0.037 ppb	0.002 ppb
Concentration per Run 1	0.540 ppb	77.689 %	0.011 ppb	0.173 ppb	0.046 ppb	-0.002 ppb	82.141 %	0.030 ppb	-0.003 ppb
Concentration per Run 2	0.521 ppb	77.255 %	0.011 ppb	0.030 ppb	0.006 ppb	0.013 ppb	81.648 %	0.022 ppb	0.011 ppb
Concentration per Run 3	0.409 ppb	87.374 %	0.049 ppb	0.072 ppb	0.059 ppb	0.053 ppb	85.065 %	0.058 ppb	-0.003 ppb
Concentration RSD	14.5 %	7.1 %	92.9 %	79.9 %	75.1 %	134.5 %	2.2 %	51.0 %	521.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.729 %	1.588 ppb	0.274 ppb	0.087 ppb	87.518 %	96.516 %	0.059 ppb	-0.001 ppb	0.018 ppb
Concentration per Run 1	81.191 %	1.572 ppb	0.222 ppb	0.082 ppb	86.590 %	93.746 %	0.032 ppb	-0.002 ppb	0.017 ppb
Concentration per Run 2	81.838 %	1.636 ppb	0.274 ppb	0.057 ppb	86.412 %	93.703 %	0.070 ppb	-0.001 ppb	0.018 ppb
Concentration per Run 3	88.157 %	1.557 ppb	0.326 ppb	0.122 ppb	89.553 %	102.101 %	0.075 ppb	0.001 ppb	0.020 ppb
Concentration RSD	4.6 %	2.6 %	19.0 %	37.7 %	2.0 %	5.0 %	39.9 %	140.7 %	9.7 %

Category	209Bi (KED AGD)
Concentration average	92.626 %
Concentration per Run 1	90.933 %
Concentration per Run 2	91.049 %
Concentration per Run 3	95.894 %
Concentration RSD	3.1 %

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Analysis label: L1807597-03 6020TL | User name: ALPHALAB\metals-instrument | Vial: 60

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.550 %	89.241 %	0.009 ppb	65.480 ppb	4.059 ppb	2.106 ppb	15.036 ppb	25.741 ppb	75.878 %
Concentration per Run 1	77.617 %	88.475 %	0.009 ppb	66.862 ppb	1.203 ppb	0.767 ppb	8.463 ppb	29.095 ppb	75.758 %
Concentration per Run 2	76.650 %	90.644 %	0.010 ppb	50.244 ppb	6.103 ppb	2.187 ppb	17.245 ppb	22.064 ppb	76.358 %
Concentration per Run 3	75.382 %	88.603 %	0.008 ppb	79.334 ppb	4.870 ppb	3.364 ppb	19.399 ppb	26.064 ppb	75.517 %
Concentration RSD	1.5 %	1.4 %	7.2 %	22.3 %	62.8 %	61.7 %	38.5 %	13.7 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.622 %	-0.079 ppb	0.047 ppb	0.296 ppb	32.986 ppb	7.329 ppb	0.005 ppb	-0.396 ppb	0.023 ppb
Concentration per Run 1	81.707 %	-0.183 ppb	0.057 ppb	0.139 ppb	31.023 ppb	4.565 ppb	-0.004 ppb	-0.407 ppb	0.028 ppb
Concentration per Run 2	86.570 %	0.002 ppb	0.054 ppb	0.286 ppb	32.208 ppb	13.939 ppb	0.010 ppb	-0.366 ppb	0.007 ppb
Concentration per Run 3	88.590 %	-0.054 ppb	0.031 ppb	0.464 ppb	35.726 ppb	3.482 ppb	0.010 ppb	-0.415 ppb	0.034 ppb
Concentration RSD	4.1 %	120.7 %	30.5 %	54.9 %	7.4 %	78.5 %	149.7 %	6.6 %	60.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.358 ppb	79.909 %	0.049 ppb	0.118 ppb	0.080 ppb	0.028 ppb	81.677 %	0.031 ppb	0.006 ppb
Concentration per Run 1	1.361 ppb	78.123 %	0.041 ppb	0.028 ppb	0.021 ppb	0.027 ppb	83.018 %	0.033 ppb	0.011 ppb
Concentration per Run 2	1.465 ppb	80.368 %	0.054 ppb	0.304 ppb	0.152 ppb	0.013 ppb	80.053 %	0.025 ppb	0.002 ppb
Concentration per Run 3	1.249 ppb	81.236 %	0.053 ppb	0.021 ppb	0.068 ppb	0.042 ppb	81.960 %	0.036 ppb	0.006 ppb
Concentration RSD	7.9 %	2.0 %	15.3 %	137.3 %	83.2 %	52.6 %	1.8 %	19.4 %	71.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.531 %	1.211 ppb	0.236 ppb	0.032 ppb	86.982 %	93.682 %	0.050 ppb	-0.002 ppb	-0.006 ppb
Concentration per Run 1	81.655 %	0.967 ppb	0.202 ppb	-0.017 ppb	87.095 %	94.408 %	0.023 ppb	-0.001 ppb	-0.012 ppb
Concentration per Run 2	79.106 %	1.185 ppb	0.243 ppb	0.059 ppb	85.289 %	90.591 %	0.063 ppb	-0.003 ppb	-0.001 ppb
Concentration per Run 3	83.831 %	1.481 ppb	0.262 ppb	0.055 ppb	88.564 %	96.048 %	0.063 ppb	-0.002 ppb	-0.004 ppb
Concentration RSD	2.9 %	21.3 %	13.1 %	133.2 %	1.9 %	3.0 %	46.5 %	59.9 %	93.9 %

Category	209Bi (KED AGD)
Concentration average	92.610 %
Concentration per Run 1	92.741 %
Concentration per Run 2	90.776 %
Concentration per Run 3	94.314 %
Concentration RSD	1.9 %

Analysis index: 90 | Analysis started at: 3/7/2018 1:57:30 PM | Rack: 1
Analysis label: WG1095170-6D5 6020TL | User name: ALPHALAB\metals-instrument | Vial: 55

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.660 %	86.561 %	0.005 ppb	72.585 ppb	0.808 ppb	0.719 ppb	4.644 ppb	9.696 ppb	74.661 %
Concentration per Run 1	77.673 %	92.239 %	0.005 ppb	42.414 ppb	0.556 ppb	0.784 ppb	5.124 ppb	10.225 ppb	74.969 %
Concentration per Run 2	78.044 %	81.905 %	0.005 ppb	96.780 ppb	1.953 ppb	0.374 ppb	8.582 ppb	9.817 ppb	74.295 %
Concentration per Run 3	77.263 %	85.541 %	0.004 ppb	78.562 ppb	-0.086 ppb	1.000 ppb	0.225 ppb	9.045 ppb	74.718 %
Concentration RSD	0.5 %	6.1 %	17.3 %	38.1 %	129.0 %	44.2 %	90.4 %	6.2 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	81.065 %	-0.235 ppb	0.003 ppb	0.161 ppb	0.055 ppb	2.403 ppb	0.001 ppb	-0.328 ppb	0.005 ppb
Concentration per Run 1	77.244 %	-0.253 ppb	-0.012 ppb	0.201 ppb	0.014 ppb	2.526 ppb	0.004 ppb	-0.378 ppb	-0.047 ppb
Concentration per Run 2	82.271 %	-0.307 ppb	0.034 ppb	0.116 ppb	0.078 ppb	3.152 ppb	-0.004 ppb	-0.380 ppb	0.015 ppb
Concentration per Run 3	83.680 %	-0.143 ppb	-0.012 ppb	0.168 ppb	0.072 ppb	1.530 ppb	0.003 ppb	-0.226 ppb	0.049 ppb
Concentration RSD	4.2 %	35.7 %	899.4 %	26.7 %	64.2 %	34.0 %	448.2 %	26.9 %	908.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.537 ppb	79.375 %	0.015 ppb	0.146 ppb	0.018 ppb	0.069 ppb	81.270 %	0.011 ppb	-0.005 ppb
Concentration per Run 1	0.497 ppb	78.781 %	0.011 ppb	0.098 ppb	-0.004 ppb	0.013 ppb	82.022 %	0.002 ppb	-0.003 ppb
Concentration per Run 2	0.562 ppb	76.057 %	0.011 ppb	0.254 ppb	0.041 ppb	0.091 ppb	80.563 %	0.013 ppb	-0.003 ppb
Concentration per Run 3	0.551 ppb	83.287 %	0.024 ppb	0.085 ppb	0.018 ppb	0.102 ppb	81.227 %	0.018 ppb	-0.008 ppb
Concentration RSD	6.5 %	4.6 %	48.7 %	64.8 %	120.6 %	71.1 %	0.9 %	73.4 %	58.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.058 %	0.596 ppb	0.077 ppb	0.000 ppb	86.208 %	93.188 %	-0.022 ppb	-0.002 ppb	-0.024 ppb
Concentration per Run 1	83.754 %	0.433 ppb	0.055 ppb	-0.042 ppb	87.167 %	94.020 %	-0.038 ppb	-0.003 ppb	-0.025 ppb
Concentration per Run 2	80.834 %	0.723 ppb	0.077 ppb	0.008 ppb	85.462 %	92.405 %	-0.014 ppb	-0.002 ppb	-0.023 ppb
Concentration per Run 3	81.586 %	0.633 ppb	0.098 ppb	0.033 ppb	85.995 %	93.140 %	-0.013 ppb	-0.001 ppb	-0.025 ppb
Concentration RSD	1.8 %	24.9 %	27.7 %	8,968.0 %	1.0 %	0.9 %	67.9 %	45.8 %	5.4 %

Category	209Bi (KED AGD)
Concentration average	91.555 %
Concentration per Run 1	93.102 %
Concentration per Run 2	92.444 %
Concentration per Run 3	89.119 %
Concentration RSD	2.3 %

Analysis index: 91 Analysis started at: 3/7/2018 2:01:22 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.924 %	90.963 %	107.776 ppb	10,258.321 ppb	10,303.553 ppb	101.867 ppb	9,530.607 ppb	9,941.567 ppb	86.910 %
Concentration per Run 1	79.949 %	94.152 %	108.300 ppb	9,414.959 ppb	9,204.180 ppb	90.577 ppb	8,390.366 ppb	8,697.881 ppb	87.450 %
Concentration per Run 2	78.851 %	90.644 %	107.426 ppb	10,698.486 ppb	10,840.905 ppb	110.225 ppb	9,840.127 ppb	10,225.230 ppb	85.638 %
Concentration per Run 3	80.972 %	88.092 %	107.601 ppb	10,661.519 ppb	10,865.574 ppb	104.800 ppb	10,361.327 ppb	10,901.590 ppb	87.641 %
Recovery Percentage 1			107.776 %	102.583 %	103.036 %	101.867 %	95.306 %	99.416 %	
Concentration RSD	1.3 %	3.3 %	0.4 %	7.1 %	9.2 %	10.0 %	10.7 %	11.4 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	98.951 %	94.392 ppb	104.824 ppb	105.090 ppb	106.124 ppb	10,379.345 ppb	103.578 ppb	102.523 ppb	104.568 ppb
Concentration per Run 1	94.745 %	78.045 ppb	96.455 ppb	96.338 ppb	100.772 ppb	9,380.814 ppb	94.512 ppb	96.630 ppb	95.452 ppb
Concentration per Run 2	99.514 %	99.477 ppb	107.742 ppb	109.834 ppb	109.746 ppb	10,858.756 ppb	109.767 ppb	107.831 ppb	108.987 ppb
Concentration per Run 3	102.592 %	105.655 ppb	110.276 ppb	109.097 ppb	107.855 ppb	10,898.466 ppb	106.456 ppb	103.107 ppb	109.265 ppb
Recovery Percentage 1		94.392 %	104.824 %	105.090 %	106.124 %	103.793 %	103.578 %	102.523 %	104.568 %
Concentration RSD	4.0 %	15.4 %	7.0 %	7.2 %	4.5 %	8.3 %	7.7 %	5.5 %	7.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	99.581 ppb	82.044 %	102.854 ppb	105.786 ppb	102.528 ppb	104.697 ppb	84.148 %	102.734 ppb	100.982 ppb
Concentration per Run 1	91.003 ppb	82.122 %	90.719 ppb	94.100 ppb	90.887 ppb	92.289 ppb	85.733 %	92.910 ppb	90.217 ppb
Concentration per Run 2	101.871 ppb	81.222 %	108.385 ppb	110.975 ppb	106.581 ppb	111.720 ppb	83.145 %	107.569 ppb	105.528 ppb
Concentration per Run 3	105.870 ppb	82.786 %	109.457 ppb	112.284 ppb	110.115 ppb	110.082 ppb	83.566 %	107.723 ppb	107.201 ppb
Recovery Percentage 1	99.581 %		102.854 %	105.786 %	102.528 %	104.697 %		102.734 %	100.982 %
Concentration RSD	7.7 %	1.0 %	10.2 %	9.6 %	10.0 %	10.3 %	1.7 %	8.3 %	9.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.866 %	91.608 ppb	99.251 ppb	103.752 ppb	89.867 %	95.309 %	98.816 ppb	99.540 ppb	98.306 ppb
Concentration per Run 1	86.747 %	80.179 ppb	86.435 ppb	91.866 ppb	90.181 %	96.283 %	87.401 ppb	90.411 ppb	87.981 ppb
Concentration per Run 2	86.610 %	94.434 ppb	103.740 ppb	109.746 ppb	88.294 %	95.069 %	101.786 ppb	101.956 ppb	101.274 ppb
Concentration per Run 3	87.241 %	100.211 ppb	107.577 ppb	109.645 ppb	91.125 %	94.576 %	107.261 ppb	106.251 ppb	105.663 ppb
Recovery Percentage 1		91.608 %	99.251 %	103.752 %			98.816 %	99.540 %	98.306 %
Concentration RSD	0.4 %	11.3 %	11.3 %	9.9 %	1.6 %	0.9 %	10.4 %	8.2 %	9.4 %

Category	209Bi (KED AGD)
Concentration average	92.614 %
Concentration per Run 1	93.928 %
Concentration per Run 2	93.289 %
Concentration per Run 3	90.627 %
Recovery Percentage 1	
Concentration RSD	1.9 %

Analysis index: 92 Analysis started at: 3/7/2018 2:05:17 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.208 %	92.579 %	0.012 ppb	25.767 ppb	0.080 ppb	0.161 ppb	-0.740 ppb	4.129 ppb	75.862 %
Concentration per Run 1	81.998 %	96.449 %	0.010 ppb	10.142 ppb	1.093 ppb	0.231 ppb	0.797 ppb	4.230 ppb	75.420 %
Concentration per Run 2	82.629 %	92.749 %	0.015 ppb	26.663 ppb	-0.738 ppb	-0.102 ppb	4.487 ppb	7.512 ppb	74.851 %
Concentration per Run 3	81.997 %	88.539 %	0.013 ppb	40.495 ppb	-0.114 ppb	0.355 ppb	-7.503 ppb	0.646 ppb	77.316 %
Recovery Percentage 1			2.499 %	25.767 %	0.080 %	1.611 %	-0.740 %	4.129 %	
Concentration RSD	0.4 %	4.3 %	18.8 %	59.0 %	1,156.4 %	146.7 %	830.4 %	83.2 %	1.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.836 %	-0.026 ppb	0.002 ppb	0.013 ppb	-0.006 ppb	18.365 ppb	0.012 ppb	-0.060 ppb	-0.025 ppb
Concentration per Run 1	83.469 %	-0.021 ppb	0.010 ppb	0.020 ppb	-0.026 ppb	22.001 ppb	0.023 ppb	-0.347 ppb	-0.054 ppb
Concentration per Run 2	88.449 %	-0.099 ppb	-0.012 ppb	-0.008 ppb	0.004 ppb	18.945 ppb	0.010 ppb	0.176 ppb	-0.067 ppb
Concentration per Run 3	88.590 %	0.043 ppb	0.009 ppb	0.027 ppb	0.003 ppb	14.149 ppb	0.003 ppb	-0.009 ppb	0.045 ppb
Recovery Percentage 1		-5.167 %	0.042 %	1.302 %	-0.614 %	36.730 %	2.401 %	-3.001 %	-2.532 %
Concentration RSD	3.4 %	276.3 %	599.6 %	142.2 %	277.4 %	21.6 %	87.4 %	441.8 %	243.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.053 ppb	84.330 %	0.056 ppb	0.150 ppb	0.014 ppb	0.336 ppb	86.980 %	0.183 ppb	-0.001 ppb
Concentration per Run 1	-0.051 ppb	86.670 %	0.023 ppb	-0.122 ppb	0.025 ppb	0.389 ppb	91.379 %	0.142 ppb	0.005 ppb
Concentration per Run 2	-0.087 ppb	82.748 %	0.094 ppb	0.287 ppb	0.007 ppb	0.211 ppb	86.606 %	0.176 ppb	0.001 ppb
Concentration per Run 3	-0.020 ppb	83.571 %	0.052 ppb	0.286 ppb	0.009 ppb	0.409 ppb	82.955 %	0.231 ppb	-0.008 ppb
Recovery Percentage 1	-0.525 %		11.270 %	3.004 %	2.729 %	16.811 %		45.697 %	-0.327 %
Concentration RSD	63.5 %	2.5 %	63.9 %	157.1 %	69.9 %	32.5 %	4.9 %	24.5 %	974.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.860 %	4.875 ppb	2.143 ppb	0.225 ppb	91.820 %	95.556 %	0.905 ppb	0.022 ppb	0.008 ppb
Concentration per Run 1	92.364 %	4.182 ppb	1.854 ppb	0.203 ppb	94.347 %	98.909 %	0.758 ppb	0.019 ppb	0.006 ppb
Concentration per Run 2	89.388 %	5.001 ppb	2.036 ppb	0.369 ppb	92.498 %	96.474 %	0.917 ppb	0.022 ppb	0.013 ppb
Concentration per Run 3	84.828 %	5.442 ppb	2.540 ppb	0.102 ppb	88.614 %	91.287 %	1.040 ppb	0.025 ppb	0.005 ppb
Recovery Percentage 1		162.512 %	53.583 %	44.946 %			45.246 %	4.438 %	1.613 %
Concentration RSD	4.3 %	13.1 %	16.6 %	60.1 %	3.2 %	4.1 %	15.6 %	14.3 %	53.4 %

Category	209Bi (KED AGD)
Concentration average	94.752 %
Concentration per Run 1	97.174 %
Concentration per Run 2	96.657 %
Concentration per Run 3	90.425 %
Recovery Percentage 1	
Concentration RSD	4.0 %

Analysis index: 93 | Analysis started at: 3/7/2018 2:10:56 PM | Rack: 2
Analysis label: WG1095244-1 6020TL | User name: ALPHALAB\metals-instrument | Vial: 5

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.722 %	92.664 %	0.009 ppb	43.176 ppb	0.309 ppb	0.253 ppb	5.079 ppb	2.458 ppb	74.352 %
Concentration per Run 1	77.920 %	97.661 %	0.006 ppb	20.274 ppb	-0.163 ppb	0.325 ppb	21.008 ppb	1.746 ppb	73.794 %
Concentration per Run 2	77.600 %	92.877 %	0.008 ppb	37.090 ppb	-0.738 ppb	0.136 ppb	2.058 ppb	-0.347 ppb	74.093 %
Concentration per Run 3	77.646 %	87.454 %	0.012 ppb	72.163 ppb	1.827 ppb	0.298 ppb	-7.830 ppb	5.974 ppb	75.169 %
Concentration RSD	0.2 %	5.5 %	38.1 %	61.3 %	435.5 %	40.5 %	288.5 %	131.0 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.956 %	-0.147 ppb	0.022 ppb	0.098 ppb	0.066 ppb	8.853 ppb	0.012 ppb	-0.354 ppb	0.010 ppb
Concentration per Run 1	94.065 %	-0.289 ppb	0.048 ppb	0.055 ppb	0.055 ppb	6.145 ppb	0.015 ppb	-0.448 ppb	0.032 ppb
Concentration per Run 2	85.278 %	-0.069 ppb	0.032 ppb	0.071 ppb	0.006 ppb	10.462 ppb	0.010 ppb	-0.344 ppb	-0.009 ppb
Concentration per Run 3	84.526 %	-0.083 ppb	-0.012 ppb	0.168 ppb	0.137 ppb	9.951 ppb	0.010 ppb	-0.270 ppb	0.008 ppb
Concentration RSD	6.0 %	84.0 %	139.5 %	62.3 %	100.2 %	26.6 %	23.6 %	25.4 %	197.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.099 ppb	85.099 %	0.028 ppb	0.030 ppb	0.034 ppb	0.102 ppb	84.646 %	0.050 ppb	0.000 ppb
Concentration per Run 1	0.090 ppb	92.075 %	0.034 ppb	0.120 ppb	0.014 ppb	0.116 ppb	90.374 %	0.050 ppb	-0.004 ppb
Concentration per Run 2	0.034 ppb	82.598 %	0.010 ppb	0.018 ppb	0.067 ppb	0.057 ppb	81.573 %	0.058 ppb	0.011 ppb
Concentration per Run 3	0.173 ppb	80.622 %	0.039 ppb	-0.047 ppb	0.020 ppb	0.132 ppb	81.991 %	0.041 ppb	-0.008 ppb
Concentration RSD	70.2 %	7.2 %	55.9 %	277.9 %	85.7 %	38.8 %	5.9 %	16.9 %	5,671.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.191 %	2.247 ppb	0.681 ppb	-0.018 ppb	90.646 %	98.044 %	0.137 ppb	0.005 ppb	-0.010 ppb
Concentration per Run 1	93.388 %	1.915 ppb	0.505 ppb	-0.042 ppb	94.444 %	104.894 %	0.085 ppb	0.007 ppb	-0.011 ppb
Concentration per Run 2	83.730 %	2.573 ppb	0.689 ppb	0.006 ppb	88.421 %	93.774 %	0.140 ppb	0.005 ppb	-0.008 ppb
Concentration per Run 3	81.455 %	2.254 ppb	0.850 ppb	-0.018 ppb	89.072 %	95.465 %	0.185 ppb	0.004 ppb	-0.010 ppb
Concentration RSD	7.4 %	14.7 %	25.4 %	136.7 %	3.6 %	6.1 %	36.9 %	33.0 %	14.2 %

Category	209Bi (KED AGD)
Concentration average	95.260 %
Concentration per Run 1	100.432 %
Concentration per Run 2	93.198 %
Concentration per Run 3	92.149 %
Concentration RSD	4.7 %

Analysis index: 94 | Analysis started at: 3/7/2018 2:14:48 PM | Rack: 2
Analysis label: WG1095244-2D5 6020TL | User name: ALPHALAB\metals-instrument | Vial: 6

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.825 %	92.621 %	11.367 ppb	2,082.748 ppb	2,070.786 ppb	438.535 ppb	2,012.778 ppb	1,858.339 ppb	68.445 %
Concentration per Run 1	78.455 %	90.899 %	11.419 ppb	1,930.410 ppb	1,930.586 ppb	412.270 ppb	1,840.085 ppb	1,830.630 ppb	67.250 %
Concentration per Run 2	79.379 %	97.214 %	11.372 ppb	2,160.389 ppb	2,148.438 ppb	464.613 ppb	2,107.321 ppb	1,862.700 ppb	68.622 %
Concentration per Run 3	78.640 %	89.751 %	11.311 ppb	2,157.445 ppb	2,133.332 ppb	438.722 ppb	2,090.928 ppb	1,881.686 ppb	69.463 %
Concentration RSD	0.6 %	4.3 %	0.5 %	6.3 %	5.9 %	6.0 %	7.4 %	1.4 %	1.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	76.814 %	190.418 ppb	110.249 ppb	43.931 ppb	110.520 ppb	224.669 ppb	105.464 ppb	104.350 ppb	52.716 ppb
Concentration per Run 1	70.902 %	187.680 ppb	111.730 ppb	43.398 ppb	105.308 ppb	216.643 ppb	103.795 ppb	100.846 ppb	52.951 ppb
Concentration per Run 2	83.775 %	191.194 ppb	109.508 ppb	43.618 ppb	112.618 ppb	225.087 ppb	103.555 ppb	105.297 ppb	51.102 ppb
Concentration per Run 3	75.764 %	192.380 ppb	109.510 ppb	44.776 ppb	113.634 ppb	232.277 ppb	109.042 ppb	106.906 ppb	54.096 ppb
Concentration RSD	8.5 %	1.3 %	1.2 %	1.7 %	4.1 %	3.5 %	2.9 %	3.0 %	2.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	105.628 ppb	83.103 %	26.512 ppb	25.335 ppb	221.798 ppb	209.088 ppb	84.255 %	11.489 ppb	10.977 ppb
Concentration per Run 1	99.402 ppb	77.478 %	25.824 ppb	22.921 ppb	210.031 ppb	201.683 ppb	82.347 %	10.670 ppb	10.112 ppb
Concentration per Run 2	105.886 ppb	88.715 %	26.037 ppb	29.360 ppb	229.963 ppb	206.317 ppb	87.878 %	11.549 ppb	10.836 ppb
Concentration per Run 3	111.596 ppb	83.116 %	27.676 ppb	23.726 ppb	225.400 ppb	219.263 ppb	82.539 %	12.248 ppb	11.982 ppb
Concentration RSD	5.8 %	6.8 %	3.8 %	13.8 %	4.7 %	4.4 %	3.7 %	6.9 %	8.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.574 %	189.951 ppb	119.783 ppb	402.442 ppb	89.807 %	95.290 %	0.173 ppb	25.290 ppb	109.548 ppb
Concentration per Run 1	82.220 %	181.238 ppb	115.807 ppb	367.856 ppb	85.873 %	90.173 %	0.149 ppb	24.746 ppb	107.002 ppb
Concentration per Run 2	91.280 %	188.018 ppb	119.455 ppb	429.681 ppb	94.217 %	101.304 %	0.152 ppb	25.615 ppb	109.618 ppb
Concentration per Run 3	83.222 %	200.598 ppb	124.088 ppb	409.789 ppb	89.330 %	94.391 %	0.219 ppb	25.509 ppb	112.025 ppb
Concentration RSD	5.8 %	5.2 %	3.5 %	7.8 %	4.7 %	5.9 %	22.9 %	1.9 %	2.3 %

Category	209Bi (KED AGD)
Concentration average	91.612 %
Concentration per Run 1	87.526 %
Concentration per Run 2	95.021 %
Concentration per Run 3	92.290 %
Concentration RSD	4.1 %

Analysis index: 95 | Analysis started at: 3/7/2018 2:20:18 PM | Rack: 2
Analysis label: WG1095244-3D10 6020TL | User name: ALPHALAB\metals-instrument | Vial: 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.222 %	95.386 %	5.929 ppb	10,240.192 ppb	5,824.990 ppb	250.880 ppb	2,182.587 ppb	4,618.820 ppb	76.035 %
Concentration per Run 1	83.482 %	92.430 %	5.983 ppb	10,403.581 ppb	5,961.608 ppb	261.528 ppb	2,180.209 ppb	4,303.650 ppb	76.246 %
Concentration per Run 2	83.323 %	93.132 %	5.878 ppb	10,425.062 ppb	5,898.431 ppb	252.385 ppb	2,185.722 ppb	4,785.319 ppb	77.215 %
Concentration per Run 3	82.860 %	100.595 %	5.926 ppb	9,891.932 ppb	5,614.930 ppb	238.726 ppb	2,181.831 ppb	4,767.490 ppb	74.644 %
Concentration RSD	0.4 %	4.7 %	0.9 %	2.9 %	3.2 %	4.6 %	0.1 %	5.9 %	1.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	79.476 %	91.214 ppb	67.778 ppb	26.744 ppb	65.022 ppb	137.666 ppb	60.810 ppb	61.150 ppb	29.714 ppb
Concentration per Run 1	72.899 %	91.750 ppb	72.124 ppb	27.922 ppb	66.981 ppb	151.205 ppb	61.964 ppb	61.516 ppb	29.877 ppb
Concentration per Run 2	77.152 %	90.811 ppb	66.943 ppb	27.259 ppb	64.844 ppb	149.156 ppb	62.806 ppb	65.416 ppb	30.494 ppb
Concentration per Run 3	88.379 %	91.080 ppb	64.266 ppb	25.051 ppb	63.242 ppb	112.638 ppb	57.660 ppb	56.519 ppb	28.769 ppb
Concentration RSD	10.1 %	0.5 %	5.9 %	5.6 %	2.9 %	15.8 %	4.5 %	7.3 %	2.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	59.914 ppb	83.417 %	13.994 ppb	14.086 ppb	133.556 ppb	104.692 ppb	84.748 %	5.629 ppb	5.782 ppb
Concentration per Run 1	60.146 ppb	79.807 %	14.263 ppb	14.849 ppb	133.503 ppb	103.713 ppb	82.854 %	5.581 ppb	5.723 ppb
Concentration per Run 2	62.039 ppb	82.761 %	14.194 ppb	13.026 ppb	130.520 ppb	106.191 ppb	82.769 %	5.747 ppb	5.905 ppb
Concentration per Run 3	57.557 ppb	87.684 %	13.525 ppb	14.384 ppb	136.645 ppb	104.173 ppb	88.619 %	5.559 ppb	5.717 ppb
Concentration RSD	3.8 %	4.8 %	2.9 %	6.7 %	2.3 %	1.3 %	4.0 %	1.8 %	1.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.475 %	97.014 ppb	62.012 ppb	225.187 ppb	90.857 %	96.185 %	0.143 ppb	12.506 ppb	53.802 ppb
Concentration per Run 1	84.909 %	99.111 ppb	60.672 ppb	222.474 ppb	87.604 %	93.023 %	0.032 ppb	12.510 ppb	54.288 ppb
Concentration per Run 2	81.940 %	97.984 ppb	63.699 ppb	227.110 ppb	88.533 %	93.971 %	0.107 ppb	12.626 ppb	53.860 ppb
Concentration per Run 3	92.576 %	93.947 ppb	61.665 ppb	225.977 ppb	96.435 %	101.560 %	0.291 ppb	12.382 ppb	53.258 ppb
Concentration RSD	6.3 %	2.8 %	2.5 %	1.1 %	5.3 %	4.9 %	92.9 %	1.0 %	1.0 %

Category	209Bi (KED AGD)
Concentration average	93.154 %
Concentration per Run 1	90.030 %
Concentration per Run 2	90.239 %
Concentration per Run 3	99.193 %
Concentration RSD	5.6 %

Analysis index: 96 | Analysis started at: 3/7/2018 2:24:10 PM | Rack: 2
Analysis label: WG1095244-5D10 6020TL | User name: ALPHALAB\metals-instrument | Vial: 8

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.040 %	92.281 %	58.581 ppb	14,836.996 ppb	10,545.268 ppb	61.102 ppb	6,434.288 ppb	9,263.025 ppb	82.953 %
Concentration per Run 1	84.201 %	91.282 %	58.823 ppb	14,507.982 ppb	10,354.424 ppb	62.213 ppb	6,266.352 ppb	8,823.825 ppb	83.324 %
Concentration per Run 2	84.747 %	94.408 %	58.504 ppb	15,069.857 ppb	10,652.587 ppb	63.058 ppb	6,404.505 ppb	9,433.511 ppb	82.872 %
Concentration per Run 3	83.170 %	91.154 %	58.415 ppb	14,933.149 ppb	10,628.792 ppb	58.034 ppb	6,632.006 ppb	9,531.738 ppb	82.664 %
Concentration RSD	1.0 %	2.0 %	0.4 %	2.0 %	1.6 %	4.4 %	2.9 %	4.1 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.122 %	57.386 ppb	65.150 ppb	65.252 ppb	63.964 ppb	6,319.089 ppb	61.651 ppb	60.198 ppb	59.280 ppb
Concentration per Run 1	80.885 %	56.659 ppb	66.241 ppb	64.872 ppb	61.560 ppb	6,406.654 ppb	60.871 ppb	57.406 ppb	57.212 ppb
Concentration per Run 2	87.650 %	59.200 ppb	66.316 ppb	65.263 ppb	65.745 ppb	6,266.484 ppb	62.726 ppb	61.300 ppb	61.050 ppb
Concentration per Run 3	86.831 %	56.300 ppb	62.893 ppb	65.621 ppb	64.588 ppb	6,284.127 ppb	61.357 ppb	61.887 ppb	59.578 ppb
Concentration RSD	4.3 %	2.8 %	3.0 %	0.6 %	3.4 %	1.2 %	1.6 %	4.0 %	3.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	61.439 ppb	83.571 %	56.179 ppb	59.005 ppb	84.565 ppb	57.485 ppb	85.149 %	3.933 ppb	57.321 ppb
Concentration per Run 1	60.208 ppb	82.182 %	54.643 ppb	57.179 ppb	80.825 ppb	56.186 ppb	84.049 %	3.819 ppb	55.476 ppb
Concentration per Run 2	62.355 ppb	85.513 %	56.707 ppb	61.635 ppb	86.445 ppb	57.367 ppb	86.252 %	4.004 ppb	57.440 ppb
Concentration per Run 3	61.754 ppb	83.016 %	57.187 ppb	58.203 ppb	86.424 ppb	58.902 ppb	85.145 %	3.976 ppb	59.047 ppb
Concentration RSD	1.8 %	2.1 %	2.4 %	4.0 %	3.8 %	2.4 %	1.3 %	2.5 %	3.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.906 %	62.472 ppb	73.226 ppb	66.266 ppb	91.662 %	96.495 %	34.494 ppb	55.326 ppb	54.337 ppb
Concentration per Run 1	85.306 %	59.467 ppb	70.058 ppb	63.214 ppb	89.243 %	95.048 %	34.003 ppb	55.036 ppb	53.493 ppb
Concentration per Run 2	87.014 %	63.902 ppb	74.331 ppb	66.664 ppb	93.783 %	99.500 %	33.914 ppb	54.814 ppb	54.280 ppb
Concentration per Run 3	85.397 %	64.047 ppb	75.289 ppb	68.920 ppb	91.959 %	94.937 %	35.563 ppb	56.130 ppb	55.238 ppb
Concentration RSD	1.1 %	4.2 %	3.8 %	4.3 %	2.5 %	2.7 %	2.7 %	1.3 %	1.6 %

Category	209Bi (KED AGD)
Concentration average	92.949 %
Concentration per Run 1	89.209 %
Concentration per Run 2	95.334 %
Concentration per Run 3	94.305 %
Concentration RSD	3.5 %

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Analysis label: WG1095244-4 6020TL | User name: ALPHALAB\metals-instrument | Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.744 %	88.347 %	0.011 ppb	82,234.492 ppb	43,007.272 ppb	7.344 ppb	12,471.321 ppb	36,864.145 ppb	76.004 %
Concentration per Run 1	78.097 %	90.453 %	0.013 ppb	75,917.115 ppb	39,105.834 ppb	6.927 ppb	11,414.391 ppb	33,330.952 ppb	77.236 %
Concentration per Run 2	74.815 %	90.899 %	0.011 ppb	84,444.413 ppb	44,128.490 ppb	7.441 ppb	12,697.346 ppb	37,230.718 ppb	76.160 %
Concentration per Run 3	74.320 %	83.691 %	0.009 ppb	86,341.949 ppb	45,787.491 ppb	7.664 ppb	13,302.226 ppb	40,030.764 ppb	74.616 %
Concentration RSD	2.7 %	4.6 %	16.1 %	6.8 %	8.1 %	5.1 %	7.7 %	9.1 %	1.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.463 %	50.738 ppb	0.162 ppb	0.386 ppb	4.831 ppb	25.084 ppb	0.030 ppb	1.036 ppb	0.216 ppb
Concentration per Run 1	86.687 %	44.642 ppb	0.206 ppb	0.311 ppb	4.076 ppb	26.065 ppb	0.030 ppb	0.969 ppb	0.221 ppb
Concentration per Run 2	88.778 %	52.172 ppb	0.073 ppb	0.381 ppb	5.332 ppb	20.366 ppb	0.023 ppb	0.890 ppb	0.163 ppb
Concentration per Run 3	86.924 %	55.398 ppb	0.206 ppb	0.467 ppb	5.086 ppb	28.821 ppb	0.037 ppb	1.249 ppb	0.265 ppb
Concentration RSD	1.3 %	10.9 %	47.3 %	20.2 %	13.8 %	17.2 %	23.0 %	18.2 %	23.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	3.016 ppb	81.969 %	0.513 ppb	0.136 ppb	278.057 ppb	0.769 ppb	79.982 %	0.099 ppb	0.008 ppb
Concentration per Run 1	2.940 ppb	82.400 %	0.547 ppb	0.018 ppb	250.545 ppb	0.618 ppb	82.955 %	0.068 ppb	0.015 ppb
Concentration per Run 2	3.029 ppb	81.595 %	0.510 ppb	0.160 ppb	295.545 ppb	0.943 ppb	79.830 %	0.119 ppb	0.016 ppb
Concentration per Run 3	3.077 ppb	81.911 %	0.480 ppb	0.229 ppb	288.079 ppb	0.747 ppb	77.161 %	0.111 ppb	-0.008 ppb
Concentration RSD	2.3 %	0.5 %	6.5 %	79.3 %	8.7 %	21.3 %	3.6 %	27.6 %	173.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.366 %	10.497 ppb	0.890 ppb	81.943 ppb	88.073 %	95.554 %	0.707 ppb	0.026 ppb	0.057 ppb
Concentration per Run 1	85.481 %	9.010 ppb	0.763 ppb	73.881 ppb	90.434 %	100.027 %	0.599 ppb	0.023 ppb	0.048 ppb
Concentration per Run 2	82.390 %	11.075 ppb	0.922 ppb	85.107 ppb	87.723 %	95.128 %	0.762 ppb	0.028 ppb	0.055 ppb
Concentration per Run 3	79.226 %	11.405 ppb	0.984 ppb	86.840 ppb	86.062 %	91.507 %	0.760 ppb	0.027 ppb	0.067 ppb
Concentration RSD	3.8 %	12.4 %	12.8 %	8.6 %	2.5 %	4.5 %	13.2 %	10.1 %	17.2 %

Category	209Bi (KED AGD)
Concentration average	89.444 %
Concentration per Run 1	91.763 %
Concentration per Run 2	91.505 %
Concentration per Run 3	85.063 %
Concentration RSD	4.2 %

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Analysis label: L1807540-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.707 %	91.941 %	0.009 ppb	81,664.650 ppb	43,178.924 ppb	7.359 ppb	12,322.969 ppb	36,462.685 ppb	75.677 %
Concentration per Run 1	77.282 %	93.387 %	0.012 ppb	76,873.567 ppb	39,942.638 ppb	6.288 ppb	11,446.108 ppb	32,444.780 ppb	76.410 %
Concentration per Run 2	76.376 %	91.728 %	0.010 ppb	84,563.370 ppb	44,771.278 ppb	8.484 ppb	12,702.170 ppb	38,082.289 ppb	74.724 %
Concentration per Run 3	76.464 %	90.708 %	0.005 ppb	83,557.013 ppb	44,822.858 ppb	7.307 ppb	12,820.628 ppb	38,860.987 ppb	75.897 %
Concentration RSD	0.7 %	1.5 %	37.4 %	5.1 %	6.5 %	14.9 %	6.2 %	9.6 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.419 %	48.722 ppb	0.159 ppb	0.443 ppb	5.134 ppb	11.516 ppb	0.029 ppb	0.857 ppb	0.248 ppb
Concentration per Run 1	84.033 %	42.491 ppb	0.258 ppb	0.364 ppb	4.800 ppb	10.764 ppb	0.003 ppb	0.830 ppb	0.337 ppb
Concentration per Run 2	84.784 %	50.698 ppb	0.144 ppb	0.486 ppb	5.616 ppb	14.104 ppb	0.052 ppb	0.860 ppb	0.257 ppb
Concentration per Run 3	87.439 %	52.978 ppb	0.075 ppb	0.480 ppb	4.986 ppb	9.679 ppb	0.031 ppb	0.881 ppb	0.151 ppb
Concentration RSD	2.1 %	11.3 %	58.4 %	15.5 %	8.3 %	20.0 %	85.7 %	3.0 %	37.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	4.069 ppb	80.513 %	0.492 ppb	0.023 ppb	289.714 ppb	0.337 ppb	81.024 %	0.067 ppb	-0.005 ppb
Concentration per Run 1	3.999 ppb	79.530 %	0.420 ppb	-0.046 ppb	264.893 ppb	0.208 ppb	82.225 %	0.045 ppb	-0.008 ppb
Concentration per Run 2	4.154 ppb	80.817 %	0.587 ppb	-0.047 ppb	300.932 ppb	0.285 ppb	81.035 %	0.060 ppb	-0.003 ppb
Concentration per Run 3	4.053 ppb	81.191 %	0.470 ppb	0.161 ppb	303.318 ppb	0.517 ppb	79.812 %	0.097 ppb	-0.003 ppb
Concentration RSD	1.9 %	1.1 %	17.4 %	528.6 %	7.4 %	47.8 %	1.5 %	40.0 %	59.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.017 %	4.737 ppb	0.476 ppb	82.659 ppb	87.105 %	95.589 %	0.235 ppb	0.005 ppb	0.031 ppb
Concentration per Run 1	82.340 %	4.219 ppb	0.382 ppb	75.441 ppb	87.957 %	96.496 %	0.181 ppb	0.006 ppb	0.026 ppb
Concentration per Run 2	82.442 %	4.647 ppb	0.511 ppb	85.401 ppb	87.330 %	96.458 %	0.261 ppb	0.005 ppb	0.032 ppb
Concentration per Run 3	81.271 %	5.346 ppb	0.534 ppb	87.136 ppb	86.028 %	93.813 %	0.264 ppb	0.004 ppb	0.034 ppb
Concentration RSD	0.8 %	12.0 %	17.2 %	7.6 %	1.1 %	1.6 %	20.1 %	22.6 %	14.5 %

Category	209Bi (KED AGD)
Concentration average	87.875 %
Concentration per Run 1	89.381 %
Concentration per Run 2	87.296 %
Concentration per Run 3	86.949 %
Concentration RSD	1.5 %

Analysis index: 99 Analysis started at: 3/7/2018 2:35:48 PM Rack: 2
Analysis label: L1807597-04 6020TL User name: ALPHALAB\metals-instrument Vial: 1

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.668 %	93.068 %	0.009 ppb	42.802 ppb	4.116 ppb	1.603 ppb	15.476 ppb	19.874 ppb	75.791 %
Concentration per Run 1	78.019 %	96.258 %	0.009 ppb	22.088 ppb	3.475 ppb	2.089 ppb	3.209 ppb	32.725 ppb	75.472 %
Concentration per Run 2	78.069 %	93.451 %	0.009 ppb	40.345 ppb	4.581 ppb	1.693 ppb	14.906 ppb	26.571 ppb	76.484 %
Concentration per Run 3	76.916 %	89.496 %	0.009 ppb	65.973 ppb	4.294 ppb	1.029 ppb	28.312 ppb	0.326 ppb	75.418 %
Concentration RSD	0.8 %	3.7 %	3.3 %	51.5 %	13.9 %	33.4 %	81.2 %	86.6 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.536 %	-0.037 ppb	0.038 ppb	0.250 ppb	0.346 ppb	7.730 ppb	0.005 ppb	-0.424 ppb	0.132 ppb
Concentration per Run 1	86.453 %	-0.080 ppb	0.031 ppb	0.227 ppb	0.318 ppb	8.893 ppb	0.010 ppb	-0.348 ppb	0.243 ppb
Concentration per Run 2	93.383 %	-0.071 ppb	0.008 ppb	0.272 ppb	0.360 ppb	6.525 ppb	-0.004 ppb	-0.464 ppb	0.071 ppb
Concentration per Run 3	85.771 %	0.039 ppb	0.076 ppb	0.253 ppb	0.359 ppb	7.774 ppb	0.010 ppb	-0.459 ppb	0.081 ppb
Concentration RSD	4.8 %	176.3 %	90.0 %	9.0 %	6.9 %	15.3 %	149.8 %	15.5 %	73.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.684 ppb	82.643 %	0.033 ppb	-0.030 ppb	0.048 ppb	0.168 ppb	84.227 %	0.058 ppb	0.013 ppb
Concentration per Run 1	0.582 ppb	84.530 %	0.051 ppb	0.079 ppb	0.045 ppb	0.124 ppb	86.239 %	0.042 ppb	0.010 ppb
Concentration per Run 2	0.772 ppb	82.928 %	0.038 ppb	0.017 ppb	0.064 ppb	0.172 ppb	84.221 %	0.066 ppb	0.015 ppb
Concentration per Run 3	0.697 ppb	80.473 %	0.011 ppb	-0.187 ppb	0.036 ppb	0.207 ppb	82.221 %	0.065 ppb	0.015 ppb
Concentration RSD	14.0 %	2.5 %	62.4 %	458.7 %	29.7 %	24.7 %	2.4 %	23.2 %	23.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.643 %	3.154 ppb	0.391 ppb	-0.010 ppb	88.719 %	96.864 %	0.089 ppb	0.000 ppb	-0.008 ppb
Concentration per Run 1	88.763 %	2.519 ppb	0.280 ppb	-0.019 ppb	90.563 %	100.418 %	0.041 ppb	-0.003 ppb	-0.010 ppb
Concentration per Run 2	85.086 %	3.419 ppb	0.449 ppb	-0.018 ppb	89.337 %	97.854 %	0.104 ppb	0.002 ppb	-0.005 ppb
Concentration per Run 3	83.080 %	3.525 ppb	0.444 ppb	0.007 ppb	86.256 %	92.318 %	0.122 ppb	-0.001 ppb	-0.008 ppb
Concentration RSD	3.4 %	17.5 %	24.7 %	149.9 %	2.5 %	4.3 %	48.1 %	599.0 %	30.8 %

Category	209Bi (KED AGD)
Concentration average	94.462 %
Concentration per Run 1	95.897 %
Concentration per Run 2	94.270 %
Concentration per Run 3	93.218 %
Concentration RSD	1.4 %

Analysis index: 100 | Analysis started at: 3/7/2018 2:39:39 PM | Rack: 2
Analysis label: L1807597-05 6020TL | User name: ALPHALAB\metals-instrument | Vial: 2

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.848 %	89.538 %	0.006 ppb	52.277 ppb	2.642 ppb	2.040 ppb	10.421 ppb	39.668 ppb	68.789 %
Concentration per Run 1	76.152 %	89.177 %	0.002 ppb	36.068 ppb	2.510 ppb	1.572 ppb	6.737 ppb	39.123 ppb	73.514 %
Concentration per Run 2	70.992 %	93.451 %	0.005 ppb	71.889 ppb	2.261 ppb	2.886 ppb	3.623 ppb	39.080 ppb	67.700 %
Concentration per Run 3	65.401 %	85.987 %	0.010 ppb	48.875 ppb	3.155 ppb	1.662 ppb	20.904 ppb	40.801 ppb	65.152 %
Concentration RSD	7.6 %	4.2 %	63.5 %	34.7 %	17.5 %	36.0 %	88.4 %	2.5 %	6.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.863 %	-0.155 ppb	0.063 ppb	1.241 ppb	5.871 ppb	15.333 ppb	0.008 ppb	-0.186 ppb	10.263 ppb
Concentration per Run 1	80.110 %	-0.185 ppb	0.105 ppb	1.079 ppb	5.331 ppb	19.132 ppb	0.018 ppb	-0.211 ppb	9.752 ppb
Concentration per Run 2	90.446 %	-0.102 ppb	0.030 ppb	1.175 ppb	6.212 ppb	13.895 ppb	0.009 ppb	-0.106 ppb	10.578 ppb
Concentration per Run 3	84.033 %	-0.178 ppb	0.055 ppb	1.471 ppb	6.070 ppb	12.971 ppb	-0.004 ppb	-0.241 ppb	10.459 ppb
Concentration RSD	6.1 %	29.8 %	60.4 %	16.5 %	8.1 %	21.7 %	140.5 %	37.9 %	4.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	5.580 ppb	80.682 %	0.044 ppb	0.180 ppb	0.027 ppb	0.220 ppb	82.846 %	0.046 ppb	0.003 ppb
Concentration per Run 1	4.887 ppb	79.410 %	0.025 ppb	-0.116 ppb	0.012 ppb	0.193 ppb	82.301 %	0.031 ppb	0.002 ppb
Concentration per Run 2	5.713 ppb	84.290 %	0.037 ppb	0.414 ppb	0.031 ppb	0.270 ppb	85.106 %	0.041 ppb	0.001 ppb
Concentration per Run 3	6.140 ppb	78.347 %	0.070 ppb	0.243 ppb	0.038 ppb	0.196 ppb	81.130 %	0.066 ppb	0.006 ppb
Concentration RSD	11.4 %	3.9 %	52.4 %	150.1 %	49.9 %	20.0 %	2.5 %	38.6 %	93.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.475 %	2.549 ppb	0.367 ppb	0.006 ppb	88.200 %	96.776 %	0.081 ppb	0.000 ppb	0.401 ppb
Concentration per Run 1	80.751 %	2.162 ppb	0.271 ppb	-0.042 ppb	86.114 %	92.624 %	0.059 ppb	-0.002 ppb	0.357 ppb
Concentration per Run 2	87.517 %	2.650 ppb	0.365 ppb	0.028 ppb	90.897 %	101.549 %	0.093 ppb	0.002 ppb	0.417 ppb
Concentration per Run 3	82.157 %	2.835 ppb	0.466 ppb	0.032 ppb	87.587 %	96.154 %	0.090 ppb	0.000 ppb	0.429 ppb
Concentration RSD	4.3 %	13.6 %	26.6 %	702.6 %	2.8 %	4.6 %	23.5 %	3,567.1 %	9.5 %

Category	209Bi (KED AGD)
Concentration average	92.022 %
Concentration per Run 1	91.208 %
Concentration per Run 2	93.408 %
Concentration per Run 3	91.450 %
Concentration RSD	1.3 %

Analysis index: 101 | Analysis started at: 3/7/2018 2:43:31 PM | Rack: 2
Analysis label: L1807597-06 6020TL | User name: ALPHALAB\metals-instrument | Vial: 3

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.163 %	91.792 %	0.008 ppb	45.100 ppb	2.381 ppb	2.329 ppb	2.473 ppb	26.487 ppb	74.048 %
Concentration per Run 1	75.864 %	89.942 %	0.006 ppb	37.107 ppb	1.197 ppb	1.439 ppb	-2.860 ppb	25.569 ppb	74.308 %
Concentration per Run 2	75.780 %	90.963 %	0.010 ppb	32.037 ppb	5.505 ppb	2.530 ppb	-2.525 ppb	22.820 ppb	72.966 %
Concentration per Run 3	76.844 %	94.471 %	0.008 ppb	66.157 ppb	0.442 ppb	3.017 ppb	12.805 ppb	31.073 ppb	74.870 %
Concentration RSD	0.8 %	2.6 %	23.4 %	40.8 %	114.7 %	34.7 %	361.8 %	15.9 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.186 %	-0.149 ppb	0.076 ppb	0.245 ppb	0.104 ppb	8.480 ppb	0.017 ppb	-0.421 ppb	13.381 ppb
Concentration per Run 1	80.556 %	-0.186 ppb	0.058 ppb	0.259 ppb	0.114 ppb	9.069 ppb	0.011 ppb	-0.503 ppb	13.373 ppb
Concentration per Run 2	85.466 %	-0.126 ppb	0.121 ppb	0.360 ppb	0.168 ppb	7.798 ppb	0.031 ppb	-0.341 ppb	13.524 ppb
Concentration per Run 3	92.537 %	-0.135 ppb	0.050 ppb	0.115 ppb	0.032 ppb	8.574 ppb	0.009 ppb	-0.419 ppb	13.246 ppb
Concentration RSD	7.0 %	22.0 %	51.0 %	50.5 %	65.7 %	7.6 %	70.8 %	19.2 %	1.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	7.662 ppb	79.809 %	0.031 ppb	-0.072 ppb	0.053 ppb	0.133 ppb	82.112 %	0.052 ppb	-0.002 ppb
Concentration per Run 1	7.261 ppb	76.835 %	0.057 ppb	-0.187 ppb	0.065 ppb	0.121 ppb	80.874 %	0.027 ppb	-0.003 ppb
Concentration per Run 2	7.748 ppb	80.413 %	0.039 ppb	-0.117 ppb	0.037 ppb	0.134 ppb	80.910 %	0.063 ppb	0.002 ppb
Concentration per Run 3	7.976 ppb	82.179 %	-0.004 ppb	0.086 ppb	0.056 ppb	0.143 ppb	84.552 %	0.066 ppb	-0.003 ppb
Concentration RSD	4.8 %	3.4 %	101.7 %	196.1 %	27.4 %	8.2 %	2.6 %	41.6 %	178.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.512 %	1.957 ppb	0.283 ppb	0.023 ppb	87.629 %	96.446 %	0.077 ppb	-0.001 ppb	0.588 ppb
Concentration per Run 1	80.296 %	1.814 ppb	0.250 ppb	0.008 ppb	86.014 %	94.290 %	0.041 ppb	-0.002 ppb	0.539 ppb
Concentration per Run 2	82.751 %	1.828 ppb	0.291 ppb	0.080 ppb	87.639 %	95.322 %	0.085 ppb	-0.001 ppb	0.610 ppb
Concentration per Run 3	87.490 %	2.229 ppb	0.308 ppb	-0.018 ppb	89.233 %	99.724 %	0.105 ppb	0.000 ppb	0.615 ppb
Concentration RSD	4.4 %	12.0 %	10.5 %	219.0 %	1.8 %	3.0 %	42.5 %	63.1 %	7.3 %

Category	209Bi (KED AGD)
Concentration average	91.755 %
Concentration per Run 1	88.806 %
Concentration per Run 2	92.684 %
Concentration per Run 3	93.774 %
Concentration RSD	2.8 %

Analysis index: 102 | Analysis started at: 3/7/2018 2:47:23 PM | Rack: 2
Analysis label: L1807597-07 6020TL | User name: ALPHALAB\metals-instrument | Vial: 4

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.260 %	92.302 %	0.008 ppb	44.981 ppb	2.112 ppb	3.644 ppb	7.996 ppb	14.925 ppb	72.554 %
Concentration per Run 1	75.199 %	88.730 %	0.004 ppb	27.502 ppb	0.550 ppb	2.881 ppb	15.251 ppb	10.827 ppb	72.862 %
Concentration per Run 2	75.227 %	94.663 %	0.011 ppb	27.297 ppb	3.524 ppb	3.502 ppb	-0.070 ppb	14.394 ppb	71.643 %
Concentration per Run 3	75.355 %	93.515 %	0.008 ppb	80.144 ppb	2.262 ppb	4.549 ppb	8.806 ppb	19.554 ppb	73.156 %
Concentration RSD	0.1 %	3.4 %	48.7 %	67.7 %	70.7 %	23.1 %	96.2 %	29.4 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.163 %	-0.109 ppb	0.118 ppb	0.248 ppb	3.116 ppb	2.839 ppb	0.010 ppb	-0.419 ppb	0.385 ppb
Concentration per Run 1	82.200 %	-0.119 ppb	0.034 ppb	0.303 ppb	2.584 ppb	0.954 ppb	0.011 ppb	-0.455 ppb	0.166 ppb
Concentration per Run 2	86.006 %	-0.075 ppb	0.143 ppb	0.226 ppb	3.212 ppb	2.277 ppb	-0.004 ppb	-0.338 ppb	0.477 ppb
Concentration per Run 3	90.282 %	-0.132 ppb	0.177 ppb	0.213 ppb	3.552 ppb	5.287 ppb	0.023 ppb	-0.464 ppb	0.513 ppb
Concentration RSD	4.7 %	27.7 %	63.4 %	19.7 %	15.8 %	78.2 %	135.2 %	16.8 %	49.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.927 ppb	80.004 %	0.035 ppb	0.078 ppb	0.019 ppb	0.076 ppb	83.249 %	0.041 ppb	0.005 ppb
Concentration per Run 1	0.779 ppb	77.135 %	0.026 ppb	-0.115 ppb	0.029 ppb	0.087 ppb	83.642 %	0.021 ppb	-0.003 ppb
Concentration per Run 2	1.185 ppb	77.479 %	0.056 ppb	0.534 ppb	0.013 ppb	0.073 ppb	82.376 %	0.045 ppb	0.016 ppb
Concentration per Run 3	0.818 ppb	85.398 %	0.023 ppb	-0.187 ppb	0.015 ppb	0.069 ppb	83.729 %	0.059 ppb	0.001 ppb
Concentration RSD	24.2 %	5.8 %	51.5 %	511.3 %	45.0 %	12.3 %	0.9 %	46.5 %	213.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.635 %	1.623 ppb	0.238 ppb	0.062 ppb	88.122 %	97.056 %	0.156 ppb	-0.002 ppb	0.017 ppb
Concentration per Run 1	81.530 %	1.168 ppb	0.199 ppb	0.032 ppb	86.221 %	93.579 %	0.027 ppb	-0.002 ppb	0.016 ppb
Concentration per Run 2	81.783 %	1.923 ppb	0.234 ppb	0.057 ppb	87.065 %	95.992 %	0.232 ppb	-0.003 ppb	0.013 ppb
Concentration per Run 3	87.590 %	1.779 ppb	0.280 ppb	0.098 ppb	91.081 %	101.596 %	0.211 ppb	0.000 ppb	0.023 ppb
Concentration RSD	4.1 %	24.7 %	17.0 %	53.0 %	2.9 %	4.2 %	72.2 %	77.2 %	29.7 %

Category	209Bi (KED AGD)
Concentration average	92.905 %
Concentration per Run 1	92.127 %
Concentration per Run 2	90.863 %
Concentration per Run 3	95.724 %
Concentration RSD	2.7 %

Analysis index: 103 Analysis started at: 3/7/2018 2:51:15 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.271 %	92.090 %	107.478 ppb	10,108.976 ppb	10,372.922 ppb	98.637 ppb	9,327.243 ppb	9,810.784 ppb	85.405 %
Concentration per Run 1	78.521 %	93.897 %	107.716 ppb	9,639.624 ppb	9,811.708 ppb	92.709 ppb	8,584.336 ppb	8,867.201 ppb	84.516 %
Concentration per Run 2	79.709 %	88.156 %	107.671 ppb	10,555.247 ppb	10,780.649 ppb	102.564 ppb	9,817.448 ppb	10,461.236 ppb	86.844 %
Concentration per Run 3	79.582 %	94.216 %	107.047 ppb	10,132.056 ppb	10,526.409 ppb	100.638 ppb	9,579.944 ppb	10,103.914 ppb	84.855 %
Recovery Percentage 1			107.478 %	101.090 %	103.729 %	98.637 %	93.272 %	98.108 %	
Concentration RSD	0.8 %	3.7 %	0.3 %	4.5 %	4.8 %	5.3 %	7.0 %	8.5 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	96.280 %	93.094 ppb	104.453 ppb	104.822 ppb	107.320 ppb	10,455.967 ppb	103.728 ppb	102.375 ppb	101.016 ppb
Concentration per Run 1	89.859 %	79.020 ppb	99.392 ppb	98.711 ppb	100.830 ppb	9,843.608 ppb	98.331 ppb	91.574 ppb	94.230 ppb
Concentration per Run 2	98.880 %	103.628 ppb	105.133 ppb	107.588 ppb	109.490 ppb	10,559.299 ppb	106.303 ppb	107.763 ppb	102.540 ppb
Concentration per Run 3	100.102 %	96.634 ppb	108.833 ppb	108.165 ppb	111.640 ppb	10,964.995 ppb	106.551 ppb	107.788 ppb	106.279 ppb
Recovery Percentage 1		93.094 %	104.453 %	104.822 %	107.320 %	104.560 %	103.728 %	102.375 %	101.016 %
Concentration RSD	5.8 %	13.6 %	4.6 %	5.1 %	5.3 %	5.4 %	4.5 %	9.1 %	6.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	100.318 ppb	83.008 %	100.407 ppb	105.533 ppb	100.364 ppb	104.531 ppb	84.031 %	102.847 ppb	101.480 ppb
Concentration per Run 1	92.108 ppb	83.672 %	90.367 ppb	99.776 ppb	90.018 ppb	94.181 ppb	84.141 %	94.575 ppb	91.950 ppb
Concentration per Run 2	103.737 ppb	81.993 %	104.819 ppb	110.701 ppb	105.227 ppb	111.382 ppb	83.105 %	106.896 ppb	105.226 ppb
Concentration per Run 3	105.109 ppb	83.358 %	106.035 ppb	106.122 ppb	105.846 ppb	108.028 ppb	84.846 %	107.071 ppb	107.263 ppb
Recovery Percentage 1	100.318 %		100.407 %	105.533 %	100.364 %	104.531 %		102.847 %	101.480 %
Concentration RSD	7.1 %	1.1 %	8.7 %	5.2 %	8.9 %	8.7 %	1.0 %	7.0 %	8.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.794 %	92.612 ppb	98.676 ppb	103.270 ppb	90.267 %	96.413 %	97.742 ppb	99.196 ppb	97.447 ppb
Concentration per Run 1	86.274 %	82.292 ppb	88.659 ppb	92.016 ppb	90.864 %	95.721 %	89.704 ppb	93.353 ppb	90.036 ppb
Concentration per Run 2	84.397 %	95.379 ppb	102.267 ppb	107.945 ppb	88.840 %	95.870 %	100.958 ppb	101.529 ppb	100.156 ppb
Concentration per Run 3	86.713 %	100.165 ppb	105.102 ppb	109.849 ppb	91.095 %	97.649 %	102.564 ppb	102.706 ppb	102.147 ppb
Recovery Percentage 1		92.612 %	98.676 %	103.270 %			97.742 %	99.196 %	97.447 %
Concentration RSD	1.4 %	10.0 %	8.9 %	9.5 %	1.4 %	1.1 %	7.2 %	5.1 %	6.7 %

Category	209Bi (KED AGD)
Concentration average	92.882 %
Concentration per Run 1	91.857 %
Concentration per Run 2	93.481 %
Concentration per Run 3	93.308 %
Recovery Percentage 1	
Concentration RSD	1.0 %

Analysis index: 104 Analysis started at: 3/7/2018 2:55:11 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.243 %	92.260 %	0.012 ppb	10.248 ppb	0.925 ppb	0.286 ppb	4.521 ppb	2.595 ppb	74.903 %
Concentration per Run 1	81.190 %	94.344 %	0.012 ppb	-0.952 ppb	0.497 ppb	0.246 ppb	-8.637 ppb	-3.131 ppb	74.086 %
Concentration per Run 2	81.401 %	89.942 %	0.010 ppb	-6.160 ppb	2.400 ppb	0.481 ppb	15.116 ppb	13.265 ppb	75.649 %
Concentration per Run 3	81.140 %	92.494 %	0.014 ppb	37.856 ppb	-0.121 ppb	0.131 ppb	7.085 ppb	-2.351 ppb	74.972 %
Recovery Percentage 1			2.452 %	10.248 %	0.925 %	2.863 %	4.521 %	2.595 %	
Concentration RSD	0.2 %	2.4 %	17.2 %	234.7 %	142.0 %	62.3 %	267.2 %	356.5 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.152 %	0.005 ppb	0.017 ppb	0.055 ppb	-0.068 ppb	17.463 ppb	0.010 ppb	-0.183 ppb	-0.010 ppb
Concentration per Run 1	83.680 %	0.017 ppb	0.032 ppb	0.046 ppb	-0.025 ppb	10.588 ppb	0.010 ppb	-0.132 ppb	-0.023 ppb
Concentration per Run 2	85.677 %	-0.059 ppb	0.032 ppb	0.068 ppb	-0.089 ppb	24.730 ppb	-0.004 ppb	-0.138 ppb	-0.053 ppb
Concentration per Run 3	86.100 %	0.056 ppb	-0.012 ppb	0.050 ppb	-0.089 ppb	17.072 ppb	0.023 ppb	-0.279 ppb	0.046 ppb
Recovery Percentage 1		0.951 %	0.344 %	5.466 %	-6.788 %	34.926 %	1.971 %	-9.147 %	-0.999 %
Concentration RSD	1.5 %	1,230.5 %	149.5 %	21.0 %	54.9 %	40.5 %	138.2 %	45.4 %	505.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.003 ppb	83.625 %	0.112 ppb	0.105 ppb	0.031 ppb	0.470 ppb	84.915 %	0.295 ppb	0.014 ppb
Concentration per Run 1	-0.035 ppb	82.823 %	0.108 ppb	0.016 ppb	0.086 ppb	0.284 ppb	85.749 %	0.213 ppb	0.027 ppb
Concentration per Run 2	0.055 ppb	83.598 %	0.107 ppb	0.217 ppb	0.000 ppb	0.517 ppb	84.987 %	0.308 ppb	0.010 ppb
Concentration per Run 3	-0.028 ppb	84.454 %	0.120 ppb	0.080 ppb	0.008 ppb	0.608 ppb	84.009 %	0.363 ppb	0.006 ppb
Recovery Percentage 1	-0.028 %		22.398 %	2.090 %	6.244 %	23.491 %		73.638 %	7.176 %
Concentration RSD	1,805.7 %	1.0 %	6.3 %	98.0 %	152.2 %	35.5 %	1.0 %	25.7 %	79.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.917 %	5.197 ppb	2.165 ppb	0.366 ppb	90.323 %	95.979 %	0.922 ppb	0.026 ppb	0.010 ppb
Concentration per Run 1	88.345 %	4.918 ppb	1.967 ppb	0.212 ppb	91.734 %	97.690 %	0.856 ppb	0.029 ppb	0.013 ppb
Concentration per Run 2	85.934 %	5.357 ppb	2.262 ppb	0.455 ppb	89.848 %	95.270 %	0.986 ppb	0.027 ppb	0.011 ppb
Concentration per Run 3	86.474 %	5.316 ppb	2.268 ppb	0.431 ppb	89.388 %	94.978 %	0.925 ppb	0.021 ppb	0.005 ppb
Recovery Percentage 1		173.229 %	54.137 %	73.151 %			46.118 %	5.186 %	1.926 %
Concentration RSD	1.5 %	4.7 %	8.0 %	36.6 %	1.4 %	1.6 %	7.0 %	15.9 %	40.8 %

Category	209Bi (KED AGD)
Concentration average	93.669 %
Concentration per Run 1	93.852 %
Concentration per Run 2	93.661 %
Concentration per Run 3	93.494 %
Recovery Percentage 1	
Concentration RSD	0.2 %

Analysis index: 105 | Analysis started at: 3/7/2018 3:00:42 PM | Rack: 2
Analysis label: L1807327-04 6020TL | User name: ALPHALAB\metals-instrument | Vial: 15

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.767 %	93.748 %	0.007 ppb	876.921 ppb	72.248 ppb	5.163 ppb	41.505 ppb	349.610 ppb	74.542 %
Concentration per Run 1	78.213 %	101.233 %	0.008 ppb	754.333 ppb	67.581 ppb	4.750 ppb	36.498 ppb	291.532 ppb	75.438 %
Concentration per Run 2	78.293 %	87.135 %	0.007 ppb	966.683 ppb	79.705 ppb	5.264 ppb	46.600 ppb	373.040 ppb	74.559 %
Concentration per Run 3	76.794 %	92.877 %	0.005 ppb	909.746 ppb	69.460 ppb	5.474 ppb	41.417 ppb	384.259 ppb	73.628 %
Concentration RSD	1.1 %	7.6 %	20.4 %	12.5 %	9.0 %	7.2 %	12.2 %	14.5 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.113 %	0.229 ppb	0.068 ppb	0.299 ppb	0.698 ppb	16.651 ppb	0.015 ppb	-0.311 ppb	0.905 ppb
Concentration per Run 1	86.734 %	0.103 ppb	0.053 ppb	0.226 ppb	0.475 ppb	8.900 ppb	0.003 ppb	-0.416 ppb	0.883 ppb
Concentration per Run 2	82.717 %	0.313 ppb	0.033 ppb	0.500 ppb	0.671 ppb	27.382 ppb	0.039 ppb	-0.215 ppb	0.854 ppb
Concentration per Run 3	85.889 %	0.270 ppb	0.119 ppb	0.170 ppb	0.948 ppb	13.672 ppb	0.003 ppb	-0.302 ppb	0.979 ppb
Concentration RSD	2.5 %	48.3 %	65.6 %	59.1 %	34.1 %	57.6 %	139.4 %	32.4 %	7.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	4.391 ppb	82.538 %	0.015 ppb	0.064 ppb	1.163 ppb	0.117 ppb	83.440 %	0.065 ppb	0.003 ppb
Concentration per Run 1	3.857 ppb	83.991 %	0.010 ppb	0.014 ppb	1.221 ppb	0.110 ppb	86.249 %	0.052 ppb	0.010 ppb
Concentration per Run 2	4.970 ppb	78.811 %	0.011 ppb	0.100 ppb	1.216 ppb	0.030 ppb	77.884 %	0.073 ppb	0.002 ppb
Concentration per Run 3	4.345 ppb	84.814 %	0.023 ppb	0.078 ppb	1.053 ppb	0.210 ppb	86.189 %	0.070 ppb	-0.003 ppb
Concentration RSD	12.7 %	3.9 %	51.5 %	70.0 %	8.2 %	77.2 %	5.8 %	17.9 %	228.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.228 %	2.960 ppb	0.777 ppb	1.072 ppb	88.493 %	95.867 %	0.371 ppb	0.010 ppb	0.185 ppb
Concentration per Run 1	88.296 %	2.588 ppb	0.693 ppb	1.025 ppb	90.803 %	100.384 %	0.170 ppb	0.008 ppb	0.168 ppb
Concentration per Run 2	78.358 %	3.819 ppb	0.909 ppb	1.296 ppb	83.188 %	90.970 %	0.644 ppb	0.014 ppb	0.211 ppb
Concentration per Run 3	86.030 %	2.472 ppb	0.730 ppb	0.895 ppb	91.486 %	96.247 %	0.298 ppb	0.007 ppb	0.176 ppb
Concentration RSD	6.2 %	25.2 %	14.8 %	19.1 %	5.2 %	4.9 %	66.1 %	35.2 %	12.5 %

Category	209Bi (KED AGD)
Concentration average	92.682 %
Concentration per Run 1	95.647 %
Concentration per Run 2	86.792 %
Concentration per Run 3	95.606 %
Concentration RSD	5.5 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.287 %	89.772 %	0.009 ppb	56.834 ppb	1.596 ppb	1.617 ppb	3.473 ppb	17.760 ppb	72.183 %
Concentration per Run 1	76.017 %	97.661 %	0.008 ppb	40.044 ppb	1.022 ppb	1.587 ppb	4.452 ppb	-1.706 ppb	72.019 %
Concentration per Run 2	77.136 %	87.837 %	0.010 ppb	58.239 ppb	1.182 ppb	0.959 ppb	-8.278 ppb	30.190 ppb	73.674 %
Concentration per Run 3	75.707 %	83.818 %	0.008 ppb	72.220 ppb	2.583 ppb	2.306 ppb	14.245 ppb	24.794 ppb	70.856 %
Concentration RSD	1.0 %	7.9 %	8.0 %	28.4 %	53.8 %	41.7 %	325.2 %	96.1 %	2.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.575 %	-0.176 ppb	0.048 ppb	0.230 ppb	0.017 ppb	7.535 ppb	0.010 ppb	-0.389 ppb	0.022 ppb
Concentration per Run 1	90.000 %	-0.172 ppb	-0.012 ppb	0.173 ppb	0.031 ppb	5.828 ppb	-0.004 ppb	-0.422 ppb	-0.003 ppb
Concentration per Run 2	84.432 %	-0.117 ppb	0.077 ppb	0.246 ppb	-0.024 ppb	9.317 ppb	0.017 ppb	-0.339 ppb	0.039 ppb
Concentration per Run 3	82.294 %	-0.241 ppb	0.080 ppb	0.271 ppb	0.044 ppb	7.459 ppb	0.018 ppb	-0.406 ppb	0.028 ppb
Concentration RSD	4.6 %	35.2 %	109.0 %	22.1 %	216.4 %	23.2 %	118.6 %	11.4 %	101.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.549 ppb	81.940 %	0.019 ppb	0.197 ppb	0.189 ppb	0.062 ppb	82.753 %	0.016 ppb	-0.003 ppb
Concentration per Run 1	0.272 ppb	88.976 %	0.035 ppb	0.321 ppb	0.160 ppb	0.051 ppb	87.235 %	0.012 ppb	0.005 ppb
Concentration per Run 2	0.712 ppb	79.589 %	-0.004 ppb	0.166 ppb	0.249 ppb	0.013 ppb	81.659 %	0.017 ppb	-0.008 ppb
Concentration per Run 3	0.663 ppb	77.255 %	0.026 ppb	0.104 ppb	0.158 ppb	0.123 ppb	79.364 %	0.019 ppb	-0.008 ppb
Concentration RSD	44.0 %	7.6 %	107.2 %	56.8 %	27.4 %	89.8 %	4.9 %	21.3 %	212.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.102 %	1.824 ppb	0.459 ppb	0.492 ppb	88.125 %	96.914 %	0.151 ppb	-0.001 ppb	-0.010 ppb
Concentration per Run 1	91.816 %	1.285 ppb	0.379 ppb	0.295 ppb	92.054 %	104.051 %	0.100 ppb	0.000 ppb	-0.014 ppb
Concentration per Run 2	81.535 %	1.980 ppb	0.423 ppb	0.779 ppb	86.532 %	94.408 %	0.169 ppb	-0.003 ppb	-0.009 ppb
Concentration per Run 3	78.954 %	2.208 ppb	0.575 ppb	0.400 ppb	85.789 %	92.283 %	0.184 ppb	0.001 ppb	-0.008 ppb
Concentration RSD	8.1 %	26.3 %	22.4 %	51.8 %	3.9 %	6.5 %	29.9 %	266.3 %	32.2 %

Category	209Bi (KED AGD)
Concentration average	94.469 %
Concentration per Run 1	100.416 %
Concentration per Run 2	93.259 %
Concentration per Run 3	89.733 %
Concentration RSD	5.8 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.286 %	91.090 %	0.006 ppb	82,503.121 ppb	44,854.758 ppb	19.685 ppb	12,606.664 ppb	36,954.572 ppb	72.839 %
Concentration per Run 1	75.252 %	94.216 %	0.006 ppb	75,922.085 ppb	40,502.272 ppb	15.039 ppb	11,425.845 ppb	32,870.834 ppb	72.583 %
Concentration per Run 2	75.563 %	90.899 %	0.003 ppb	87,270.620 ppb	47,671.331 ppb	24.857 ppb	13,611.037 ppb	40,448.658 ppb	73.955 %
Concentration per Run 3	75.044 %	88.156 %	0.008 ppb	84,316.659 ppb	46,390.673 ppb	19.160 ppb	12,783.112 ppb	37,544.224 ppb	71.979 %
Concentration RSD	0.3 %	3.3 %	44.9 %	7.1 %	8.5 %	25.0 %	8.8 %	10.3 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.226 %	50.918 ppb	0.170 ppb	0.789 ppb	3.241 ppb	10.239 ppb	0.020 ppb	1.131 ppb	0.130 ppb
Concentration per Run 1	85.278 %	45.367 ppb	0.121 ppb	0.796 ppb	3.198 ppb	7.137 ppb	0.031 ppb	1.171 ppb	0.127 ppb
Concentration per Run 2	88.684 %	56.017 ppb	0.266 ppb	0.794 ppb	3.717 ppb	12.805 ppb	0.003 ppb	1.101 ppb	0.074 ppb
Concentration per Run 3	84.714 %	51.371 ppb	0.122 ppb	0.776 ppb	2.810 ppb	10.774 ppb	0.025 ppb	1.121 ppb	0.190 ppb
Concentration RSD	2.5 %	10.5 %	49.0 %	1.4 %	14.0 %	28.0 %	75.9 %	3.2 %	44.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	8.068 ppb	80.598 %	0.662 ppb	0.140 ppb	307.776 ppb	0.193 ppb	79.161 %	0.026 ppb	-0.005 ppb
Concentration per Run 1	7.508 ppb	79.904 %	0.564 ppb	0.447 ppb	283.402 ppb	0.165 ppb	81.052 %	0.031 ppb	0.001 ppb
Concentration per Run 2	8.286 ppb	83.482 %	0.667 ppb	0.017 ppb	324.389 ppb	0.225 ppb	79.677 %	0.020 ppb	-0.008 ppb
Concentration per Run 3	8.411 ppb	78.407 %	0.754 ppb	-0.043 ppb	315.537 ppb	0.189 ppb	76.753 %	0.027 ppb	-0.008 ppb
Concentration RSD	6.1 %	3.2 %	14.4 %	190.2 %	7.0 %	15.8 %	2.8 %	21.4 %	114.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.378 %	1.411 ppb	0.398 ppb	89.890 ppb	87.792 %	97.743 %	0.114 ppb	0.002 ppb	0.019 ppb
Concentration per Run 1	84.463 %	1.113 ppb	0.302 ppb	80.367 ppb	88.954 %	99.592 %	0.076 ppb	0.006 ppb	0.012 ppb
Concentration per Run 2	82.660 %	1.721 ppb	0.427 ppb	94.359 ppb	88.232 %	100.826 %	0.117 ppb	0.002 ppb	0.022 ppb
Concentration per Run 3	80.011 %	1.398 ppb	0.464 ppb	94.945 ppb	86.190 %	92.811 %	0.150 ppb	-0.002 ppb	0.022 ppb
Concentration RSD	2.7 %	21.6 %	21.3 %	9.2 %	1.6 %	4.4 %	32.3 %	180.5 %	29.6 %

Category	209Bi (KED AGD)
Concentration average	88.876 %
Concentration per Run 1	90.768 %
Concentration per Run 2	88.635 %
Concentration per Run 3	87.224 %
Concentration RSD	2.0 %

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Analysis label: L1807749-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 23

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.049 %	90.878 %	1.700 ppb	314,018.223 ppb	16,006.265 ppb	2,886.389 ppb	8,871.487 ppb	102,810.709 ppb	75.623 %
Concentration per Run 1	75.202 %	89.559 %	1.622 ppb	295,275.004 ppb	14,804.090 ppb	2,708.318 ppb	8,715.735 ppb	90,661.044 ppb	75.426 %
Concentration per Run 2	74.843 %	98.235 %	1.760 ppb	320,134.286 ppb	16,577.741 ppb	3,025.454 ppb	9,861.030 ppb	106,135.964 ppb	76.109 %
Concentration per Run 3	75.102 %	84.839 %	1.719 ppb	326,645.378 ppb	16,636.963 ppb	2,925.396 ppb	8,037.696 ppb	111,635.120 ppb	75.333 %
Concentration RSD	0.2 %	7.5 %	4.2 %	5.3 %	6.5 %	5.6 %	10.4 %	10.6 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.818 %	184.796 ppb	25.601 ppb	6.454 ppb	750.625 ppb	5,471.019 ppb	7.954 ppb	15.417 ppb	29.146 ppb
Concentration per Run 1	79.241 %	158.869 ppb	24.484 ppb	6.010 ppb	701.518 ppb	5,123.874 ppb	7.574 ppb	13.595 ppb	28.652 ppb
Concentration per Run 2	91.527 %	191.863 ppb	25.421 ppb	6.547 ppb	783.227 ppb	5,579.686 ppb	7.832 ppb	15.755 ppb	28.646 ppb
Concentration per Run 3	86.687 %	203.657 ppb	26.896 ppb	6.804 ppb	767.130 ppb	5,709.496 ppb	8.455 ppb	16.901 ppb	30.139 ppb
Concentration RSD	7.2 %	12.6 %	4.7 %	6.3 %	5.8 %	5.6 %	5.7 %	10.9 %	3.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	163.972 ppb	78.793 %	3.371 ppb	2.459 ppb	558.093 ppb	0.581 ppb	76.392 %	0.120 ppb	0.355 ppb
Concentration per Run 1	153.169 ppb	76.462 %	3.257 ppb	2.028 ppb	500.033 ppb	0.565 ppb	75.519 %	0.091 ppb	0.291 ppb
Concentration per Run 2	168.514 ppb	81.343 %	3.566 ppb	3.230 ppb	606.021 ppb	0.621 ppb	77.678 %	0.114 ppb	0.427 ppb
Concentration per Run 3	170.233 ppb	78.572 %	3.290 ppb	2.119 ppb	568.225 ppb	0.558 ppb	75.980 %	0.154 ppb	0.349 ppb
Concentration RSD	5.7 %	3.1 %	5.0 %	27.2 %	9.6 %	5.9 %	1.5 %	26.9 %	19.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	78.661 %	1.885 ppb	2.133 ppb	129.248 ppb	82.276 %	93.224 %	0.198 ppb	0.060 ppb	86.695 ppb
Concentration per Run 1	77.370 %	1.434 ppb	1.817 ppb	116.041 ppb	80.738 %	90.533 %	0.192 ppb	0.053 ppb	78.913 ppb
Concentration per Run 2	80.945 %	1.879 ppb	2.202 ppb	136.647 ppb	85.081 %	98.016 %	0.168 ppb	0.063 ppb	90.104 ppb
Concentration per Run 3	77.668 %	2.343 ppb	2.380 ppb	135.056 ppb	81.009 %	91.124 %	0.233 ppb	0.063 ppb	91.068 ppb
Concentration RSD	2.5 %	24.1 %	13.5 %	8.9 %	3.0 %	4.5 %	16.7 %	9.7 %	7.8 %

Category	209Bi (KED AGD)
Concentration average	82.473 %
Concentration per Run 1	82.617 %
Concentration per Run 2	84.350 %
Concentration per Run 3	80.452 %
Concentration RSD	2.4 %

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Analysis label: WG1095247-3D10 2008TL | User name: ALPHALAB\metals-instrument | Vial: 24

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.355 %	90.793 %	5.894 ppb	7,745.436 ppb	2,923.552 ppb	279.524 ppb	1,191.944 ppb	6,173.718 ppb	69.204 %
Concentration per Run 1	80.361 %	89.496 %	5.716 ppb	7,530.313 ppb	2,907.670 ppb	275.783 ppb	1,063.181 ppb	5,602.369 ppb	71.028 %
Concentration per Run 2	79.510 %	89.432 %	6.001 ppb	8,023.761 ppb	3,028.090 ppb	279.603 ppb	1,185.948 ppb	6,302.595 ppb	68.678 %
Concentration per Run 3	78.194 %	93.451 %	5.964 ppb	7,682.235 ppb	2,834.897 ppb	283.186 ppb	1,326.702 ppb	6,616.191 ppb	67.907 %
Concentration RSD	1.4 %	2.5 %	2.6 %	3.3 %	3.3 %	1.3 %	11.1 %	8.4 %	2.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	73.526 %	96.787 ppb	69.505 ppb	27.502 ppb	1,075.149 ppb	221.008 ppb	61.067 ppb	59.800 ppb	28.899 ppb
Concentration per Run 1	66.440 %	87.663 ppb	69.596 ppb	28.433 ppb	1,064.183 ppb	230.753 ppb	60.232 ppb	57.731 ppb	27.990 ppb
Concentration per Run 2	68.389 %	98.492 ppb	74.933 ppb	28.470 ppb	1,121.950 ppb	242.984 ppb	63.693 ppb	63.694 ppb	30.577 ppb
Concentration per Run 3	85.748 %	104.206 ppb	63.986 ppb	25.604 ppb	1,039.314 ppb	189.287 ppb	59.274 ppb	57.975 ppb	28.131 ppb
Concentration RSD	14.5 %	8.7 %	7.9 %	6.0 %	3.9 %	12.7 %	3.8 %	5.6 %	5.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	61.063 ppb	84.840 %	13.671 ppb	13.672 ppb	129.506 ppb	102.860 ppb	83.905 %	5.700 ppb	5.782 ppb
Concentration per Run 1	59.967 ppb	79.395 %	13.277 ppb	12.207 ppb	121.706 ppb	99.775 ppb	80.782 %	5.536 ppb	5.634 ppb
Concentration per Run 2	62.861 ppb	83.998 %	14.229 ppb	13.468 ppb	129.580 ppb	101.891 ppb	82.547 %	5.823 ppb	5.943 ppb
Concentration per Run 3	60.361 ppb	91.128 %	13.505 ppb	15.341 ppb	137.231 ppb	106.914 ppb	88.386 %	5.740 ppb	5.768 ppb
Concentration RSD	2.6 %	7.0 %	3.6 %	11.5 %	6.0 %	3.6 %	4.7 %	2.6 %	2.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.688 %	89.280 ppb	63.497 ppb	234.908 ppb	90.682 %	97.972 %	0.066 ppb	12.621 ppb	55.168 ppb
Concentration per Run 1	81.249 %	87.682 ppb	61.136 ppb	227.366 ppb	86.859 %	92.995 %	0.037 ppb	12.456 ppb	54.265 ppb
Concentration per Run 2	84.543 %	90.689 ppb	64.037 ppb	235.989 ppb	89.036 %	95.063 %	0.048 ppb	12.923 ppb	56.494 ppb
Concentration per Run 3	91.271 %	89.471 ppb	65.317 ppb	241.369 ppb	96.152 %	105.859 %	0.114 ppb	12.484 ppb	54.746 ppb
Concentration RSD	6.0 %	1.7 %	3.4 %	3.0 %	5.4 %	7.1 %	63.2 %	2.1 %	2.1 %

Category	209Bi (KED AGD)
Concentration average	91.431 %
Concentration per Run 1	85.781 %
Concentration per Run 2	90.296 %
Concentration per Run 3	98.215 %
Concentration RSD	6.9 %

Analysis index: 110 Analysis started at: 3/7/2018 3:20:06 PM Rack: 2
Analysis label: WG1095247-4 2008TL User name: ALPHALAB\metals-instrument Vial: 25

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.759 %	92.621 %	0.012 ppb	55,809.658 ppb	14,000.370 ppb	4.427 ppb	1,500.103 ppb	47,621.985 ppb	74.915 %
Concentration per Run 1	75.739 %	93.259 %	0.015 ppb	51,797.138 ppb	12,704.718 ppb	2.257 ppb	1,351.525 ppb	41,603.659 ppb	75.961 %
Concentration per Run 2	76.000 %	90.644 %	0.008 ppb	58,113.538 ppb	14,294.179 ppb	4.367 ppb	1,550.532 ppb	49,091.955 ppb	74.483 %
Concentration per Run 3	75.538 %	93.961 %	0.013 ppb	57,518.299 ppb	15,002.212 ppb	6.657 ppb	1,598.252 ppb	52,170.340 ppb	74.302 %
Concentration RSD	0.3 %	1.9 %	32.5 %	6.2 %	8.4 %	49.7 %	8.7 %	11.4 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.522 %	66.064 ppb	0.960 ppb	1.266 ppb	8,755.320 ppb	705.028 ppb	0.530 ppb	0.968 ppb	0.417 ppb
Concentration per Run 1	86.053 %	58.306 ppb	0.808 ppb	1.101 ppb	8,067.592 ppb	693.312 ppb	0.559 ppb	1.173 ppb	0.528 ppb
Concentration per Run 2	88.895 %	68.785 ppb	0.940 ppb	1.349 ppb	8,840.915 ppb	730.785 ppb	0.503 ppb	1.084 ppb	0.393 ppb
Concentration per Run 3	93.618 %	71.100 ppb	1.131 ppb	1.347 ppb	9,357.455 ppb	690.989 ppb	0.528 ppb	0.648 ppb	0.329 ppb
Concentration RSD	4.3 %	10.3 %	16.9 %	11.3 %	7.4 %	3.2 %	5.2 %	29.0 %	24.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	2.219 ppb	80.710 %	1.179 ppb	0.168 ppb	203.507 ppb	2.867 ppb	81.444 %	0.051 ppb	-0.005 ppb
Concentration per Run 1	1.860 ppb	78.961 %	1.190 ppb	0.240 ppb	180.641 ppb	2.582 ppb	81.147 %	0.041 ppb	-0.008 ppb
Concentration per Run 2	2.553 ppb	78.059 %	1.338 ppb	0.317 ppb	213.022 ppb	3.150 ppb	79.715 %	0.042 ppb	0.002 ppb
Concentration per Run 3	2.243 ppb	85.111 %	1.009 ppb	-0.054 ppb	216.858 ppb	2.871 ppb	83.470 %	0.071 ppb	-0.008 ppb
Concentration RSD	15.6 %	4.8 %	14.0 %	116.8 %	9.8 %	9.9 %	2.3 %	33.6 %	117.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.964 %	10.680 ppb	2.537 ppb	110.962 ppb	90.212 %	95.617 %	0.187 ppb	0.004 ppb	0.037 ppb
Concentration per Run 1	83.704 %	9.997 ppb	2.208 ppb	99.266 ppb	89.174 %	94.266 %	0.197 ppb	0.001 ppb	0.039 ppb
Concentration per Run 2	83.293 %	11.272 ppb	2.623 ppb	115.970 ppb	89.438 %	94.622 %	0.182 ppb	0.008 ppb	0.040 ppb
Concentration per Run 3	87.894 %	10.771 ppb	2.781 ppb	117.650 ppb	92.023 %	97.962 %	0.183 ppb	0.003 ppb	0.031 ppb
Concentration RSD	3.0 %	6.0 %	11.7 %	9.2 %	1.7 %	2.1 %	4.5 %	94.9 %	14.3 %

Category	209Bi (KED AGD)
Concentration average	91.583 %
Concentration per Run 1	91.619 %
Concentration per Run 2	90.459 %
Concentration per Run 3	92.672 %
Concentration RSD	1.2 %

Analysis index: 111 | Analysis started at: 3/7/2018 3:23:59 PM | Rack: 2
Analysis label: L1807343-01 2008TL | User name: ALPHALAB\metals-instrument | Vial: 26

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.162 %	83.733 %	0.017 ppb	59,191.494 ppb	14,518.942 ppb	5.054 ppb	1,582.091 ppb	51,044.238 ppb	72.350 %
Concentration per Run 1	75.063 %	88.347 %	0.018 ppb	54,954.838 ppb	13,381.722 ppb	5.626 ppb	1,409.725 ppb	44,111.888 ppb	73.177 %
Concentration per Run 2	72.979 %	80.501 %	0.016 ppb	61,466.141 ppb	15,221.408 ppb	5.789 ppb	1,678.546 ppb	55,474.178 ppb	71.443 %
Concentration per Run 3	74.445 %	82.351 %	0.018 ppb	61,153.501 ppb	14,953.695 ppb	3.747 ppb	1,658.001 ppb	53,546.648 ppb	72.428 %
Concentration RSD	1.4 %	4.9 %	7.3 %	6.2 %	6.8 %	22.5 %	9.5 %	11.9 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.315 %	69.027 ppb	0.936 ppb	0.300 ppb	8,805.121 ppb	742.360 ppb	0.506 ppb	0.689 ppb	0.373 ppb
Concentration per Run 1	81.120 %	61.666 ppb	0.923 ppb	0.224 ppb	8,364.483 ppb	734.107 ppb	0.526 ppb	0.709 ppb	0.416 ppb
Concentration per Run 2	86.734 %	70.951 ppb	0.956 ppb	0.346 ppb	8,865.587 ppb	737.501 ppb	0.505 ppb	0.690 ppb	0.346 ppb
Concentration per Run 3	85.090 %	74.463 ppb	0.930 ppb	0.330 ppb	9,185.294 ppb	755.473 ppb	0.487 ppb	0.668 ppb	0.356 ppb
Concentration RSD	3.4 %	9.6 %	1.8 %	22.2 %	4.7 %	1.5 %	3.9 %	3.0 %	10.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	2.042 ppb	78.032 %	1.244 ppb	0.052 ppb	201.650 ppb	2.013 ppb	78.678 %	0.025 ppb	0.000 ppb
Concentration per Run 1	1.899 ppb	76.532 %	1.213 ppb	-0.040 ppb	186.759 ppb	1.711 ppb	77.495 %	0.016 ppb	-0.003 ppb
Concentration per Run 2	2.186 ppb	79.649 %	1.298 ppb	0.238 ppb	206.204 ppb	2.137 ppb	78.739 %	0.041 ppb	-0.003 ppb
Concentration per Run 3	2.040 ppb	77.913 %	1.221 ppb	-0.043 ppb	211.987 ppb	2.191 ppb	79.800 %	0.019 ppb	0.006 ppb
Concentration RSD	7.0 %	2.0 %	3.8 %	310.3 %	6.6 %	13.1 %	1.5 %	54.0 %	2,671.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.460 %	3.393 ppb	2.086 ppb	112.251 ppb	87.862 %	94.119 %	0.126 ppb	-0.001 ppb	0.000 ppb
Concentration per Run 1	80.709 %	2.799 ppb	2.013 ppb	105.967 ppb	87.638 %	94.375 %	0.086 ppb	-0.001 ppb	-0.003 ppb
Concentration per Run 2	82.050 %	3.359 ppb	1.997 ppb	115.369 ppb	87.867 %	93.394 %	0.141 ppb	-0.001 ppb	0.000 ppb
Concentration per Run 3	81.620 %	4.019 ppb	2.247 ppb	115.418 ppb	88.082 %	94.590 %	0.150 ppb	-0.002 ppb	0.004 ppb
Concentration RSD	0.8 %	18.0 %	6.7 %	4.8 %	0.3 %	0.7 %	27.3 %	50.1 %	819.3 %

Category	209Bi (KED AGD)
Concentration average	87.723 %
Concentration per Run 1	89.592 %
Concentration per Run 2	86.762 %
Concentration per Run 3	86.816 %
Concentration RSD	1.8 %

Analysis index: 112 | Analysis started at: 3/7/2018 3:27:52 PM | Rack: 2
Analysis label: L1807343-02 2008TL | User name: ALPHALAB\metals-instrument | Vial: 27

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.023 %	90.431 %	0.060 ppb	58,399.034 ppb	12,291.610 ppb	749.024 ppb	1,188.212 ppb	47,526.207 ppb	73.089 %
Concentration per Run 1	73.894 %	93.514 %	0.055 ppb	54,279.852 ppb	11,221.500 ppb	709.269 ppb	1,100.749 ppb	42,828.334 ppb	72.788 %
Concentration per Run 2	74.262 %	91.792 %	0.062 ppb	59,726.362 ppb	12,602.459 ppb	745.373 ppb	1,216.990 ppb	48,032.252 ppb	73.621 %
Concentration per Run 3	73.914 %	85.987 %	0.062 ppb	61,190.886 ppb	13,050.871 ppb	792.430 ppb	1,246.896 ppb	51,718.034 ppb	72.858 %
Concentration RSD	0.3 %	4.4 %	6.8 %	6.2 %	7.8 %	5.6 %	6.5 %	9.4 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	81.167 %	82.314 ppb	3.657 ppb	1.294 ppb	6,884.980 ppb	1,151.457 ppb	0.967 ppb	2.101 ppb	12.691 ppb
Concentration per Run 1	79.311 %	74.290 ppb	3.125 ppb	1.115 ppb	6,491.267 ppb	1,106.670 ppb	0.915 ppb	1.860 ppb	11.288 ppb
Concentration per Run 2	82.271 %	84.462 ppb	4.138 ppb	1.355 ppb	7,090.301 ppb	1,184.840 ppb	0.873 ppb	2.516 ppb	13.271 ppb
Concentration per Run 3	81.919 %	88.190 ppb	3.708 ppb	1.413 ppb	7,073.373 ppb	1,162.863 ppb	1.111 ppb	1.928 ppb	13.513 ppb
Concentration RSD	2.0 %	8.7 %	13.9 %	12.2 %	5.0 %	3.5 %	13.2 %	17.2 %	9.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	5.387 ppb	77.873 %	1.328 ppb	0.223 ppb	167.238 ppb	1.285 ppb	78.224 %	0.034 ppb	0.145 ppb
Concentration per Run 1	4.842 ppb	77.389 %	1.815 ppb	0.103 ppb	153.059 ppb	1.052 ppb	79.620 %	0.027 ppb	0.119 ppb
Concentration per Run 2	5.761 ppb	77.838 %	1.059 ppb	0.248 ppb	174.951 ppb	1.421 ppb	77.333 %	0.032 ppb	0.145 ppb
Concentration per Run 3	5.559 ppb	78.392 %	1.111 ppb	0.317 ppb	173.704 ppb	1.382 ppb	77.719 %	0.043 ppb	0.170 ppb
Concentration RSD	9.0 %	0.6 %	31.8 %	48.9 %	7.4 %	15.8 %	1.6 %	23.4 %	17.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.179 %	2.525 ppb	1.770 ppb	124.746 ppb	87.482 %	93.404 %	0.088 ppb	0.011 ppb	0.692 ppb
Concentration per Run 1	82.090 %	2.295 ppb	1.604 ppb	114.917 ppb	88.423 %	93.600 %	0.088 ppb	0.009 ppb	0.630 ppb
Concentration per Run 2	81.263 %	2.841 ppb	1.863 ppb	126.190 ppb	86.548 %	92.022 %	0.064 ppb	0.010 ppb	0.723 ppb
Concentration per Run 3	80.185 %	2.437 ppb	1.842 ppb	133.132 ppb	87.474 %	94.590 %	0.112 ppb	0.013 ppb	0.723 ppb
Concentration RSD	1.2 %	11.2 %	8.1 %	7.4 %	1.1 %	1.4 %	27.2 %	21.2 %	7.7 %

Category	209Bi (KED AGD)
Concentration average	87.256 %
Concentration per Run 1	87.630 %
Concentration per Run 2	86.811 %
Concentration per Run 3	87.326 %
Concentration RSD	0.5 %

Analysis index: 113 | Analysis started at: 3/7/2018 3:31:44 PM | Rack: 2
Analysis label: L1807327-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 12

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.357 %	93.111 %	0.022 ppb	156,010.790 ppb	19,936.690 ppb	54.327 ppb	10,498.793 ppb	169,211.833 ppb	75.314 %
Concentration per Run 1	75.384 %	94.344 %	0.020 ppb	143,601.129 ppb	17,987.921 ppb	49.014 ppb	9,672.648 ppb	150,769.310 ppb	75.683 %
Concentration per Run 2	74.317 %	91.984 %	0.024 ppb	163,531.887 ppb	20,788.064 ppb	59.168 ppb	10,718.066 ppb	177,933.728 ppb	74.769 %
Concentration per Run 3	73.368 %	93.004 %	0.023 ppb	160,899.354 ppb	21,034.085 ppb	54.798 ppb	11,105.665 ppb	178,932.460 ppb	75.490 %
Concentration RSD	1.4 %	1.3 %	8.2 %	6.9 %	8.5 %	9.4 %	7.1 %	9.4 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.256 %	235.652 ppb	1.739 ppb	0.757 ppb	275.413 ppb	661.761 ppb	1.035 ppb	2.279 ppb	2.844 ppb
Concentration per Run 1	87.651 %	211.008 ppb	1.771 ppb	0.731 ppb	255.395 ppb	595.156 ppb	0.884 ppb	2.295 ppb	2.271 ppb
Concentration per Run 2	89.459 %	242.473 ppb	1.765 ppb	0.656 ppb	283.219 ppb	718.100 ppb	1.047 ppb	2.180 ppb	2.927 ppb
Concentration per Run 3	90.657 %	253.474 ppb	1.681 ppb	0.883 ppb	287.625 ppb	672.027 ppb	1.172 ppb	2.360 ppb	3.335 ppb
Concentration RSD	1.7 %	9.4 %	2.9 %	15.3 %	6.3 %	9.4 %	14.0 %	4.0 %	18.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	19.448 ppb	80.719 %	1.319 ppb	1.000 ppb	897.091 ppb	5.181 ppb	80.858 %	0.017 ppb	0.084 ppb
Concentration per Run 1	17.444 ppb	80.828 %	1.104 ppb	0.994 ppb	796.212 ppb	4.915 ppb	83.007 %	0.016 ppb	0.045 ppb
Concentration per Run 2	20.081 ppb	80.466 %	1.473 ppb	1.006 ppb	932.582 ppb	5.282 ppb	79.740 %	0.017 ppb	0.110 ppb
Concentration per Run 3	20.818 ppb	80.862 %	1.379 ppb	1.000 ppb	962.479 ppb	5.347 ppb	79.828 %	0.018 ppb	0.096 ppb
Concentration RSD	9.1 %	0.3 %	14.5 %	0.6 %	9.9 %	4.5 %	2.3 %	6.4 %	40.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.871 %	1.638 ppb	1.158 ppb	87.441 ppb	92.765 %	92.643 %	0.172 ppb	0.052 ppb	4.620 ppb
Concentration per Run 1	87.759 %	1.218 ppb	1.051 ppb	76.594 ppb	94.468 %	95.421 %	0.084 ppb	0.049 ppb	4.154 ppb
Concentration per Run 2	86.283 %	1.924 ppb	1.133 ppb	91.677 ppb	90.465 %	90.702 %	0.227 ppb	0.054 ppb	4.823 ppb
Concentration per Run 3	86.572 %	1.771 ppb	1.290 ppb	94.053 ppb	93.363 %	91.806 %	0.204 ppb	0.053 ppb	4.884 ppb
Concentration RSD	0.9 %	22.7 %	10.5 %	10.8 %	2.2 %	2.7 %	44.6 %	5.5 %	8.8 %

Category	209Bi (KED AGD)
Concentration average	87.610 %
Concentration per Run 1	88.699 %
Concentration per Run 2	86.743 %
Concentration per Run 3	87.386 %
Concentration RSD	1.1 %

Analysis index: 114 | Analysis started at: 3/7/2018 3:35:38 PM | Rack: 2
Analysis label: WG1095244-6D5 6020TL | User name: ALPHALAB\metals-instrument | Vial: 11

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.124 %	94.365 %	0.008 ppb	18,550.622 ppb	9,528.713 ppb	4.547 ppb	2,541.915 ppb	7,373.953 ppb	73.235 %
Concentration per Run 1	81.230 %	98.108 %	0.010 ppb	17,045.498 ppb	8,669.540 ppb	3.675 ppb	2,280.188 ppb	6,617.674 ppb	72.973 %
Concentration per Run 2	81.674 %	89.304 %	0.007 ppb	19,956.297 ppb	10,378.631 ppb	4.769 ppb	2,784.755 ppb	7,912.391 ppb	73.162 %
Concentration per Run 3	80.468 %	95.683 %	0.008 ppb	18,650.071 ppb	9,537.968 ppb	5.197 ppb	2,560.800 ppb	7,591.795 ppb	73.569 %
Concentration RSD	0.8 %	4.8 %	18.4 %	7.9 %	9.0 %	17.3 %	9.9 %	9.1 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	76.579 %	9.678 ppb	0.075 ppb	0.159 ppb	1.195 ppb	4.793 ppb	0.018 ppb	-0.209 ppb	0.017 ppb
Concentration per Run 1	73.792 %	9.108 ppb	0.037 ppb	0.066 ppb	0.977 ppb	4.660 ppb	0.018 ppb	-0.335 ppb	0.036 ppb
Concentration per Run 2	76.258 %	9.979 ppb	0.084 ppb	0.296 ppb	1.377 ppb	2.444 ppb	0.018 ppb	-0.212 ppb	-0.006 ppb
Concentration per Run 3	79.687 %	9.946 ppb	0.104 ppb	0.115 ppb	1.231 ppb	7.273 ppb	0.017 ppb	-0.080 ppb	0.020 ppb
Concentration RSD	3.9 %	5.1 %	46.1 %	76.5 %	17.0 %	50.4 %	2.0 %	61.0 %	126.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.926 ppb	85.038 %	0.119 ppb	0.034 ppb	57.630 ppb	0.074 ppb	83.825 %	0.001 ppb	-0.006 ppb
Concentration per Run 1	0.842 ppb	86.550 %	0.158 ppb	0.140 ppb	51.945 ppb	0.040 ppb	83.624 %	-0.001 ppb	-0.008 ppb
Concentration per Run 2	1.056 ppb	83.706 %	0.080 ppb	0.015 ppb	59.504 ppb	0.113 ppb	83.985 %	0.001 ppb	-0.008 ppb
Concentration per Run 3	0.880 ppb	84.859 %	0.120 ppb	-0.054 ppb	61.442 ppb	0.069 ppb	83.865 %	0.003 ppb	-0.003 ppb
Concentration RSD	12.3 %	1.7 %	32.9 %	290.2 %	8.7 %	49.8 %	0.2 %	182.8 %	41.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.830 %	0.450 ppb	0.132 ppb	16.527 ppb	89.575 %	97.723 %	-0.093 ppb	-0.003 ppb	-0.019 ppb
Concentration per Run 1	84.753 %	0.299 ppb	0.089 ppb	15.233 ppb	88.022 %	96.484 %	-0.237 ppb	-0.003 ppb	-0.020 ppb
Concentration per Run 2	85.408 %	0.397 ppb	0.122 ppb	18.325 ppb	89.282 %	97.250 %	-0.029 ppb	-0.003 ppb	-0.023 ppb
Concentration per Run 3	87.330 %	0.656 ppb	0.186 ppb	16.024 ppb	91.421 %	99.436 %	-0.013 ppb	-0.003 ppb	-0.014 ppb
Concentration RSD	1.6 %	41.0 %	37.2 %	9.7 %	1.9 %	1.6 %	134.7 %	10.3 %	24.4 %

Category	209Bi (KED AGD)
Concentration average	92.841 %
Concentration per Run 1	92.008 %
Concentration per Run 2	93.232 %
Concentration per Run 3	93.284 %
Concentration RSD	0.8 %

Analysis index: 115 Analysis started at: 3/7/2018 3:39:31 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.037 %	93.791 %	106.912 ppb	9,911.772 ppb	9,988.369 ppb	101.808 ppb	9,067.707 ppb	9,305.325 ppb	90.358 %
Concentration per Run 1	82.247 %	98.235 %	106.833 ppb	9,098.980 ppb	9,070.527 ppb	92.439 ppb	7,946.976 ppb	8,044.561 ppb	91.829 %
Concentration per Run 2	80.647 %	89.942 %	107.316 ppb	10,659.743 ppb	11,057.050 ppb	112.809 ppb	9,813.019 ppb	10,118.504 ppb	89.541 %
Concentration per Run 3	80.218 %	93.196 %	106.585 ppb	9,976.595 ppb	9,837.531 ppb	100.176 ppb	9,443.127 ppb	9,752.910 ppb	89.703 %
Recovery Percentage 1			106.912 %	99.118 %	99.884 %	101.808 %	90.677 %	93.053 %	
Concentration RSD	1.3 %	4.5 %	0.3 %	7.9 %	10.0 %	10.1 %	10.9 %	11.9 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	100.501 %	93.185 ppb	100.854 ppb	100.366 ppb	100.378 ppb	10,125.704 ppb	100.183 ppb	96.697 ppb	98.595 ppb
Concentration per Run 1	96.437 %	79.889 ppb	96.172 ppb	95.189 ppb	94.348 ppb	9,496.041 ppb	94.461 ppb	89.790 ppb	93.139 ppb
Concentration per Run 2	98.739 %	100.830 ppb	109.530 ppb	109.113 ppb	107.893 ppb	11,137.957 ppb	108.445 ppb	106.969 ppb	106.935 ppb
Concentration per Run 3	106.328 %	98.834 ppb	96.858 ppb	96.797 ppb	98.892 ppb	9,743.115 ppb	97.643 ppb	93.332 ppb	95.711 ppb
Recovery Percentage 1		93.185 %	100.854 %	100.366 %	100.378 %	101.257 %	100.183 %	96.697 %	98.595 %
Concentration RSD	5.2 %	12.4 %	7.5 %	7.6 %	6.9 %	8.7 %	7.3 %	9.4 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	96.598 ppb	82.787 %	100.050 ppb	103.873 ppb	98.839 ppb	101.677 ppb	86.049 %	99.162 ppb	98.198 ppb
Concentration per Run 1	88.024 ppb	82.426 %	92.263 ppb	98.457 ppb	89.688 ppb	92.257 ppb	86.375 %	91.722 ppb	90.426 ppb
Concentration per Run 2	107.720 ppb	79.305 %	109.340 ppb	112.261 ppb	109.309 ppb	113.212 ppb	82.554 %	106.914 ppb	108.560 ppb
Concentration per Run 3	94.051 ppb	86.630 %	98.548 ppb	100.901 ppb	97.520 ppb	99.563 ppb	89.217 %	98.850 ppb	95.610 ppb
Recovery Percentage 1	96.598 %		100.050 %	103.873 %	98.839 %	101.677 %		99.162 %	98.198 %
Concentration RSD	10.4 %	4.4 %	8.6 %	7.1 %	10.0 %	10.5 %	3.9 %	7.7 %	9.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.408 %	90.356 ppb	95.519 ppb	102.889 ppb	91.598 %	98.304 %	94.917 ppb	96.354 ppb	94.878 ppb
Concentration per Run 1	87.999 %	83.072 ppb	86.414 ppb	94.926 ppb	91.376 %	99.293 %	84.742 ppb	90.548 ppb	87.353 ppb
Concentration per Run 2	83.909 %	97.683 ppb	103.973 ppb	111.811 ppb	88.811 %	93.841 %	104.513 ppb	104.007 ppb	104.504 ppb
Concentration per Run 3	90.317 %	90.313 ppb	96.170 ppb	101.931 ppb	94.606 %	101.780 %	95.496 ppb	94.508 ppb	92.778 ppb
Recovery Percentage 1		90.356 %	95.519 %	102.889 %			94.917 %	96.354 %	94.878 %
Concentration RSD	3.7 %	8.1 %	9.2 %	8.2 %	3.2 %	4.1 %	10.4 %	7.2 %	9.2 %

Category	209Bi (KED AGD)
Concentration average	95.290 %
Concentration per Run 1	94.563 %
Concentration per Run 2	91.228 %
Concentration per Run 3	100.078 %
Recovery Percentage 1	
Concentration RSD	4.7 %

Analysis index: 116 Analysis started at: 3/7/2018 3:43:27 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.217 %	95.620 %	0.012 ppb	6.442 ppb	0.083 ppb	0.244 ppb	3.341 ppb	5.054 ppb	71.854 %
Concentration per Run 1	73.367 %	99.575 %	0.013 ppb	-13.134 ppb	-0.144 ppb	0.293 ppb	-6.940 ppb	1.435 ppb	64.870 %
Concentration per Run 2	89.241 %	96.385 %	0.011 ppb	2.101 ppb	-0.738 ppb	-0.027 ppb	13.999 ppb	13.519 ppb	74.520 %
Concentration per Run 3	87.044 %	90.899 %	0.011 ppb	30.359 ppb	1.129 ppb	0.467 ppb	2.965 ppb	0.207 ppb	76.171 %
Recovery Percentage 1			2.356 %	6.442 %	0.083 %	2.442 %	3.341 %	5.054 %	
Concentration RSD	10.3 %	4.6 %	12.6 %	342.6 %	1,153.6 %	102.5 %	313.5 %	145.6 %	8.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.828 %	-0.118 ppb	0.002 ppb	0.056 ppb	0.005 ppb	25.036 ppb	0.008 ppb	-0.003 ppb	0.057 ppb
Concentration per Run 1	85.278 %	-0.205 ppb	-0.012 ppb	0.016 ppb	-0.058 ppb	26.123 ppb	0.010 ppb	-0.046 ppb	0.047 ppb
Concentration per Run 2	89.060 %	0.039 ppb	0.030 ppb	0.064 ppb	-0.027 ppb	22.966 ppb	0.003 ppb	0.063 ppb	0.033 ppb
Concentration per Run 3	86.147 %	-0.188 ppb	-0.012 ppb	0.088 ppb	0.100 ppb	26.019 ppb	0.010 ppb	-0.024 ppb	0.090 ppb
Recovery Percentage 1		-23.638 %	0.036 %	5.617 %	0.496 %	50.072 %	1.505 %	-0.136 %	5.657 %
Concentration RSD	2.3 %	115.1 %	1,368.9 %	65.3 %	1,683.8 %	7.2 %	53.1 %	2,115.4 %	52.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.033 ppb	83.182 %	0.094 ppb	0.060 ppb	0.039 ppb	0.390 ppb	86.074 %	0.084 ppb	-0.002 ppb
Concentration per Run 1	-0.034 ppb	83.975 %	0.051 ppb	0.080 ppb	0.029 ppb	0.251 ppb	87.088 %	0.061 ppb	-0.003 ppb
Concentration per Run 2	-0.058 ppb	82.060 %	0.067 ppb	0.018 ppb	0.064 ppb	0.621 ppb	85.083 %	0.083 ppb	0.001 ppb
Concentration per Run 3	-0.007 ppb	83.511 %	0.163 ppb	0.082 ppb	0.023 ppb	0.297 ppb	86.051 %	0.108 ppb	-0.003 ppb
Recovery Percentage 1	-0.331 %		18.770 %	1.204 %	7.731 %	19.500 %		20.939 %	-0.904 %
Concentration RSD	78.0 %	1.2 %	64.5 %	60.4 %	57.0 %	51.7 %	1.2 %	28.3 %	142.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.242 %	5.183 ppb	2.318 ppb	0.456 ppb	90.206 %	96.371 %	0.943 ppb	0.022 ppb	0.008 ppb
Concentration per Run 1	88.559 %	4.936 ppb	2.178 ppb	0.421 ppb	91.121 %	98.104 %	0.838 ppb	0.023 ppb	0.011 ppb
Concentration per Run 2	86.870 %	5.477 ppb	2.343 ppb	0.442 ppb	89.605 %	94.837 %	0.912 ppb	0.026 ppb	0.007 ppb
Concentration per Run 3	86.297 %	5.137 ppb	2.431 ppb	0.506 ppb	89.892 %	96.173 %	1.080 ppb	0.017 ppb	0.006 ppb
Recovery Percentage 1		172.775 %	57.939 %	91.283 %			47.170 %	4.479 %	1.597 %
Concentration RSD	1.3 %	5.3 %	5.5 %	9.6 %	0.9 %	1.7 %	13.2 %	20.4 %	30.8 %

Category	209Bi (KED AGD)
Concentration average	96.082 %
Concentration per Run 1	96.859 %
Concentration per Run 2	96.016 %
Concentration per Run 3	95.371 %
Recovery Percentage 1	
Concentration RSD	0.8 %

Analysis index: 117 | Analysis started at: 3/7/2018 3:47:23 PM | Rack: 2
Analysis label: WG1094297-1D10 CT-SPLP-6020TL | User name: ALPHALAB\metals-instrument | Vial: 28

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.374 %	92.728 %	0.008 ppb	217.551 ppb	5.449 ppb	1.745 ppb	5.770 ppb	63.638 ppb	76.087 %
Concentration per Run 1	80.593 %	93.196 %	0.005 ppb	189.489 ppb	6.099 ppb	1.769 ppb	6.953 ppb	65.487 ppb	76.674 %
Concentration per Run 2	80.202 %	92.685 %	0.013 ppb	237.636 ppb	4.898 ppb	1.249 ppb	8.359 ppb	51.376 ppb	75.940 %
Concentration per Run 3	80.326 %	92.302 %	0.005 ppb	225.528 ppb	5.352 ppb	2.217 ppb	1.998 ppb	74.052 ppb	75.648 %
Concentration RSD	0.2 %	0.5 %	64.6 %	11.5 %	11.1 %	27.8 %	57.9 %	18.0 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.113 %	-0.017 ppb	0.039 ppb	0.068 ppb	0.070 ppb	9.394 ppb	0.001 ppb	-0.274 ppb	0.010 ppb
Concentration per Run 1	83.727 %	-0.101 ppb	0.033 ppb	0.132 ppb	0.105 ppb	5.052 ppb	0.010 ppb	-0.270 ppb	-0.007 ppb
Concentration per Run 2	82.882 %	-0.007 ppb	0.033 ppb	-0.017 ppb	0.009 ppb	15.118 ppb	-0.004 ppb	-0.289 ppb	0.010 ppb
Concentration per Run 3	88.731 %	0.057 ppb	0.051 ppb	0.090 ppb	0.095 ppb	8.013 ppb	-0.004 ppb	-0.262 ppb	0.029 ppb
Concentration RSD	3.7 %	471.5 %	27.5 %	112.3 %	75.5 %	55.1 %	1,006.5 %	5.1 %	173.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.596 ppb	82.364 %	0.048 ppb	-0.004 ppb	0.107 ppb	0.144 ppb	83.663 %	0.066 ppb	-0.002 ppb
Concentration per Run 1	1.540 ppb	81.790 %	0.067 ppb	0.019 ppb	0.136 ppb	0.129 ppb	84.225 %	0.065 ppb	0.001 ppb
Concentration per Run 2	1.694 ppb	79.784 %	0.025 ppb	0.024 ppb	0.099 ppb	0.189 ppb	83.791 %	0.076 ppb	-0.003 ppb
Concentration per Run 3	1.554 ppb	85.517 %	0.051 ppb	-0.054 ppb	0.086 ppb	0.114 ppb	82.974 %	0.057 ppb	-0.003 ppb
Concentration RSD	5.3 %	3.5 %	44.4 %	1,128.1 %	24.3 %	27.9 %	0.8 %	14.8 %	164.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.094 %	3.107 ppb	0.936 ppb	0.151 ppb	88.390 %	96.061 %	0.370 ppb	0.016 ppb	0.499 ppb
Concentration per Run 1	83.468 %	2.690 ppb	0.862 ppb	0.080 ppb	87.637 %	95.213 %	0.337 ppb	0.019 ppb	0.447 ppb
Concentration per Run 2	83.848 %	3.310 ppb	0.990 ppb	0.199 ppb	88.755 %	96.047 %	0.316 ppb	0.015 ppb	0.535 ppb
Concentration per Run 3	84.968 %	3.321 ppb	0.957 ppb	0.173 ppb	88.779 %	96.921 %	0.458 ppb	0.012 ppb	0.514 ppb
Concentration RSD	0.9 %	11.6 %	7.1 %	41.7 %	0.7 %	0.9 %	20.8 %	22.3 %	9.2 %

Category	209Bi (KED AGD)
Concentration average	94.243 %
Concentration per Run 1	94.576 %
Concentration per Run 2	93.547 %
Concentration per Run 3	94.605 %
Concentration RSD	0.6 %

Analysis index: 118
Analysis label: WG1094297-2D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 3:51:15 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 29

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.779 %	92.366 %	5.487 ppb	1,271.073 ppb	1,077.895 ppb	224.968 ppb	860.771 ppb	854.663 ppb	75.647 %
Concentration per Run 1	78.611 %	89.687 %	5.420 ppb	1,186.042 ppb	1,040.034 ppb	201.361 ppb	786.966 ppb	712.223 ppb	75.039 %
Concentration per Run 2	78.699 %	95.046 %	5.492 ppb	1,303.713 ppb	1,045.035 ppb	234.933 ppb	908.780 ppb	925.627 ppb	75.562 %
Concentration per Run 3	79.028 %	92.366 %	5.550 ppb	1,323.464 ppb	1,148.617 ppb	238.611 ppb	886.566 ppb	926.139 ppb	76.340 %
Concentration RSD	0.3 %	2.9 %	1.2 %	5.8 %	5.7 %	9.1 %	7.5 %	14.4 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.973 %	79.979 ppb	56.274 ppb	22.750 ppb	55.390 ppb	122.745 ppb	53.112 ppb	52.858 ppb	26.979 ppb
Concentration per Run 1	80.699 %	71.760 ppb	51.617 ppb	20.264 ppb	48.703 ppb	110.332 ppb	47.738 ppb	48.199 ppb	24.463 ppb
Concentration per Run 2	87.181 %	83.095 ppb	58.680 ppb	24.171 ppb	56.799 ppb	132.389 ppb	55.777 ppb	53.441 ppb	27.647 ppb
Concentration per Run 3	87.040 %	85.082 ppb	58.526 ppb	23.813 ppb	60.667 ppb	125.514 ppb	55.820 ppb	56.935 ppb	28.827 ppb
Concentration RSD	4.4 %	9.0 %	7.2 %	9.5 %	11.0 %	9.2 %	8.8 %	8.3 %	8.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	52.832 ppb	79.673 %	13.136 ppb	13.132 ppb	99.784 ppb	98.430 ppb	82.382 %	4.854 ppb	5.464 ppb
Concentration per Run 1	47.754 ppb	76.712 %	11.776 ppb	10.792 ppb	90.418 ppb	87.485 ppb	82.594 %	4.332 ppb	4.677 ppb
Concentration per Run 2	55.613 ppb	81.038 %	14.140 ppb	14.651 ppb	104.522 ppb	101.774 ppb	82.908 %	5.196 ppb	5.965 ppb
Concentration per Run 3	55.130 ppb	81.270 %	13.492 ppb	13.953 ppb	104.413 ppb	106.030 ppb	81.645 %	5.034 ppb	5.749 ppb
Concentration RSD	8.3 %	3.2 %	9.3 %	15.7 %	8.1 %	9.9 %	0.8 %	9.5 %	12.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.184 %	106.574 ppb	64.623 ppb	205.674 ppb	88.092 %	96.528 %	0.205 ppb	11.563 ppb	51.495 ppb
Concentration per Run 1	82.475 %	94.529 ppb	56.989 ppb	182.070 ppb	87.245 %	95.737 %	0.152 ppb	10.281 ppb	46.378 ppb
Concentration per Run 2	82.924 %	111.503 ppb	68.462 ppb	212.608 ppb	88.720 %	96.643 %	0.214 ppb	12.279 ppb	53.586 ppb
Concentration per Run 3	84.153 %	113.690 ppb	68.418 ppb	222.345 ppb	88.311 %	97.204 %	0.249 ppb	12.129 ppb	54.523 ppb
Concentration RSD	1.0 %	9.8 %	10.2 %	10.2 %	0.9 %	0.8 %	24.1 %	9.6 %	8.7 %

Category	209Bi (KED AGD)
Concentration average	93.767 %
Concentration per Run 1	93.898 %
Concentration per Run 2	94.105 %
Concentration per Run 3	93.299 %
Concentration RSD	0.4 %

Analysis index: 119 | Analysis started at: 3/7/2018 3:55:08 PM | Rack: 2
Analysis label: L1807327-02 6020TL | User name: ALPHALAB\metals-instrument | Vial: 13

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.160 %	87.646 %	0.023 ppb	255,667.970 ppb	22,293.885 ppb	12.289 ppb	7,576.496 ppb	97,825.072 ppb	77.720 %
Concentration per Run 1	75.161 %	84.074 %	0.021 ppb	240,674.074 ppb	21,003.300 ppb	11.099 ppb	7,135.982 ppb	89,409.714 ppb	77.870 %
Concentration per Run 2	75.391 %	92.430 %	0.023 ppb	257,438.088 ppb	22,610.355 ppb	12.168 ppb	7,476.381 ppb	99,287.882 ppb	78.374 %
Concentration per Run 3	74.927 %	86.434 %	0.026 ppb	268,891.747 ppb	23,268.000 ppb	13.599 ppb	8,117.126 ppb	104,777.620 ppb	76.915 %
Concentration RSD	0.3 %	4.9 %	9.9 %	5.6 %	5.2 %	10.2 %	6.6 %	8.0 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.746 %	137.337 ppb	1.134 ppb	0.876 ppb	[illegible] ppb	10,024.220 ppb	1.230 ppb	1.134 ppb	1.302 ppb
Concentration per Run 1	78.350 %	128.078 ppb	0.956 ppb	0.830 ppb	9,985.570 ppb	9,346.401 ppb	1.099 ppb	0.853 ppb	1.263 ppb
Concentration per Run 2	88.050 %	137.082 ppb	1.277 ppb	0.924 ppb	10,756.830 ppb	10,350.640 ppb	1.341 ppb	1.051 ppb	1.367 ppb
Concentration per Run 3	87.838 %	146.850 ppb	1.169 ppb	0.874 ppb	10,453.571 ppb	10,375.620 ppb	1.250 ppb	1.499 ppb	1.276 ppb
Concentration RSD	6.5 %	6.8 %	14.4 %	5.4 %	3.7 %	5.9 %	9.9 %	29.2 %	4.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.909 ppb	76.452 %	12.206 ppb	0.402 ppb	556.843 ppb	5.400 ppb	75.502 %	0.042 ppb	0.024 ppb
Concentration per Run 1	1.800 ppb	74.203 %	11.026 ppb	0.268 ppb	502.581 ppb	5.003 ppb	74.806 %	0.037 ppb	0.007 ppb
Concentration per Run 2	2.218 ppb	77.479 %	13.188 ppb	0.470 ppb	582.290 ppb	5.314 ppb	75.792 %	0.057 ppb	0.057 ppb
Concentration per Run 3	1.707 ppb	77.674 %	12.405 ppb	0.468 ppb	585.658 ppb	5.881 ppb	75.908 %	0.032 ppb	0.007 ppb
Concentration RSD	14.3 %	2.6 %	9.0 %	28.8 %	8.4 %	8.2 %	0.8 %	31.0 %	120.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	77.538 %	6.193 ppb	0.625 ppb	88.214 ppb	81.480 %	89.509 %	0.438 ppb	0.053 ppb	2.670 ppb
Concentration per Run 1	76.349 %	5.896 ppb	0.523 ppb	79.516 ppb	79.478 %	86.652 %	0.366 ppb	0.036 ppb	2.385 ppb
Concentration per Run 2	77.679 %	6.792 ppb	0.683 ppb	93.851 ppb	81.597 %	90.638 %	0.452 ppb	0.059 ppb	2.831 ppb
Concentration per Run 3	78.585 %	5.892 ppb	0.670 ppb	91.274 ppb	83.365 %	91.236 %	0.494 ppb	0.062 ppb	2.795 ppb
Concentration RSD	1.5 %	8.4 %	14.2 %	8.7 %	2.4 %	2.8 %	14.9 %	27.1 %	9.3 %

Category	209Bi (KED AGD)
Concentration average	82.713 %
Concentration per Run 1	81.769 %
Concentration per Run 2	82.858 %
Concentration per Run 3	83.511 %
Concentration RSD	1.1 %

Analysis index: 120 | Analysis started at: 3/7/2018 3:59:00 PM | Rack: 2
Analysis label: L1807327-03 6020TL | User name: ALPHALAB\metals-instrument | Vial: 14

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.553 %	89.028 %	0.034 ppb	188,121.123 ppb	22,421.169 ppb	28.311 ppb	7,523.472 ppb	129,713.801 ppb	75.160 %
Concentration per Run 1	77.495 %	91.665 %	0.035 ppb	176,788.157 ppb	20,780.216 ppb	26.558 ppb	6,939.302 ppb	115,295.411 ppb	76.083 %
Concentration per Run 2	77.794 %	86.051 %	0.033 ppb	191,951.990 ppb	22,850.837 ppb	25.652 ppb	7,602.203 ppb	135,323.757 ppb	75.274 %
Concentration per Run 3	77.372 %	89.368 %	0.033 ppb	195,623.221 ppb	23,632.453 ppb	32.723 ppb	8,028.912 ppb	138,522.236 ppb	74.124 %
Concentration RSD	0.3 %	3.2 %	3.7 %	5.3 %	6.6 %	13.6 %	7.3 %	9.7 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	83.916 %	179.662 ppb	2.997 ppb	0.641 ppb	1,930.196 ppb	774.769 ppb	1.213 ppb	1.553 ppb	4.178 ppb
Concentration per Run 1	82.318 %	158.308 ppb	2.574 ppb	0.576 ppb	1,798.859 ppb	684.021 ppb	1.044 ppb	1.289 ppb	3.689 ppb
Concentration per Run 2	84.669 %	190.025 ppb	3.274 ppb	0.724 ppb	1,968.273 ppb	815.482 ppb	1.293 ppb	1.675 ppb	4.095 ppb
Concentration per Run 3	84.761 %	190.652 ppb	3.142 ppb	0.624 ppb	2,023.456 ppb	824.803 ppb	1.302 ppb	1.697 ppb	4.750 ppb
Concentration RSD	1.7 %	10.3 %	12.4 %	11.8 %	6.1 %	10.2 %	12.1 %	14.8 %	12.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	8.950 ppb	80.703 %	1.066 ppb	0.510 ppb	617.226 ppb	1.710 ppb	79.395 %	0.028 ppb	0.405 ppb
Concentration per Run 1	8.398 ppb	80.638 %	0.761 ppb	0.581 ppb	565.601 ppb	1.621 ppb	81.738 %	0.025 ppb	0.364 ppb
Concentration per Run 2	9.388 ppb	78.184 %	1.293 ppb	0.319 ppb	632.061 ppb	1.877 ppb	76.462 %	0.029 ppb	0.416 ppb
Concentration per Run 3	9.063 ppb	83.287 %	1.144 ppb	0.630 ppb	654.017 ppb	1.632 ppb	79.985 %	0.031 ppb	0.434 ppb
Concentration RSD	5.6 %	3.2 %	25.7 %	32.7 %	7.5 %	8.5 %	3.4 %	11.3 %	9.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.625 %	2.174 ppb	1.011 ppb	75.185 ppb	88.142 %	91.552 %	0.206 ppb	0.030 ppb	0.204 ppb
Concentration per Run 1	85.428 %	1.672 ppb	0.905 ppb	68.004 ppb	90.339 %	93.675 %	0.096 ppb	0.025 ppb	0.177 ppb
Concentration per Run 2	77.984 %	2.426 ppb	1.072 ppb	76.910 ppb	84.742 %	87.998 %	0.178 ppb	0.033 ppb	0.214 ppb
Concentration per Run 3	84.462 %	2.422 ppb	1.056 ppb	80.641 ppb	89.345 %	92.982 %	0.344 ppb	0.031 ppb	0.221 ppb
Concentration RSD	4.9 %	20.0 %	9.1 %	8.6 %	3.4 %	3.4 %	61.2 %	14.7 %	11.6 %

Category	209Bi (KED AGD)
Concentration average	85.835 %
Concentration per Run 1	88.037 %
Concentration per Run 2	82.801 %
Concentration per Run 3	86.668 %
Concentration RSD	3.2 %

Analysis index: 121 | Analysis started at: 3/7/2018 4:02:52 PM | Rack: 2
Analysis label: L1807338-01 6020TL | User name: ALPHALAB\metals-instrument | Vial: 16

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.134 %	88.815 %	0.046 ppb	458,776.581 ppb	62,410.351 ppb	162.187 ppb	3,631.273 ppb	177,092.474 ppb	75.566 %
Concentration per Run 1	75.431 %	92.813 %	0.046 ppb	420,041.267 ppb	56,373.761 ppb	146.667 ppb	3,353.116 ppb	158,851.179 ppb	75.372 %
Concentration per Run 2	74.710 %	86.242 %	0.045 ppb	491,160.272 ppb	68,307.985 ppb	183.710 ppb	3,721.882 ppb	185,801.808 ppb	75.031 %
Concentration per Run 3	75.260 %	87.391 %	0.048 ppb	465,128.205 ppb	62,549.307 ppb	156.184 ppb	3,818.820 ppb	186,624.434 ppb	76.294 %
Concentration RSD	0.5 %	4.0 %	2.8 %	7.8 %	9.6 %	11.9 %	6.8 %	8.9 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	83.407 %	249.520 ppb	1.846 ppb	1.076 ppb	[illegible] ppb	1,921.221 ppb	6.506 ppb	6.584 ppb	8.667 ppb
Concentration per Run 1	86.053 %	223.117 ppb	1.741 ppb	1.019 ppb	21,884.005 ppb	1,709.020 ppb	6.031 ppb	5.534 ppb	8.396 ppb
Concentration per Run 2	75.837 %	258.124 ppb	2.037 ppb	1.168 ppb	26,421.413 ppb	2,204.566 ppb	7.229 ppb	7.124 ppb	9.865 ppb
Concentration per Run 3	88.332 %	267.319 ppb	1.759 ppb	1.041 ppb	23,343.495 ppb	1,850.076 ppb	6.257 ppb	7.096 ppb	7.740 ppb
Concentration RSD	8.0 %	9.3 %	9.0 %	7.5 %	9.7 %	13.3 %	9.8 %	13.8 %	12.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	17.178 ppb	77.245 %	0.751 ppb	0.053 ppb	434.116 ppb	5.431 ppb	76.712 %	0.028 ppb	2.825 ppb
Concentration per Run 1	15.297 ppb	78.706 %	0.691 ppb	0.028 ppb	395.730 ppb	4.779 ppb	79.305 %	0.039 ppb	2.610 ppb
Concentration per Run 2	19.251 ppb	71.988 %	0.789 ppb	-0.030 ppb	473.046 ppb	6.267 ppb	72.158 %	0.025 ppb	3.185 ppb
Concentration per Run 3	16.985 ppb	81.041 %	0.773 ppb	0.162 ppb	433.573 ppb	5.246 ppb	78.672 %	0.019 ppb	2.680 ppb
Concentration RSD	11.5 %	6.1 %	7.0 %	185.4 %	8.9 %	14.0 %	5.2 %	38.6 %	11.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	77.763 %	2.121 ppb	0.538 ppb	545.529 ppb	78.548 %	87.930 %	1.239 ppb	0.013 ppb	2.021 ppb
Concentration per Run 1	79.961 %	1.793 ppb	0.458 ppb	497.495 ppb	80.541 %	92.223 %	0.864 ppb	0.011 ppb	1.837 ppb
Concentration per Run 2	71.473 %	2.597 ppb	0.708 ppb	594.854 ppb	73.646 %	80.123 %	1.631 ppb	0.015 ppb	2.209 ppb
Concentration per Run 3	81.853 %	1.971 ppb	0.447 ppb	544.239 ppb	81.458 %	91.444 %	1.221 ppb	0.013 ppb	2.017 ppb
Concentration RSD	7.1 %	19.9 %	27.4 %	8.9 %	5.4 %	7.7 %	31.0 %	13.5 %	9.2 %

Category	209Bi (KED AGD)
Concentration average	80.618 %
Concentration per Run 1	83.518 %
Concentration per Run 2	74.834 %
Concentration per Run 3	83.504 %
Concentration RSD	6.2 %

Analysis index: 122 | Analysis started at: 3/7/2018 4:06:45 PM | Rack: 2
Analysis label: L1807338-02 6020TL | User name: ALPHALAB\metals-instrument | Vial: 17

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.946 %	90.070 %	0.085 ppb	90,100.883 ppb	2,999.254 ppb	1,171.647 ppb	1,916.300 ppb	13,628.529 ppb	76.871 %
Concentration per Run 1	76.896 %	94.025 %	0.082 ppb	81,685.727 ppb	2,585.703 ppb	1,062.075 ppb	1,700.385 ppb	11,893.999 ppb	77.212 %
Concentration per Run 2	77.000 %	92.621 %	0.083 ppb	91,656.622 ppb	3,162.967 ppb	1,183.292 ppb	1,967.215 ppb	13,954.006 ppb	76.226 %
Concentration per Run 3	76.943 %	83.563 %	0.091 ppb	96,960.301 ppb	3,249.091 ppb	1,269.572 ppb	2,081.302 ppb	15,037.582 ppb	77.175 %
Concentration RSD	0.1 %	6.3 %	5.6 %	8.6 %	12.0 %	8.9 %	10.2 %	11.7 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.785 %	43.436 ppb	4.013 ppb	3.409 ppb	25.545 ppb	1,484.833 ppb	0.675 ppb	1.814 ppb	9.075 ppb
Concentration per Run 1	86.969 %	38.271 ppb	3.999 ppb	3.133 ppb	24.816 ppb	1,399.546 ppb	0.586 ppb	1.874 ppb	8.550 ppb
Concentration per Run 2	85.771 %	45.227 ppb	4.059 ppb	3.583 ppb	26.709 ppb	1,543.453 ppb	0.653 ppb	1.588 ppb	9.416 ppb
Concentration per Run 3	81.615 %	46.811 ppb	3.980 ppb	3.512 ppb	25.111 ppb	1,511.500 ppb	0.786 ppb	1.980 ppb	9.260 ppb
Concentration RSD	3.3 %	10.5 %	1.0 %	7.1 %	4.0 %	5.1 %	15.1 %	11.2 %	5.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	15.126 ppb	77.417 %	0.828 ppb	0.446 ppb	42.787 ppb	0.944 ppb	79.082 %	0.020 ppb	0.373 ppb
Concentration per Run 1	13.576 ppb	80.248 %	0.852 ppb	0.304 ppb	38.329 ppb	0.981 ppb	81.210 %	0.015 ppb	0.374 ppb
Concentration per Run 2	15.957 ppb	76.529 %	0.725 ppb	0.399 ppb	45.428 ppb	0.852 ppb	79.794 %	0.019 ppb	0.346 ppb
Concentration per Run 3	15.845 ppb	75.475 %	0.906 ppb	0.634 ppb	44.605 ppb	0.998 ppb	76.243 %	0.025 ppb	0.399 ppb
Concentration RSD	8.9 %	3.2 %	11.2 %	38.1 %	9.1 %	8.5 %	3.2 %	23.5 %	7.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	78.269 %	1.387 ppb	0.837 ppb	39.974 ppb	84.207 %	93.338 %	0.160 ppb	0.013 ppb	3.681 ppb
Concentration per Run 1	80.924 %	1.259 ppb	0.696 ppb	36.593 ppb	86.311 %	95.520 %	0.170 ppb	0.006 ppb	3.327 ppb
Concentration per Run 2	78.111 %	1.412 ppb	0.857 ppb	41.932 ppb	83.997 %	93.554 %	0.146 ppb	0.016 ppb	3.823 ppb
Concentration per Run 3	75.773 %	1.489 ppb	0.958 ppb	41.396 ppb	82.312 %	90.940 %	0.166 ppb	0.016 ppb	3.892 ppb
Concentration RSD	3.3 %	8.4 %	15.8 %	7.4 %	2.4 %	2.5 %	8.2 %	44.5 %	8.4 %

Category	209Bi (KED AGD)
Concentration average	88.620 %
Concentration per Run 1	91.086 %
Concentration per Run 2	88.857 %
Concentration per Run 3	85.916 %
Concentration RSD	2.9 %

Analysis index: 123 | Analysis started at: 3/7/2018 4:10:37 PM | Rack: 2
Analysis label: L1807338-04 6020TL | User name: ALPHALAB\metals-instrument | Vial: 18

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.760 %	88.135 %	0.126 ppb	[illegible] ppb	51,960.667 ppb	233.628 ppb	5,401.042 ppb	245,692.584 ppb	79.542 %
Concentration per Run 1	72.745 %	85.796 %	0.132 ppb	698,579.193 ppb	49,131.250 ppb	219.462 ppb	5,220.699 ppb	230,507.418 ppb	80.286 %
Concentration per Run 2	72.720 %	86.497 %	0.119 ppb	739,643.768 ppb	52,672.494 ppb	236.585 ppb	5,568.909 ppb	260,313.826 ppb	79.190 %
Concentration per Run 3	72.815 %	92.111 %	0.128 ppb	744,640.027 ppb	54,078.257 ppb	244.838 ppb	5,413.517 ppb	246,256.506 ppb	79.152 %
Concentration RSD	0.1 %	3.9 %	5.5 %	3.5 %	4.9 %	5.5 %	3.2 %	6.1 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.294 %	346.454 ppb	2.853 ppb	1.496 ppb	[illegible] ppb	23,932.713 ppb	0.430 ppb	0.926 ppb	7.529 ppb
Concentration per Run 1	90.023 %	321.601 ppb	2.667 ppb	1.530 ppb	40,196.878 ppb	22,198.838 ppb	0.362 ppb	0.912 ppb	7.364 ppb
Concentration per Run 2	96.907 %	363.499 ppb	2.881 ppb	1.450 ppb	43,580.285 ppb	24,437.146 ppb	0.463 ppb	0.822 ppb	7.633 ppb
Concentration per Run 3	89.952 %	354.261 ppb	3.011 ppb	1.508 ppb	46,288.490 ppb	25,162.156 ppb	0.464 ppb	1.044 ppb	7.589 ppb
Concentration RSD	4.3 %	6.4 %	6.1 %	2.8 %	7.0 %	6.5 %	13.7 %	12.1 %	1.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	50.460 ppb	78.542 %	2.535 ppb	0.372 ppb	731.914 ppb	1.840 ppb	75.690 %	0.027 ppb	6.943 ppb
Concentration per Run 1	47.396 ppb	77.943 %	2.149 ppb	0.321 ppb	669.123 ppb	1.654 ppb	76.594 %	0.020 ppb	6.331 ppb
Concentration per Run 2	52.158 ppb	76.596 %	2.795 ppb	0.772 ppb	763.559 ppb	1.779 ppb	75.331 %	0.036 ppb	7.320 ppb
Concentration per Run 3	51.826 ppb	81.086 %	2.660 ppb	0.024 ppb	763.061 ppb	2.088 ppb	75.146 %	0.027 ppb	7.178 ppb
Concentration RSD	5.3 %	2.9 %	13.4 %	101.2 %	7.4 %	12.1 %	1.0 %	29.2 %	7.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	74.637 %	1.352 ppb	0.486 ppb	1,251.253 ppb	75.143 %	88.289 %	0.972 ppb	0.004 ppb	4.788 ppb
Concentration per Run 1	75.474 %	1.304 ppb	0.407 ppb	1,130.249 ppb	75.331 %	88.507 %	0.887 ppb	0.004 ppb	4.327 ppb
Concentration per Run 2	74.579 %	1.389 ppb	0.527 ppb	1,289.388 ppb	75.408 %	88.271 %	0.987 ppb	0.003 ppb	4.949 ppb
Concentration per Run 3	73.860 %	1.363 ppb	0.525 ppb	1,334.122 ppb	74.690 %	88.089 %	1.041 ppb	0.005 ppb	5.088 ppb
Concentration RSD	1.1 %	3.2 %	14.1 %	8.6 %	0.5 %	0.2 %	8.0 %	27.7 %	8.5 %

Category	209Bi (KED AGD)
Concentration average	79.534 %
Concentration per Run 1	80.357 %
Concentration per Run 2	79.518 %
Concentration per Run 3	78.728 %
Concentration RSD	1.0 %

Analysis index: 124 | Analysis started at: 3/7/2018 4:14:29 PM | Rack: 2
Analysis label: L1807338-05 6020TL | User name: ALPHALAB\metals-instrument | Vial: 19

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.554 %	94.450 %	0.071 ppb	[illegible] ppb	46,041.371 ppb	11.770 ppb	14,835.943 ppb	424,368.470 ppb	76.369 %
Concentration per Run 1	75.756 %	99.128 %	0.080 ppb	581,128.248 ppb	41,628.329 ppb	9.417 ppb	13,807.882 ppb	386,017.973 ppb	76.004 %
Concentration per Run 2	71.083 %	93.515 %	0.069 ppb	667,258.565 ppb	47,883.203 ppb	15.655 ppb	15,213.059 ppb	429,606.988 ppb	76.477 %
Concentration per Run 3	70.823 %	90.708 %	0.063 ppb	674,795.393 ppb	48,612.582 ppb	10.237 ppb	15,486.889 ppb	457,480.449 ppb	76.627 %
Concentration RSD	3.8 %	4.5 %	12.4 %	8.1 %	8.3 %	28.8 %	6.1 %	8.5 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	90.141 %	576.621 ppb	0.491 ppb	0.941 ppb	5,882.977 ppb	7,079.602 ppb	0.279 ppb	1.102 ppb	0.981 ppb
Concentration per Run 1	93.829 %	523.436 ppb	0.558 ppb	0.786 ppb	5,354.550 ppb	6,389.171 ppb	0.235 ppb	0.860 ppb	0.927 ppb
Concentration per Run 2	88.191 %	585.003 ppb	0.416 ppb	1.048 ppb	6,124.109 ppb	7,300.834 ppb	0.277 ppb	1.425 ppb	0.952 ppb
Concentration per Run 3	88.402 %	621.423 ppb	0.501 ppb	0.988 ppb	6,170.271 ppb	7,548.800 ppb	0.324 ppb	1.021 ppb	1.065 ppb
Concentration RSD	3.5 %	8.6 %	14.5 %	14.6 %	7.8 %	8.6 %	16.0 %	26.4 %	7.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.814 ppb	85.303 %	0.575 ppb	0.147 ppb	1,097.253 ppb	19.592 ppb	79.909 %	0.010 ppb	0.031 ppb
Concentration per Run 1	1.518 ppb	85.697 %	0.595 ppb	0.012 ppb	1,018.366 ppb	18.269 ppb	81.843 %	0.005 ppb	0.019 ppb
Concentration per Run 2	2.219 ppb	85.233 %	0.489 ppb	0.282 ppb	1,124.697 ppb	19.865 ppb	77.852 %	0.007 ppb	0.024 ppb
Concentration per Run 3	1.704 ppb	84.978 %	0.641 ppb	0.148 ppb	1,148.695 ppb	20.641 ppb	80.031 %	0.018 ppb	0.050 ppb
Concentration RSD	20.0 %	0.4 %	13.5 %	91.8 %	6.3 %	6.2 %	2.5 %	71.4 %	54.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.670 %	0.952 ppb	0.497 ppb	489.363 ppb	85.003 %	87.184 %	0.532 ppb	-0.001 ppb	0.074 ppb
Concentration per Run 1	90.130 %	0.809 ppb	0.407 ppb	451.285 ppb	85.875 %	89.358 %	0.545 ppb	-0.001 ppb	0.069 ppb
Concentration per Run 2	87.272 %	0.877 ppb	0.559 ppb	507.110 ppb	83.775 %	85.247 %	0.663 ppb	-0.002 ppb	0.068 ppb
Concentration per Run 3	88.609 %	1.169 ppb	0.525 ppb	509.694 ppb	85.359 %	86.947 %	0.388 ppb	0.001 ppb	0.086 ppb
Concentration RSD	1.6 %	20.1 %	16.0 %	6.7 %	1.3 %	2.4 %	25.9 %	291.5 %	13.8 %

Category	209Bi (KED AGD)
Concentration average	82.538 %
Concentration per Run 1	85.335 %
Concentration per Run 2	80.128 %
Concentration per Run 3	82.152 %
Concentration RSD	3.2 %

Analysis index: 125 | Analysis started at: 3/7/2018 4:18:22 PM | Rack: 2
Analysis label: XL1807338-07 6020TL | User name: ALPHALAB\metals-instrument | Vial: 20

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	61.171 %	89.241 %	0.039 ppb	[illegible] ppb	47,879.217 ppb	16.211 ppb	12,385.287 ppb	350,913.333 ppb	75.530 %
Concentration per Run 1	61.489 %	93.642 %	0.043 ppb	3,773,998.782 ppb	46,319.391 ppb	18.580 ppb	12,154.214 ppb	340,564.957 ppb	76.027 %
Concentration per Run 2	61.567 %	88.730 %	0.034 ppb	3,939,118.212 ppb	48,296.113 ppb	13.331 ppb	12,253.048 ppb	349,674.946 ppb	75.709 %
Concentration per Run 3	60.458 %	85.349 %	0.039 ppb	3,997,543.909 ppb	49,022.147 ppb	16.723 ppb	12,748.599 ppb	362,500.097 ppb	74.852 %
Concentration RSD	1.0 %	4.7 %	12.8 %	3.0 %	2.9 %	16.4 %	2.6 %	3.1 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	103.423 %	479.747 ppb	0.526 ppb	0.550 ppb	[illegible] ppb	62,412.202 ppb	0.129 ppb	0.110 ppb	0.869 ppb
Concentration per Run 1	109.501 %	468.856 ppb	0.404 ppb	0.551 ppb	77,080.833 ppb	58,837.644 ppb	0.141 ppb	-0.020 ppb	0.837 ppb
Concentration per Run 2	100.854 %	475.762 ppb	0.457 ppb	0.512 ppb	81,061.439 ppb	64,110.332 ppb	0.107 ppb	0.241 ppb	1.035 ppb
Concentration per Run 3	99.914 %	494.623 ppb	0.716 ppb	0.585 ppb	81,087.297 ppb	64,288.631 ppb	0.140 ppb	0.110 ppb	0.733 ppb
Concentration RSD	5.1 %	2.8 %	31.8 %	6.6 %	2.9 %	5.0 %	15.1 %	118.1 %	17.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	1.856 ppb	78.412 %	0.865 ppb	0.233 ppb	1,522.657 ppb	0.667 ppb	63.813 %	0.017 ppb	-0.001 ppb
Concentration per Run 1	1.731 ppb	81.447 %	0.759 ppb	0.168 ppb	1,468.045 ppb	0.611 ppb	66.232 %	0.011 ppb	-0.001 ppb
Concentration per Run 2	2.078 ppb	76.596 %	0.991 ppb	0.417 ppb	1,556.439 ppb	0.799 ppb	62.346 %	0.024 ppb	-0.008 ppb
Concentration per Run 3	1.761 ppb	77.195 %	0.846 ppb	0.113 ppb	1,543.486 ppb	0.590 ppb	62.863 %	0.018 ppb	0.006 ppb
Concentration RSD	10.4 %	3.4 %	13.5 %	69.6 %	3.1 %	17.2 %	3.3 %	38.6 %	749.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	52.603 %	1.357 ppb	0.631 ppb	1,523.402 ppb	65.458 %	56.775 %	0.628 ppb	-0.002 ppb	1.752 ppb
Concentration per Run 1	56.176 %	0.957 ppb	0.533 ppb	1,481.053 ppb	68.628 %	60.431 %	0.594 ppb	-0.002 ppb	1.677 ppb
Concentration per Run 2	50.383 %	1.714 ppb	0.666 ppb	1,550.520 ppb	63.577 %	54.690 %	0.648 ppb	-0.001 ppb	1.772 ppb
Concentration per Run 3	51.250 %	1.399 ppb	0.693 ppb	1,538.634 ppb	64.170 %	55.205 %	0.642 ppb	-0.001 ppb	1.807 ppb
Concentration RSD	5.9 %	28.0 %	13.6 %	2.4 %	4.2 %	5.6 %	4.7 %	25.7 %	3.9 %

Category	209Bi (KED AGD)
Concentration average	57.984 %
Concentration per Run 1	59.909 %
Concentration per Run 2	57.413 %
Concentration per Run 3	56.631 %
Concentration RSD	3.0 %

Analysis index: 126
Analysis label: L1806872-01D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:22:14 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 30

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.763 %	96.832 %	0.003 ppb	23,020.779 ppb	16.200 ppb	3.030 ppb	1,937.069 ppb	11,187.988 ppb	79.535 %
Concentration per Run 1	80.225 %	100.085 %	0.002 ppb	21,276.909 ppb	13.546 ppb	2.898 ppb	1,720.857 ppb	9,771.404 ppb	79.261 %
Concentration per Run 2	81.191 %	97.852 %	0.007 ppb	23,612.317 ppb	13.523 ppb	2.775 ppb	2,013.703 ppb	11,840.556 ppb	80.848 %
Concentration per Run 3	80.875 %	92.558 %	0.000 ppb	24,173.111 ppb	21.531 ppb	3.418 ppb	2,076.648 ppb	11,952.004 ppb	78.497 %
Concentration RSD	0.6 %	4.0 %	111.0 %	6.7 %	28.5 %	11.3 %	9.8 %	11.0 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.952 %	14.220 ppb	14.530 ppb	2.043 ppb	2.780 ppb	62.172 ppb	0.048 ppb	1.810 ppb	45.995 ppb
Concentration per Run 1	92.584 %	12.611 ppb	12.468 ppb	1.853 ppb	4.259 ppb	50.777 ppb	0.052 ppb	1.816 ppb	40.823 ppb
Concentration per Run 2	95.521 %	15.424 ppb	15.145 ppb	2.135 ppb	2.157 ppb	68.748 ppb	0.052 ppb	1.766 ppb	48.025 ppb
Concentration per Run 3	90.751 %	14.626 ppb	15.978 ppb	2.141 ppb	1.923 ppb	66.990 ppb	0.041 ppb	1.847 ppb	49.137 ppb
Concentration RSD	2.6 %	10.2 %	12.6 %	8.1 %	46.3 %	15.9 %	13.1 %	2.2 %	9.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.546 ppb	92.888 %	0.910 ppb	0.318 ppb	69.695 ppb	6.467 ppb	91.161 %	0.012 ppb	0.002 ppb
Concentration per Run 1	0.348 ppb	94.860 %	0.672 ppb	0.350 ppb	64.256 ppb	6.352 ppb	92.051 %	0.010 ppb	0.005 ppb
Concentration per Run 2	0.649 ppb	92.733 %	1.127 ppb	0.544 ppb	73.744 ppb	6.343 ppb	91.445 %	0.012 ppb	0.001 ppb
Concentration per Run 3	0.641 ppb	91.071 %	0.930 ppb	0.061 ppb	71.083 ppb	6.707 ppb	89.987 %	0.013 ppb	0.001 ppb
Concentration RSD	31.4 %	2.0 %	25.1 %	76.3 %	7.0 %	3.2 %	1.2 %	12.8 %	110.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.728 %	0.487 ppb	0.408 ppb	1.312 ppb	92.273 %	102.048 %	0.311 ppb	-0.003 ppb	-0.015 ppb
Concentration per Run 1	91.595 %	0.333 ppb	0.382 ppb	1.529 ppb	93.528 %	104.970 %	0.246 ppb	-0.003 ppb	-0.017 ppb
Concentration per Run 2	91.263 %	0.550 ppb	0.392 ppb	1.029 ppb	91.180 %	100.525 %	0.338 ppb	-0.002 ppb	-0.015 ppb
Concentration per Run 3	89.325 %	0.578 ppb	0.449 ppb	1.378 ppb	92.112 %	100.649 %	0.350 ppb	-0.002 ppb	-0.014 ppb
Concentration RSD	1.4 %	27.6 %	8.9 %	19.6 %	1.3 %	2.5 %	18.2 %	23.7 %	10.0 %

Category	209Bi (KED AGD)
Concentration average	96.278 %
Concentration per Run 1	98.547 %
Concentration per Run 2	96.021 %
Concentration per Run 3	94.267 %
Concentration RSD	2.2 %

Analysis index: 127 Analysis started at: 3/7/2018 4:26:07 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.965 %	98.278 %	110.188 ppb	10,941.121 ppb	10,868.700 ppb	108.628 ppb	10,699.615 ppb	11,009.625 ppb	90.881 %
Concentration per Run 1	85.295 %	99.256 %	108.962 ppb	10,107.447 ppb	9,832.130 ppb	97.456 ppb	9,252.743 ppb	9,395.718 ppb	91.776 %
Concentration per Run 2	84.690 %	101.807 %	111.017 ppb	11,237.866 ppb	11,303.098 ppb	117.797 ppb	11,708.725 ppb	12,182.945 ppb	90.553 %
Concentration per Run 3	84.909 %	93.770 %	110.583 ppb	11,478.052 ppb	11,470.870 ppb	110.630 ppb	11,137.378 ppb	11,450.210 ppb	90.313 %
Recovery Percentage 1			110.188 %	109.411 %	108.687 %	108.628 %	106.996 %	110.096 %	
Concentration RSD	0.4 %	4.2 %	1.0 %	6.7 %	8.3 %	9.5 %	12.0 %	13.1 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	111.937 %	107.263 ppb	108.490 ppb	107.015 ppb	109.251 ppb	10,665.143 ppb	103.990 ppb	102.878 ppb	101.132 ppb
Concentration per Run 1	103.932 %	91.737 ppb	102.049 ppb	99.553 ppb	100.289 ppb	9,747.624 ppb	96.695 ppb	95.981 ppb	93.711 ppb
Concentration per Run 2	123.366 %	115.046 ppb	109.606 ppb	108.020 ppb	110.811 ppb	10,723.232 ppb	105.720 ppb	104.477 ppb	102.642 ppb
Concentration per Run 3	108.513 %	115.005 ppb	113.814 ppb	113.474 ppb	116.652 ppb	11,524.575 ppb	109.556 ppb	108.175 ppb	107.042 ppb
Recovery Percentage 1		107.263 %	108.490 %	107.015 %	109.251 %	106.651 %	103.990 %	102.878 %	101.132 %
Concentration RSD	9.1 %	12.5 %	5.5 %	6.6 %	7.6 %	8.3 %	6.3 %	6.1 %	6.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	100.095 ppb	96.334 %	103.062 ppb	108.269 ppb	103.701 ppb	102.694 ppb	95.411 %	103.888 ppb	101.868 ppb
Concentration per Run 1	91.263 ppb	95.191 %	91.763 ppb	96.354 ppb	89.776 ppb	91.738 ppb	95.471 %	96.332 ppb	92.068 ppb
Concentration per Run 2	103.753 ppb	99.688 %	108.728 ppb	115.908 ppb	114.157 ppb	109.037 ppb	97.863 %	107.357 ppb	106.785 ppb
Concentration per Run 3	105.270 ppb	94.123 %	108.696 ppb	112.544 ppb	107.169 ppb	107.308 ppb	92.898 %	107.974 ppb	106.752 ppb
Recovery Percentage 1	100.095 %		103.062 %	108.269 %	103.701 %	102.694 %		103.888 %	101.868 %
Concentration RSD	7.7 %	3.1 %	9.5 %	9.7 %	12.1 %	9.3 %	2.6 %	6.3 %	8.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	96.680 %	98.289 ppb	94.701 ppb	106.271 ppb	95.541 %	104.010 %	97.460 ppb	100.558 ppb	98.631 ppb
Concentration per Run 1	94.468 %	86.235 ppb	83.764 ppb	94.166 ppb	94.214 %	100.586 %	89.165 ppb	92.279 ppb	88.483 ppb
Concentration per Run 2	100.711 %	102.579 ppb	99.584 ppb	114.548 ppb	97.366 %	110.501 %	98.818 ppb	103.329 ppb	101.938 ppb
Concentration per Run 3	94.862 %	106.053 ppb	100.754 ppb	110.100 ppb	95.044 %	100.943 %	104.397 ppb	106.066 ppb	105.473 ppb
Recovery Percentage 1		98.289 %	94.701 %	106.271 %			97.460 %	100.558 %	98.631 %
Concentration RSD	3.6 %	10.8 %	10.0 %	10.1 %	1.7 %	5.4 %	7.9 %	7.3 %	9.1 %

Category	209Bi (KED AGD)
Concentration average	100.112 %
Concentration per Run 1	100.651 %
Concentration per Run 2	102.581 %
Concentration per Run 3	97.104 %
Recovery Percentage 1	
Concentration RSD	2.8 %

Analysis index: 128 Analysis started at: 3/7/2018 4:30:02 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.743 %	103.466 %	0.008 ppb	128.001 ppb	1.581 ppb	0.177 ppb	14.544 ppb	1.113 ppb	84.771 %
Concentration per Run 1	87.579 %	110.228 %	0.004 ppb	87.599 ppb	1.928 ppb	0.122 ppb	20.658 ppb	2.680 ppb	85.620 %
Concentration per Run 2	87.242 %	99.447 %	0.011 ppb	148.953 ppb	1.933 ppb	-0.176 ppb	10.159 ppb	-0.797 ppb	85.066 %
Concentration per Run 3	85.407 %	100.723 %	0.007 ppb	147.451 ppb	0.883 ppb	0.586 ppb	12.816 ppb	1.457 ppb	83.629 %
Recovery Percentage 1			1.520 %	128.001 %	1.581 %	1.774 %	14.544 %	1.113 %	
Concentration RSD	1.3 %	5.7 %	42.6 %	27.3 %	38.2 %	216.5 %	37.5 %	158.4 %	1.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.538 %	-0.116 ppb	0.000 ppb	0.018 ppb	0.077 ppb	28.143 ppb	0.008 ppb	-0.148 ppb	0.050 ppb
Concentration per Run 1	95.756 %	-0.221 ppb	0.007 ppb	0.072 ppb	-0.005 ppb	25.270 ppb	0.020 ppb	-0.188 ppb	-0.011 ppb
Concentration per Run 2	107.950 %	-0.118 ppb	0.005 ppb	0.003 ppb	0.063 ppb	29.988 ppb	-0.004 ppb	-0.199 ppb	0.085 ppb
Concentration per Run 3	103.908 %	-0.008 ppb	-0.012 ppb	-0.022 ppb	0.172 ppb	29.170 ppb	0.007 ppb	-0.057 ppb	0.077 ppb
Recovery Percentage 1		-23.164 %	-0.002 %	1.785 %	7.670 %	56.285 %	1.597 %	-7.406 %	5.014 %
Concentration RSD	6.1 %	92.3 %	13,294.3 %	270.6 %	116.7 %	9.0 %	151.7 %	53.2 %	106.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	-0.003 ppb	99.491 %	0.110 ppb	0.248 ppb	-0.014 ppb	0.357 ppb	98.181 %	0.065 ppb	0.000 ppb
Concentration per Run 1	-0.055 ppb	96.162 %	0.129 ppb	0.105 ppb	-0.040 ppb	0.352 ppb	99.676 %	0.064 ppb	0.000 ppb
Concentration per Run 2	0.033 ppb	101.702 %	0.111 ppb	-0.020 ppb	0.005 ppb	0.314 ppb	97.964 %	0.067 ppb	-0.004 ppb
Concentration per Run 3	0.014 ppb	100.609 %	0.089 ppb	0.658 ppb	-0.007 ppb	0.405 ppb	96.904 %	0.065 ppb	0.004 ppb
Recovery Percentage 1	-0.027 %		21.902 %	4.953 %	-2.806 %	17.842 %		16.338 %	0.035 %
Concentration RSD	1,756.7 %	2.9 %	18.4 %	145.6 %	165.8 %	12.8 %	1.4 %	1.9 %	5,660.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	99.764 %	3.896 ppb	2.123 ppb	0.545 ppb	97.419 %	106.700 %	0.805 ppb	0.024 ppb	0.005 ppb
Concentration per Run 1	99.420 %	3.596 ppb	1.951 ppb	0.485 ppb	98.042 %	105.823 %	0.739 ppb	0.021 ppb	0.005 ppb
Concentration per Run 2	102.806 %	3.921 ppb	2.093 ppb	0.648 ppb	98.569 %	110.060 %	0.823 ppb	0.030 ppb	0.009 ppb
Concentration per Run 3	97.064 %	4.170 ppb	2.326 ppb	0.501 ppb	95.646 %	104.217 %	0.853 ppb	0.021 ppb	0.000 ppb
Recovery Percentage 1		129.853 %	53.085 %	108.931 %			40.245 %	4.801 %	0.910 %
Concentration RSD	2.9 %	7.4 %	8.9 %	16.4 %	1.6 %	2.8 %	7.4 %	22.4 %	96.7 %

Category	209Bi (KED AGD)
Concentration average	103.250 %
Concentration per Run 1	104.090 %
Concentration per Run 2	103.716 %
Concentration per Run 3	101.942 %
Recovery Percentage 1	
Concentration RSD	1.1 %

Analysis index: 129
Analysis label: L1806872-02D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:33:58 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 31

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.410 %	100.702 %	0.002 ppb	22,738.979 ppb	16.017 ppb	22.525 ppb	2,796.476 ppb	12,539.212 ppb	83.069 %
Concentration per Run 1	85.149 %	101.361 %	0.003 ppb	21,001.550 ppb	19.387 ppb	20.914 ppb	2,450.773 ppb	10,847.188 ppb	83.062 %
Concentration per Run 2	83.936 %	99.511 %	0.003 ppb	23,094.681 ppb	12.702 ppb	22.728 ppb	2,710.020 ppb	12,521.247 ppb	82.931 %
Concentration per Run 3	84.144 %	101.233 %	0.001 ppb	24,120.708 ppb	15.963 ppb	23.934 ppb	3,228.635 ppb	14,249.200 ppb	83.213 %
Concentration RSD	0.8 %	1.0 %	51.2 %	7.0 %	20.9 %	6.7 %	14.2 %	13.6 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	101.426 %	17.550 ppb	8.411 ppb	4.603 ppb	0.109 ppb	20.424 ppb	0.079 ppb	2.844 ppb	43.232 ppb
Concentration per Run 1	95.709 %	15.781 ppb	7.871 ppb	4.343 ppb	0.166 ppb	21.955 ppb	0.058 ppb	2.769 ppb	40.493 ppb
Concentration per Run 2	97.494 %	16.484 ppb	8.665 ppb	4.625 ppb	0.051 ppb	15.011 ppb	0.100 ppb	2.654 ppb	42.979 ppb
Concentration per Run 3	111.076 %	20.384 ppb	8.697 ppb	4.842 ppb	0.112 ppb	24.307 ppb	0.079 ppb	3.108 ppb	46.222 ppb
Concentration RSD	8.3 %	14.1 %	5.6 %	5.4 %	52.7 %	23.7 %	26.6 %	8.3 %	6.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.327 ppb	95.189 %	0.459 ppb	0.288 ppb	115.053 ppb	8.756 ppb	93.668 %	0.120 ppb	0.003 ppb
Concentration per Run 1	0.272 ppb	93.182 %	0.321 ppb	0.357 ppb	101.076 ppb	7.494 ppb	93.688 %	0.111 ppb	-0.004 ppb
Concentration per Run 2	0.219 ppb	93.407 %	0.482 ppb	0.236 ppb	117.509 ppb	8.943 ppb	92.337 %	0.141 ppb	0.013 ppb
Concentration per Run 3	0.489 ppb	98.977 %	0.573 ppb	0.271 ppb	126.575 ppb	9.832 ppb	94.979 %	0.108 ppb	0.000 ppb
Concentration RSD	43.8 %	3.4 %	27.9 %	21.6 %	11.2 %	13.5 %	1.4 %	15.5 %	271.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	94.325 %	2.319 ppb	0.960 ppb	1.860 ppb	93.843 %	103.157 %	0.741 ppb	0.010 ppb	0.112 ppb
Concentration per Run 1	91.698 %	1.807 ppb	0.799 ppb	1.714 ppb	92.907 %	100.360 %	0.666 ppb	0.013 ppb	0.088 ppb
Concentration per Run 2	91.484 %	2.637 ppb	1.065 ppb	2.087 ppb	92.022 %	100.857 %	0.738 ppb	0.005 ppb	0.124 ppb
Concentration per Run 3	99.794 %	2.511 ppb	1.016 ppb	1.778 ppb	96.602 %	108.255 %	0.819 ppb	0.010 ppb	0.124 ppb
Concentration RSD	5.0 %	19.3 %	14.7 %	10.7 %	2.6 %	4.3 %	10.4 %	39.4 %	18.8 %

Category	209Bi (KED AGD)
Concentration average	99.169 %
Concentration per Run 1	99.686 %
Concentration per Run 2	97.716 %
Concentration per Run 3	100.104 %
Concentration RSD	1.3 %

Analysis index: 130
Analysis label: L1806872-03D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:37:51 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 32

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.123 %	98.830 %	0.004 ppb	22,126.010 ppb	9.986 ppb	57.716 ppb	3,203.457 ppb	12,396.284 ppb	83.612 %
Concentration per Run 1	84.333 %	104.295 %	0.004 ppb	19,453.800 ppb	7.430 ppb	50.549 ppb	2,644.797 ppb	10,075.516 ppb	83.895 %
Concentration per Run 2	83.759 %	94.663 %	0.002 ppb	23,737.337 ppb	13.222 ppb	59.421 ppb	3,395.580 ppb	13,449.169 ppb	82.870 %
Concentration per Run 3	84.276 %	97.533 %	0.006 ppb	23,186.894 ppb	9.307 ppb	63.180 ppb	3,569.993 ppb	13,664.168 ppb	84.071 %
Concentration RSD	0.4 %	5.0 %	61.0 %	10.5 %	29.6 %	11.2 %	15.3 %	16.2 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	97.909 %	17.018 ppb	6.829 ppb	8.644 ppb	0.051 ppb	12.020 ppb	0.143 ppb	5.341 ppb	63.814 ppb
Concentration per Run 1	97.987 %	14.640 ppb	5.900 ppb	7.351 ppb	-0.006 ppb	5.844 ppb	0.146 ppb	4.269 ppb	55.130 ppb
Concentration per Run 2	95.192 %	17.681 ppb	7.635 ppb	9.445 ppb	0.056 ppb	11.263 ppb	0.154 ppb	6.239 ppb	69.050 ppb
Concentration per Run 3	100.549 %	18.734 ppb	6.952 ppb	9.137 ppb	0.103 ppb	18.952 ppb	0.128 ppb	5.515 ppb	67.262 ppb
Concentration RSD	2.7 %	12.5 %	12.8 %	13.1 %	107.9 %	54.8 %	9.3 %	18.7 %	11.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.430 ppb	91.890 %	0.284 ppb	0.268 ppb	135.231 ppb	10.256 ppb	92.440 %	0.018 ppb	0.001 ppb
Concentration per Run 1	0.278 ppb	95.233 %	0.253 ppb	0.050 ppb	115.563 ppb	8.879 ppb	93.891 %	0.012 ppb	0.005 ppb
Concentration per Run 2	0.480 ppb	88.062 %	0.287 ppb	0.452 ppb	145.618 ppb	11.201 ppb	89.287 %	0.024 ppb	-0.003 ppb
Concentration per Run 3	0.533 ppb	92.374 %	0.311 ppb	0.300 ppb	144.511 ppb	10.689 ppb	94.142 %	0.017 ppb	0.000 ppb
Concentration RSD	31.3 %	3.9 %	10.3 %	75.8 %	12.6 %	11.9 %	3.0 %	32.2 %	727.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	91.846 %	1.660 ppb	0.535 ppb	4.669 ppb	92.555 %	101.703 %	0.643 ppb	0.002 ppb	-0.007 ppb
Concentration per Run 1	93.979 %	1.652 ppb	0.449 ppb	4.392 ppb	93.463 %	102.845 %	0.490 ppb	0.003 ppb	-0.013 ppb
Concentration per Run 2	88.521 %	1.814 ppb	0.515 ppb	4.733 ppb	89.900 %	98.346 %	0.698 ppb	0.003 ppb	-0.004 ppb
Concentration per Run 3	93.038 %	1.514 ppb	0.640 ppb	4.883 ppb	94.302 %	103.917 %	0.742 ppb	0.001 ppb	-0.004 ppb
Concentration RSD	3.2 %	9.1 %	18.2 %	5.4 %	2.5 %	2.9 %	20.9 %	53.2 %	73.2 %

Category	209Bi (KED AGD)
Concentration average	96.382 %
Concentration per Run 1	99.597 %
Concentration per Run 2	92.968 %
Concentration per Run 3	96.581 %
Concentration RSD	3.4 %

Analysis index: 131
Analysis label: L1806872-04D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:41:44 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 33

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.736 %	100.425 %	0.007 ppb	22,194.459 ppb	25.578 ppb	2.678 ppb	1,118.391 ppb	8,630.143 ppb	84.294 %
Concentration per Run 1	84.967 %	100.659 %	0.007 ppb	20,463.112 ppb	27.316 ppb	2.813 ppb	1,009.870 ppb	7,816.261 ppb	84.922 %
Concentration per Run 2	84.798 %	103.721 %	0.010 ppb	22,574.399 ppb	26.724 ppb	2.444 ppb	1,121.270 ppb	8,586.920 ppb	84.040 %
Concentration per Run 3	84.443 %	96.895 %	0.004 ppb	23,545.865 ppb	22.696 ppb	2.778 ppb	1,224.032 ppb	9,487.249 ppb	83.918 %
Concentration RSD	0.3 %	3.4 %	42.2 %	7.1 %	9.8 %	7.6 %	9.6 %	9.7 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	94.824 %	11.759 ppb	10.089 ppb	2.072 ppb	0.329 ppb	7.113 ppb	0.037 ppb	1.051 ppb	17.549 ppb
Concentration per Run 1	91.480 %	9.550 ppb	8.824 ppb	1.790 ppb	0.260 ppb	7.475 ppb	0.040 ppb	0.898 ppb	15.469 ppb
Concentration per Run 2	96.766 %	11.300 ppb	10.280 ppb	2.178 ppb	0.335 ppb	10.930 ppb	0.027 ppb	1.290 ppb	18.604 ppb
Concentration per Run 3	96.225 %	14.427 ppb	11.164 ppb	2.249 ppb	0.390 ppb	2.934 ppb	0.045 ppb	0.966 ppb	18.575 ppb
Concentration RSD	3.1 %	21.0 %	11.7 %	11.9 %	19.8 %	56.4 %	25.1 %	19.9 %	10.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.411 ppb	92.973 %	1.100 ppb	0.401 ppb	25.177 ppb	3.727 ppb	90.817 %	0.016 ppb	0.004 ppb
Concentration per Run 1	0.407 ppb	93.692 %	0.966 ppb	0.416 ppb	22.189 ppb	3.358 ppb	91.957 %	0.021 ppb	-0.008 ppb
Concentration per Run 2	0.415 ppb	91.595 %	1.167 ppb	0.430 ppb	27.115 ppb	3.672 ppb	89.699 %	0.012 ppb	0.005 ppb
Concentration per Run 3	0.410 ppb	93.632 %	1.166 ppb	0.357 ppb	26.227 ppb	4.152 ppb	90.797 %	0.014 ppb	0.013 ppb
Concentration RSD	1.1 %	1.3 %	10.5 %	9.7 %	10.4 %	10.7 %	1.2 %	27.6 %	290.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.066 %	0.848 ppb	0.885 ppb	1.195 ppb	92.567 %	101.327 %	0.585 ppb	0.005 ppb	0.003 ppb
Concentration per Run 1	91.822 %	0.569 ppb	0.804 ppb	0.968 ppb	93.316 %	102.473 %	0.478 ppb	0.003 ppb	0.000 ppb
Concentration per Run 2	88.075 %	0.952 ppb	0.938 ppb	1.243 ppb	89.808 %	97.956 %	0.613 ppb	0.005 ppb	0.007 ppb
Concentration per Run 3	90.300 %	1.023 ppb	0.913 ppb	1.374 ppb	94.578 %	103.552 %	0.663 ppb	0.005 ppb	0.002 ppb
Concentration RSD	2.1 %	28.8 %	8.0 %	17.3 %	2.7 %	2.9 %	16.4 %	22.8 %	138.4 %

Category	209Bi (KED AGD)
Concentration average	96.882 %
Concentration per Run 1	98.107 %
Concentration per Run 2	96.089 %
Concentration per Run 3	96.450 %
Concentration RSD	1.1 %

Analysis index: 132
Analysis label: L1806872-05D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:45:36 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 34

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.436 %	96.343 %	0.002 ppb	22,208.744 ppb	21.501 ppb	8.888 ppb	1,807.854 ppb	11,752.113 ppb	81.175 %
Concentration per Run 1	81.056 %	97.087 %	0.003 ppb	20,665.101 ppb	22.301 ppb	7.696 ppb	1,699.081 ppb	10,622.804 ppb	81.183 %
Concentration per Run 2	82.021 %	94.089 %	0.004 ppb	22,960.198 ppb	22.928 ppb	9.559 ppb	1,890.661 ppb	12,094.599 ppb	81.329 %
Concentration per Run 3	81.232 %	97.852 %	-0.002 ppb	23,000.933 ppb	19.272 ppb	9.409 ppb	1,833.822 ppb	12,538.937 ppb	81.011 %
Concentration RSD	0.6 %	2.1 %	180.0 %	6.0 %	9.1 %	11.6 %	5.4 %	8.5 %	0.2 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	95.630 %	14.753 ppb	8.581 ppb	5.382 ppb	0.093 ppb	5.945 ppb	0.188 ppb	3.891 ppb	86.033 ppb
Concentration per Run 1	94.393 %	13.218 ppb	8.291 ppb	5.087 ppb	0.085 ppb	5.604 ppb	0.173 ppb	3.866 ppb	78.741 ppb
Concentration per Run 2	97.447 %	16.847 ppb	8.193 ppb	5.373 ppb	0.080 ppb	6.600 ppb	0.223 ppb	3.571 ppb	88.176 ppb
Concentration per Run 3	95.051 %	14.195 ppb	9.260 ppb	5.685 ppb	0.114 ppb	5.632 ppb	0.168 ppb	4.236 ppb	91.184 ppb
Concentration RSD	1.7 %	12.7 %	6.9 %	5.6 %	20.1 %	9.5 %	16.2 %	8.6 %	7.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.422 ppb	89.429 %	0.652 ppb	0.359 ppb	41.967 ppb	4.196 ppb	89.584 %	0.026 ppb	0.002 ppb
Concentration per Run 1	0.326 ppb	89.170 %	0.727 ppb	0.192 ppb	38.305 ppb	4.203 ppb	90.579 %	0.029 ppb	-0.003 ppb
Concentration per Run 2	0.389 ppb	91.685 %	0.581 ppb	0.492 ppb	43.743 ppb	4.414 ppb	89.028 %	0.028 ppb	0.001 ppb
Concentration per Run 3	0.552 ppb	87.433 %	0.648 ppb	0.392 ppb	43.853 ppb	3.972 ppb	89.146 %	0.021 ppb	0.010 ppb
Concentration RSD	27.6 %	2.4 %	11.2 %	42.7 %	7.6 %	5.3 %	1.0 %	15.9 %	274.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.917 %	0.724 ppb	0.618 ppb	1.758 ppb	91.515 %	99.779 %	0.637 ppb	0.000 ppb	-0.013 ppb
Concentration per Run 1	88.674 %	0.449 ppb	0.520 ppb	1.508 ppb	90.983 %	100.799 %	0.639 ppb	-0.002 ppb	-0.015 ppb
Concentration per Run 2	86.449 %	0.872 ppb	0.638 ppb	2.016 ppb	91.247 %	98.688 %	0.566 ppb	0.001 ppb	-0.013 ppb
Concentration per Run 3	88.628 %	0.850 ppb	0.696 ppb	1.750 ppb	92.314 %	99.851 %	0.708 ppb	0.001 ppb	-0.012 ppb
Concentration RSD	1.4 %	32.9 %	14.5 %	14.5 %	0.8 %	1.1 %	11.2 %	1,538.8 %	13.5 %

Category	209Bi (KED AGD)
Concentration average	94.792 %
Concentration per Run 1	96.821 %
Concentration per Run 2	91.905 %
Concentration per Run 3	95.651 %
Concentration RSD	2.7 %

Analysis index: 133
Analysis label: L1806872-06D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:49:30 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 35

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.377 %	96.087 %	0.004 ppb	21,500.504 ppb	13.569 ppb	10.488 ppb	1,733.145 ppb	11,215.605 ppb	81.239 %
Concentration per Run 1	82.106 %	97.852 %	0.004 ppb	19,796.941 ppb	14.868 ppb	9.748 ppb	1,568.413 ppb	10,104.892 ppb	80.880 %
Concentration per Run 2	82.616 %	92.877 %	0.002 ppb	22,787.471 ppb	16.964 ppb	12.259 ppb	1,833.419 ppb	11,791.127 ppb	80.962 %
Concentration per Run 3	82.408 %	97.533 %	0.004 ppb	21,917.099 ppb	8.873 ppb	9.458 ppb	1,797.604 ppb	11,750.797 ppb	81.874 %
Concentration RSD	0.3 %	2.9 %	44.8 %	7.2 %	30.9 %	14.7 %	8.3 %	8.6 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	94.964 %	14.140 ppb	8.881 ppb	5.318 ppb	0.056 ppb	4.994 ppb	0.196 ppb	4.333 ppb	82.363 ppb
Concentration per Run 1	92.772 %	13.463 ppb	8.837 ppb	4.870 ppb	0.058 ppb	6.360 ppb	0.137 ppb	4.256 ppb	74.641 ppb
Concentration per Run 2	94.346 %	15.068 ppb	8.907 ppb	5.303 ppb	0.086 ppb	5.024 ppb	0.257 ppb	4.205 ppb	85.978 ppb
Concentration per Run 3	97.776 %	13.890 ppb	8.899 ppb	5.781 ppb	0.024 ppb	3.598 ppb	0.195 ppb	4.540 ppb	86.471 ppb
Concentration RSD	2.7 %	5.9 %	0.4 %	8.6 %	55.3 %	27.7 %	30.6 %	4.2 %	8.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.362 ppb	88.317 %	0.611 ppb	0.535 ppb	41.127 ppb	3.912 ppb	89.074 %	0.026 ppb	-0.003 ppb
Concentration per Run 1	0.288 ppb	88.077 %	0.604 ppb	0.645 ppb	36.713 ppb	3.915 ppb	88.499 %	0.028 ppb	-0.003 ppb
Concentration per Run 2	0.369 ppb	87.688 %	0.660 ppb	0.327 ppb	43.719 ppb	3.847 ppb	88.184 %	0.037 ppb	-0.008 ppb
Concentration per Run 3	0.430 ppb	89.185 %	0.570 ppb	0.633 ppb	42.948 ppb	3.973 ppb	90.540 %	0.012 ppb	0.001 ppb
Concentration RSD	19.8 %	0.9 %	7.4 %	33.7 %	9.3 %	1.6 %	1.4 %	48.8 %	127.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.426 %	0.643 ppb	0.677 ppb	1.492 ppb	90.656 %	100.577 %	0.527 ppb	0.002 ppb	-0.013 ppb
Concentration per Run 1	89.076 %	0.355 ppb	0.551 ppb	1.320 ppb	90.890 %	102.303 %	0.500 ppb	0.001 ppb	-0.022 ppb
Concentration per Run 2	85.584 %	0.829 ppb	0.757 ppb	1.619 ppb	89.536 %	99.162 %	0.531 ppb	0.002 ppb	0.002 ppb
Concentration per Run 3	87.619 %	0.745 ppb	0.724 ppb	1.535 ppb	91.542 %	100.265 %	0.550 ppb	0.002 ppb	-0.018 ppb
Concentration RSD	2.0 %	39.4 %	16.3 %	10.3 %	1.1 %	1.6 %	4.8 %	28.4 %	104.0 %

Category	209Bi (KED AGD)
Concentration average	95.070 %
Concentration per Run 1	96.885 %
Concentration per Run 2	93.095 %
Concentration per Run 3	95.231 %
Concentration RSD	2.0 %

Analysis index: 134
Analysis label: L1806872-07D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:53:23 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 36

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.771 %	96.832 %	0.003 ppb	17,519.638 ppb	23.817 ppb	2.047 ppb	1,372.872 ppb	7,813.648 ppb	81.005 %
Concentration per Run 1	81.635 %	96.768 %	0.003 ppb	16,383.402 ppb	20.795 ppb	1.555 ppb	1,297.050 ppb	7,209.714 ppb	81.534 %
Concentration per Run 2	82.084 %	95.046 %	0.004 ppb	18,318.039 ppb	22.167 ppb	1.882 ppb	1,448.420 ppb	8,076.271 ppb	81.071 %
Concentration per Run 3	81.594 %	98.682 %	0.002 ppb	17,857.473 ppb	28.488 ppb	2.704 ppb	1,373.146 ppb	8,154.960 ppb	80.410 %
Concentration RSD	0.3 %	1.9 %	35.0 %	5.8 %	17.2 %	28.9 %	5.5 %	6.7 %	0.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.999 %	10.635 ppb	19.968 ppb	1.144 ppb	0.088 ppb	6.836 ppb	0.028 ppb	0.460 ppb	15.873 ppb
Concentration per Run 1	92.631 %	9.417 ppb	19.124 ppb	1.069 ppb	0.030 ppb	8.376 ppb	0.042 ppb	0.429 ppb	14.537 ppb
Concentration per Run 2	92.772 %	11.522 ppb	20.423 ppb	1.194 ppb	0.029 ppb	3.814 ppb	0.022 ppb	0.527 ppb	16.386 ppb
Concentration per Run 3	93.594 %	10.968 ppb	20.357 ppb	1.170 ppb	0.206 ppb	8.318 ppb	0.022 ppb	0.425 ppb	16.697 ppb
Concentration RSD	0.6 %	10.3 %	3.7 %	5.8 %	115.9 %	38.3 %	39.9 %	12.6 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.989 ppb	86.624 %	1.286 ppb	0.333 ppb	45.510 ppb	6.563 ppb	87.901 %	0.023 ppb	-0.003 ppb
Concentration per Run 1	0.859 ppb	86.131 %	1.157 ppb	0.269 ppb	41.952 ppb	5.968 ppb	89.206 %	0.020 ppb	-0.003 ppb
Concentration per Run 2	1.049 ppb	87.729 %	1.310 ppb	0.327 ppb	46.472 ppb	6.624 ppb	87.742 %	0.011 ppb	-0.003 ppb
Concentration per Run 3	1.058 ppb	86.011 %	1.390 ppb	0.402 ppb	48.107 ppb	7.097 ppb	86.756 %	0.037 ppb	-0.003 ppb
Concentration RSD	11.4 %	1.1 %	9.2 %	20.1 %	7.0 %	8.6 %	1.4 %	57.0 %	1.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.849 %	0.439 ppb	0.617 ppb	1.372 ppb	90.576 %	99.032 %	2.628 ppb	-0.002 ppb	0.014 ppb
Concentration per Run 1	87.151 %	0.250 ppb	0.505 ppb	1.263 ppb	91.227 %	100.001 %	2.445 ppb	-0.004 ppb	0.013 ppb
Concentration per Run 2	85.716 %	0.507 ppb	0.673 ppb	1.478 ppb	89.311 %	97.725 %	2.592 ppb	-0.002 ppb	0.013 ppb
Concentration per Run 3	87.680 %	0.560 ppb	0.674 ppb	1.375 ppb	91.189 %	99.370 %	2.848 ppb	-0.001 ppb	0.016 ppb
Concentration RSD	1.2 %	37.7 %	15.8 %	7.8 %	1.2 %	1.2 %	7.8 %	70.8 %	15.5 %

Category	209Bi (KED AGD)
Concentration average	95.896 %
Concentration per Run 1	95.872 %
Concentration per Run 2	95.503 %
Concentration per Run 3	96.313 %
Concentration RSD	0.4 %

Analysis index: 135
Analysis label: L1806872-08D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 4:57:17 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 37

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.191 %	97.491 %	0.004 ppb	17,370.104 ppb	24.519 ppb	24.298 ppb	1,929.831 ppb	9,909.424 ppb	80.612 %
Concentration per Run 1	84.518 %	100.532 %	0.006 ppb	16,005.273 ppb	22.602 ppb	22.745 ppb	1,762.399 ppb	8,747.267 ppb	82.719 %
Concentration per Run 2	81.145 %	95.109 %	0.001 ppb	18,036.870 ppb	24.984 ppb	24.888 ppb	2,015.736 ppb	10,339.681 ppb	79.884 %
Concentration per Run 3	80.909 %	96.832 %	0.005 ppb	18,068.169 ppb	25.971 ppb	25.261 ppb	2,011.358 ppb	10,641.323 ppb	79.232 %
Concentration RSD	2.5 %	2.8 %	63.7 %	6.8 %	7.1 %	5.6 %	7.5 %	10.3 %	2.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.163 %	14.052 ppb	19.554 ppb	2.920 ppb	0.107 ppb	4.255 ppb	0.078 ppb	1.541 ppb	27.738 ppb
Concentration per Run 1	92.819 %	12.923 ppb	19.289 ppb	2.784 ppb	0.000 ppb	0.648 ppb	0.061 ppb	1.006 ppb	25.743 ppb
Concentration per Run 2	93.641 %	14.766 ppb	19.197 ppb	3.082 ppb	0.119 ppb	6.454 ppb	0.081 ppb	1.969 ppb	29.511 ppb
Concentration per Run 3	93.030 %	14.467 ppb	20.177 ppb	2.894 ppb	0.204 ppb	5.661 ppb	0.092 ppb	1.648 ppb	27.959 ppb
Concentration RSD	0.5 %	7.0 %	2.8 %	5.1 %	95.1 %	74.0 %	19.6 %	31.8 %	6.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.320 ppb	86.246 %	0.515 ppb	0.137 ppb	84.973 ppb	8.662 ppb	87.110 %	0.006 ppb	-0.003 ppb
Concentration per Run 1	0.343 ppb	84.918 %	0.503 ppb	0.143 ppb	76.924 ppb	7.868 ppb	88.578 %	0.004 ppb	0.005 ppb
Concentration per Run 2	0.422 ppb	84.365 %	0.382 ppb	0.013 ppb	89.566 ppb	8.956 ppb	85.812 %	0.003 ppb	-0.008 ppb
Concentration per Run 3	0.196 ppb	89.454 %	0.661 ppb	0.256 ppb	88.428 ppb	9.161 ppb	86.939 %	0.010 ppb	-0.008 ppb
Concentration RSD	35.8 %	3.2 %	27.1 %	88.4 %	8.2 %	8.0 %	1.6 %	61.4 %	227.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.497 %	0.431 ppb	0.493 ppb	2.375 ppb	89.464 %	98.210 %	1.396 ppb	-0.003 ppb	-0.018 ppb
Concentration per Run 1	87.144 %	0.270 ppb	0.421 ppb	2.287 ppb	89.536 %	98.151 %	-0.237 ppb	-0.004 ppb	-0.019 ppb
Concentration per Run 2	86.854 %	0.570 ppb	0.553 ppb	2.630 ppb	88.879 %	98.051 %	2.313 ppb	-0.001 ppb	-0.017 ppb
Concentration per Run 3	85.492 %	0.452 ppb	0.505 ppb	2.208 ppb	89.976 %	98.427 %	2.112 ppb	-0.003 ppb	-0.017 ppb
Concentration RSD	1.0 %	35.2 %	13.5 %	9.5 %	0.6 %	0.2 %	101.5 %	70.2 %	8.9 %

Category	209Bi (KED AGD)
Concentration average	95.044 %
Concentration per Run 1	96.245 %
Concentration per Run 2	94.585 %
Concentration per Run 3	94.303 %
Concentration RSD	1.1 %

Analysis index: 136
Analysis label: L1806872-09D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 5:01:10 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 38

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.818 %	95.875 %	0.005 ppb	17,367.205 ppb	13.177 ppb	78.319 ppb	2,178.378 ppb	10,667.588 ppb	83.170 %
Concentration per Run 1	83.894 %	96.449 %	0.005 ppb	16,075.037 ppb	9.808 ppb	69.874 ppb	2,035.124 ppb	9,460.948 ppb	84.230 %
Concentration per Run 2	83.082 %	96.385 %	0.007 ppb	17,280.234 ppb	13.655 ppb	79.653 ppb	2,206.000 ppb	11,039.890 ppb	83.427 %
Concentration per Run 3	81.477 %	94.790 %	0.004 ppb	18,746.342 ppb	16.067 ppb	85.429 ppb	2,294.009 ppb	11,501.926 ppb	81.853 %
Concentration RSD	1.5 %	1.0 %	30.7 %	7.7 %	24.0 %	10.0 %	6.0 %	10.0 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	91.879 %	14.514 ppb	7.754 ppb	5.821 ppb	0.012 ppb	4.164 ppb	0.156 ppb	3.121 ppb	35.699 ppb
Concentration per Run 1	91.621 %	13.427 ppb	6.993 ppb	5.140 ppb	0.062 ppb	4.625 ppb	0.162 ppb	2.519 ppb	32.078 ppb
Concentration per Run 2	95.309 %	14.149 ppb	7.634 ppb	5.784 ppb	-0.031 ppb	3.755 ppb	0.162 ppb	3.162 ppb	34.584 ppb
Concentration per Run 3	88.708 %	15.965 ppb	8.633 ppb	6.539 ppb	0.004 ppb	4.114 ppb	0.145 ppb	3.682 ppb	40.437 ppb
Concentration RSD	3.6 %	9.0 %	10.7 %	12.0 %	407.8 %	10.5 %	6.2 %	18.7 %	12.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.345 ppb	84.244 %	0.272 ppb	0.282 ppb	101.564 ppb	9.500 ppb	85.422 %	0.006 ppb	-0.005 ppb
Concentration per Run 1	0.407 ppb	83.661 %	0.232 ppb	0.081 ppb	89.964 ppb	8.625 ppb	87.654 %	0.010 ppb	-0.008 ppb
Concentration per Run 2	0.292 ppb	86.430 %	0.333 ppb	0.270 ppb	104.048 ppb	10.021 ppb	85.646 %	0.005 ppb	0.001 ppb
Concentration per Run 3	0.336 ppb	82.640 %	0.250 ppb	0.495 ppb	110.680 ppb	9.852 ppb	82.967 %	0.002 ppb	-0.008 ppb
Concentration RSD	16.9 %	2.3 %	19.8 %	73.5 %	10.4 %	8.0 %	2.8 %	69.8 %	109.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.711 %	0.479 ppb	0.464 ppb	2.337 ppb	88.867 %	98.334 %	0.833 ppb	-0.003 ppb	-0.018 ppb
Concentration per Run 1	86.022 %	0.240 ppb	0.364 ppb	2.245 ppb	90.243 %	100.763 %	0.502 ppb	-0.002 ppb	-0.022 ppb
Concentration per Run 2	85.200 %	0.494 ppb	0.498 ppb	2.375 ppb	88.431 %	97.566 %	0.605 ppb	-0.002 ppb	-0.019 ppb
Concentration per Run 3	82.910 %	0.703 ppb	0.529 ppb	2.391 ppb	87.925 %	96.672 %	1.393 ppb	-0.003 ppb	-0.015 ppb
Concentration RSD	1.9 %	48.4 %	18.8 %	3.4 %	1.4 %	2.2 %	58.5 %	6.2 %	19.0 %

Category	209Bi (KED AGD)
Concentration average	94.561 %
Concentration per Run 1	95.489 %
Concentration per Run 2	93.827 %
Concentration per Run 3	94.369 %
Concentration RSD	0.9 %

Analysis index: 137
Analysis label: L1806872-10D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 5:05:02 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 39

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.882 %	94.025 %	0.003 ppb	17,416.959 ppb	27.289 ppb	1.755 ppb	938.380 ppb	6,842.476 ppb	79.545 %
Concentration per Run 1	80.898 %	92.685 %	0.004 ppb	16,354.147 ppb	25.075 ppb	1.924 ppb	858.866 ppb	6,060.258 ppb	79.188 %
Concentration per Run 2	81.253 %	91.154 %	0.001 ppb	18,287.614 ppb	30.208 ppb	1.985 ppb	1,033.332 ppb	7,424.563 ppb	80.066 %
Concentration per Run 3	80.496 %	98.235 %	0.003 ppb	17,609.117 ppb	26.583 ppb	1.357 ppb	922.942 ppb	7,042.608 ppb	79.380 %
Concentration RSD	0.5 %	4.0 %	54.7 %	5.6 %	9.7 %	19.7 %	9.4 %	10.3 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.925 %	8.590 ppb	23.489 ppb	1.780 ppb	0.259 ppb	3.268 ppb	0.042 ppb	0.168 ppb	8.678 ppb
Concentration per Run 1	81.851 %	7.593 ppb	21.850 ppb	1.785 ppb	0.111 ppb	4.553 ppb	0.047 ppb	0.178 ppb	7.796 ppb
Concentration per Run 2	90.775 %	9.957 ppb	24.162 ppb	1.848 ppb	0.457 ppb	2.002 ppb	0.042 ppb	0.070 ppb	9.174 ppb
Concentration per Run 3	91.151 %	8.221 ppb	24.456 ppb	1.708 ppb	0.210 ppb	3.249 ppb	0.035 ppb	0.258 ppb	9.066 ppb
Concentration RSD	6.0 %	14.3 %	6.1 %	4.0 %	68.7 %	39.0 %	14.1 %	56.0 %	8.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.426 ppb	83.243 %	1.603 ppb	0.194 ppb	19.804 ppb	4.252 ppb	85.451 %	0.007 ppb	0.001 ppb
Concentration per Run 1	0.467 ppb	78.260 %	1.613 ppb	0.169 ppb	18.100 ppb	3.717 ppb	84.732 %	0.001 ppb	-0.003 ppb
Concentration per Run 2	0.368 ppb	84.604 %	1.496 ppb	0.146 ppb	21.146 ppb	4.406 ppb	85.464 %	0.006 ppb	0.006 ppb
Concentration per Run 3	0.443 ppb	86.864 %	1.699 ppb	0.268 ppb	20.168 ppb	4.632 ppb	86.158 %	0.014 ppb	0.001 ppb
Concentration RSD	12.1 %	5.4 %	6.4 %	33.3 %	7.9 %	11.2 %	0.8 %	97.1 %	340.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.398 %	0.263 ppb	1.093 ppb	0.735 ppb	88.456 %	96.301 %	0.438 ppb	-0.003 ppb	-0.003 ppb
Concentration per Run 1	83.529 %	0.241 ppb	0.964 ppb	0.615 ppb	87.267 %	94.205 %	0.370 ppb	-0.004 ppb	-0.005 ppb
Concentration per Run 2	84.602 %	0.319 ppb	1.144 ppb	0.849 ppb	87.901 %	95.728 %	0.463 ppb	-0.004 ppb	-0.002 ppb
Concentration per Run 3	85.063 %	0.228 ppb	1.172 ppb	0.741 ppb	90.201 %	98.970 %	0.482 ppb	-0.002 ppb	-0.001 ppb
Concentration RSD	0.9 %	18.6 %	10.3 %	16.0 %	1.7 %	2.5 %	13.7 %	24.6 %	84.7 %

Category	209Bi (KED AGD)
Concentration average	93.615 %
Concentration per Run 1	94.863 %
Concentration per Run 2	92.789 %
Concentration per Run 3	93.193 %
Concentration RSD	1.2 %

Analysis index: 138
Analysis label: L1806872-11D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 5:08:55 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 40

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.022 %	95.960 %	0.008 ppb	16,802.788 ppb	22.516 ppb	2.598 ppb	1,061.702 ppb	7,270.560 ppb	78.837 %
Concentration per Run 1	81.030 %	94.089 %	0.013 ppb	15,649.484 ppb	21.322 ppb	2.157 ppb	949.830 ppb	6,284.515 ppb	79.144 %
Concentration per Run 2	81.511 %	99.001 %	0.005 ppb	16,884.305 ppb	23.041 ppb	3.167 ppb	1,101.846 ppb	7,424.691 ppb	78.451 %
Concentration per Run 3	80.526 %	94.790 %	0.007 ppb	17,874.575 ppb	23.184 ppb	2.469 ppb	1,133.431 ppb	8,102.474 ppb	78.918 %
Concentration RSD	0.6 %	2.8 %	48.8 %	6.6 %	4.6 %	19.9 %	9.2 %	12.6 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.712 %	9.133 ppb	14.642 ppb	2.237 ppb	3.026 ppb	1.432 ppb	0.128 ppb	0.989 ppb	25.794 ppb
Concentration per Run 1	79.994 %	7.383 ppb	13.379 ppb	2.210 ppb	2.792 ppb	0.256 ppb	0.114 ppb	1.125 ppb	24.179 ppb
Concentration per Run 2	90.729 %	10.063 ppb	15.096 ppb	2.370 ppb	2.802 ppb	4.000 ppb	0.109 ppb	0.945 ppb	26.595 ppb
Concentration per Run 3	89.412 %	9.953 ppb	15.451 ppb	2.130 ppb	3.485 ppb	0.041 ppb	0.162 ppb	0.897 ppb	26.607 ppb
Concentration RSD	6.8 %	16.6 %	7.6 %	5.5 %	13.1 %	155.5 %	22.9 %	12.1 %	5.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	18.466 ppb	82.380 %	1.072 ppb	0.564 ppb	23.833 ppb	4.287 ppb	84.589 %	0.026 ppb	0.006 ppb
Concentration per Run 1	17.186 ppb	77.991 %	1.009 ppb	0.529 ppb	20.533 ppb	3.421 ppb	83.375 %	0.029 ppb	-0.003 ppb
Concentration per Run 2	19.428 ppb	83.781 %	1.038 ppb	0.954 ppb	25.535 ppb	4.642 ppb	85.286 %	0.031 ppb	0.010 ppb
Concentration per Run 3	18.783 ppb	85.368 %	1.169 ppb	0.210 ppb	25.430 ppb	4.797 ppb	85.106 %	0.019 ppb	0.010 ppb
Concentration RSD	6.2 %	4.7 %	8.0 %	66.2 %	12.0 %	17.6 %	1.2 %	25.4 %	131.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.628 %	0.320 ppb	0.754 ppb	2.233 ppb	88.660 %	97.288 %	0.252 ppb	-0.002 ppb	0.020 ppb
Concentration per Run 1	82.840 %	0.129 ppb	0.642 ppb	1.705 ppb	88.470 %	95.251 %	0.503 ppb	-0.004 ppb	0.010 ppb
Concentration per Run 2	83.892 %	0.546 ppb	0.853 ppb	2.898 ppb	88.541 %	99.661 %	0.490 ppb	-0.003 ppb	0.026 ppb
Concentration per Run 3	84.150 %	0.284 ppb	0.766 ppb	2.095 ppb	88.970 %	96.950 %	-0.237 ppb	-0.001 ppb	0.023 ppb
Concentration RSD	0.8 %	65.9 %	14.0 %	27.3 %	0.3 %	2.3 %	168.0 %	64.2 %	44.8 %

Category	209Bi (KED AGD)
Concentration average	92.336 %
Concentration per Run 1	92.572 %
Concentration per Run 2	91.825 %
Concentration per Run 3	92.612 %
Concentration RSD	0.5 %

Analysis index: 139 Analysis started at: 3/7/2018 5:12:48 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.001 %	94.790 %	108.141 ppb	9,996.919 ppb	9,839.499 ppb	97.466 ppb	9,161.780 ppb	9,255.877 ppb	93.177 %
Concentration per Run 1	82.815 %	99.638 %	107.625 ppb	9,049.839 ppb	8,720.772 ppb	84.752 ppb	8,103.228 ppb	8,124.278 ppb	94.190 %
Concentration per Run 2	82.929 %	91.154 %	107.884 ppb	10,474.568 ppb	10,271.662 ppb	106.524 ppb	9,326.816 ppb	9,487.368 ppb	93.536 %
Concentration per Run 3	83.257 %	93.578 %	108.913 ppb	10,466.350 ppb	10,526.065 ppb	101.121 ppb	10,055.298 ppb	10,155.986 ppb	91.805 %
Recovery Percentage 1			108.141 %	99.969 %	98.395 %	97.466 %	91.618 %	92.559 %	
Concentration RSD	0.3 %	4.6 %	0.6 %	8.2 %	9.9 %	11.6 %	10.8 %	11.2 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.053 %	89.738 ppb	99.339 ppb	100.705 ppb	100.463 ppb	10,070.575 ppb	99.467 ppb	99.542 ppb	99.639 ppb
Concentration per Run 1	100.266 %	78.327 ppb	93.247 ppb	90.215 ppb	92.215 ppb	9,091.682 ppb	89.455 ppb	88.133 ppb	88.241 ppb
Concentration per Run 2	97.121 %	90.559 ppb	102.304 ppb	105.662 ppb	103.615 ppb	10,576.895 ppb	104.475 ppb	106.389 ppb	104.349 ppb
Concentration per Run 3	108.772 %	100.327 ppb	102.467 ppb	106.238 ppb	105.559 ppb	10,543.148 ppb	104.471 ppb	104.103 ppb	106.327 ppb
Recovery Percentage 1		89.738 %	99.339 %	100.705 %	100.463 %	100.706 %	99.467 %	99.542 %	99.639 %
Concentration RSD	5.9 %	12.3 %	5.3 %	9.0 %	7.2 %	8.4 %	8.7 %	10.0 %	10.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	98.093 ppb	82.055 %	99.351 ppb	104.590 ppb	99.745 ppb	101.769 ppb	86.262 %	101.400 ppb	98.359 ppb
Concentration per Run 1	86.751 ppb	85.436 %	89.204 ppb	91.839 ppb	85.645 ppb	87.101 ppb	89.509 %	88.988 ppb	86.605 ppb
Concentration per Run 2	103.774 ppb	77.510 %	104.602 ppb	107.403 ppb	105.156 ppb	107.581 ppb	83.417 %	105.993 ppb	103.192 ppb
Concentration per Run 3	103.755 ppb	83.218 %	104.246 ppb	114.528 ppb	108.434 ppb	110.625 ppb	85.861 %	109.219 ppb	105.281 ppb
Recovery Percentage 1	98.093 %		99.351 %	104.590 %	99.745 %	101.769 %		101.400 %	98.359 %
Concentration RSD	10.0 %	5.0 %	8.8 %	11.1 %	12.4 %	12.6 %	3.6 %	10.7 %	10.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.516 %	86.264 ppb	92.346 ppb	100.504 ppb	90.956 %	98.376 %	95.110 ppb	96.182 ppb	94.275 ppb
Concentration per Run 1	90.224 %	71.481 ppb	78.965 ppb	87.046 ppb	91.909 %	102.131 %	81.428 ppb	87.888 ppb	83.665 ppb
Concentration per Run 2	85.721 %	89.159 ppb	93.163 ppb	105.460 ppb	88.800 %	94.153 %	99.890 ppb	97.817 ppb	97.459 ppb
Concentration per Run 3	86.604 %	98.153 ppb	104.911 ppb	109.006 ppb	92.159 %	98.844 %	104.013 ppb	102.841 ppb	101.701 ppb
Recovery Percentage 1		86.264 %	92.346 %	100.504 %			95.110 %	96.182 %	94.275 %
Concentration RSD	2.7 %	15.7 %	14.1 %	11.7 %	2.1 %	4.1 %	12.6 %	7.9 %	10.0 %

Category	209Bi (KED AGD)
Concentration average	96.458 %
Concentration per Run 1	96.976 %
Concentration per Run 2	96.470 %
Concentration per Run 3	95.927 %
Recovery Percentage 1	
Concentration RSD	0.5 %

Analysis index: 140 Analysis started at: 3/7/2018 5:16:44 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.911 %	98.490 %	0.008 ppb	32.120 ppb	1.040 ppb	0.491 ppb	-4.320 ppb	-2.363 ppb	79.137 %
Concentration per Run 1	85.703 %	103.721 %	0.007 ppb	8.233 ppb	0.958 ppb	0.408 ppb	-7.022 ppb	-5.602 ppb	78.520 %
Concentration per Run 2	85.324 %	92.940 %	0.005 ppb	53.774 ppb	1.150 ppb	0.607 ppb	-4.070 ppb	-5.228 ppb	78.752 %
Concentration per Run 3	86.707 %	98.809 %	0.012 ppb	34.354 ppb	1.012 ppb	0.458 ppb	-1.867 ppb	3.740 ppb	80.140 %
Recovery Percentage 1			1.640 %	32.120 %	1.040 %	4.909 %	-4.320 %	-2.363 %	
Concentration RSD	0.8 %	5.5 %	47.2 %	71.1 %	9.5 %	21.1 %	59.9 %	223.8 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	87.377 %	-0.140 ppb	-0.005 ppb	0.067 ppb	0.105 ppb	22.809 ppb	0.014 ppb	-0.057 ppb	0.088 ppb
Concentration per Run 1	90.564 %	-0.212 ppb	0.009 ppb	0.192 ppb	0.093 ppb	19.833 ppb	0.036 ppb	-0.173 ppb	0.029 ppb
Concentration per Run 2	81.708 %	0.023 ppb	-0.012 ppb	0.003 ppb	0.010 ppb	22.423 ppb	-0.004 ppb	0.026 ppb	0.070 ppb
Concentration per Run 3	89.859 %	-0.232 ppb	-0.012 ppb	0.005 ppb	0.213 ppb	26.172 ppb	0.009 ppb	-0.024 ppb	0.163 ppb
Recovery Percentage 1		-28.064 %	-0.109 %	6.651 %	10.546 %	45.618 %	2.757 %	-2.859 %	8.764 %
Concentration RSD	5.6 %	101.2 %	222.3 %	163.5 %	96.7 %	14.0 %	147.3 %	181.3 %	78.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.039 ppb	83.702 %	0.075 ppb	0.078 ppb	0.038 ppb	0.421 ppb	87.159 %	0.062 ppb	0.000 ppb
Concentration per Run 1	0.069 ppb	84.140 %	0.065 ppb	0.145 ppb	0.012 ppb	0.354 ppb	90.457 %	0.069 ppb	0.001 ppb
Concentration per Run 2	0.000 ppb	79.861 %	0.069 ppb	-0.046 ppb	0.060 ppb	0.383 ppb	83.369 %	0.049 ppb	-0.003 ppb
Concentration per Run 3	0.048 ppb	87.104 %	0.090 ppb	0.136 ppb	0.042 ppb	0.527 ppb	87.653 %	0.070 ppb	0.001 ppb
Recovery Percentage 1	0.390 %		14.901 %	1.565 %	7.551 %	21.071 %		15.604 %	-0.223 %
Concentration RSD	91.6 %	4.4 %	17.7 %	138.2 %	63.8 %	22.0 %	4.1 %	19.0 %	509.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.225 %	4.606 ppb	2.234 ppb	0.549 ppb	88.627 %	96.426 %	0.977 ppb	0.021 ppb	0.008 ppb
Concentration per Run 1	90.434 %	3.983 ppb	1.930 ppb	0.578 ppb	90.449 %	99.751 %	0.818 ppb	0.022 ppb	0.004 ppb
Concentration per Run 2	82.652 %	4.892 ppb	2.369 ppb	0.556 ppb	84.298 %	90.295 %	1.003 ppb	0.025 ppb	0.014 ppb
Concentration per Run 3	88.588 %	4.943 ppb	2.401 ppb	0.513 ppb	91.133 %	99.232 %	1.111 ppb	0.015 ppb	0.004 ppb
Recovery Percentage 1		153.537 %	55.840 %	109.799 %			48.874 %	4.162 %	1.512 %
Concentration RSD	4.7 %	11.7 %	11.8 %	6.0 %	4.2 %	5.5 %	15.2 %	24.1 %	74.1 %

Category	209Bi (KED AGD)
Concentration average	94.803 %
Concentration per Run 1	97.558 %
Concentration per Run 2	91.160 %
Concentration per Run 3	95.690 %
Recovery Percentage 1	
Concentration RSD	3.5 %

Analysis index: 141
Analysis label: WG1093817-1D2 A2-6020T
Analysis started at: 3/7/2018 5:20:40 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 42

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.033 %	83.053 %	0.002 ppb	113.968 ppb	-0.088 ppb	1.094 ppb	0.035 ppb	-1.764 ppb	72.147 %
Concentration per Run 1	74.073 %	83.691 %	0.003 ppb	85.980 ppb	-0.092 ppb	0.630 ppb	3.516 ppb	-1.866 ppb	72.994 %
Concentration per Run 2	74.440 %	84.073 %	0.002 ppb	138.622 ppb	0.567 ppb	1.781 ppb	8.850 ppb	-2.248 ppb	72.413 %
Concentration per Run 3	73.587 %	81.394 %	0.001 ppb	117.303 ppb	-0.738 ppb	0.870 ppb	-12.261 ppb	-1.177 ppb	71.033 %
Concentration RSD	0.6 %	1.7 %	40.0 %	23.2 %	743.7 %	55.5 %	31,347.4 %	30.8 %	1.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	84.542 %	-0.147 ppb	0.048 ppb	0.125 ppb	0.054 ppb	20.800 ppb	0.003 ppb	-0.381 ppb	0.092 ppb
Concentration per Run 1	87.768 %	-0.206 ppb	0.076 ppb	0.026 ppb	0.008 ppb	21.324 ppb	0.003 ppb	-0.384 ppb	0.075 ppb
Concentration per Run 2	85.301 %	-0.173 ppb	0.010 ppb	0.223 ppb	0.106 ppb	22.843 ppb	0.010 ppb	-0.433 ppb	0.072 ppb
Concentration per Run 3	80.557 %	-0.061 ppb	0.059 ppb	0.127 ppb	0.048 ppb	18.232 ppb	-0.004 ppb	-0.325 ppb	0.130 ppb
Concentration RSD	4.3 %	52.0 %	70.9 %	78.7 %	91.7 %	11.3 %	218.5 %	14.2 %	35.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.581 ppb	75.025 %	0.068 ppb	0.135 ppb	0.074 ppb	0.125 ppb	79.000 %	0.089 ppb	0.002 ppb
Concentration per Run 1	0.557 ppb	74.485 %	0.074 ppb	0.189 ppb	0.078 ppb	0.046 ppb	78.740 %	0.111 ppb	0.007 ppb
Concentration per Run 2	0.512 ppb	77.105 %	0.071 ppb	0.176 ppb	0.114 ppb	0.150 ppb	81.681 %	0.081 ppb	-0.003 ppb
Concentration per Run 3	0.674 ppb	73.484 %	0.059 ppb	0.042 ppb	0.029 ppb	0.178 ppb	76.580 %	0.074 ppb	0.003 ppb
Concentration RSD	14.4 %	2.5 %	11.5 %	59.9 %	57.6 %	55.5 %	3.2 %	22.2 %	222.8 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	76.777 %	4.403 ppb	1.456 ppb	-0.025 ppb	82.719 %	91.036 %	0.885 ppb	0.010 ppb	0.005 ppb
Concentration per Run 1	78.592 %	4.034 ppb	1.241 ppb	0.010 ppb	82.947 %	91.520 %	0.733 ppb	0.015 ppb	0.005 ppb
Concentration per Run 2	78.433 %	4.438 ppb	1.487 ppb	-0.042 ppb	84.256 %	93.186 %	0.892 ppb	0.007 ppb	0.004 ppb
Concentration per Run 3	73.305 %	4.736 ppb	1.641 ppb	-0.042 ppb	80.954 %	88.402 %	1.031 ppb	0.008 ppb	0.006 ppb
Concentration RSD	3.9 %	8.0 %	13.9 %	120.1 %	2.0 %	2.7 %	16.8 %	48.2 %	28.1 %

Category	209Bi (KED AGD)
Concentration average	90.128 %
Concentration per Run 1	90.078 %
Concentration per Run 2	92.175 %
Concentration per Run 3	88.130 %
Concentration RSD	2.2 %

Analysis index: 142 | Analysis started at: 3/7/2018 5:24:33 PM | Rack: 2
Analysis label: WG1093817-2D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 43

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.989 %	90.793 %	49.820 ppb	551.959 ppb	1,734.917 ppb	4,761.832 ppb	1,223.019 ppb	3,508.334 ppb	79.670 %
Concentration per Run 1	78.997 %	94.535 %	49.502 ppb	502.645 ppb	1,551.493 ppb	4,347.895 ppb	1,063.855 ppb	3,029.788 ppb	79.933 %
Concentration per Run 2	79.116 %	88.922 %	50.052 ppb	590.141 ppb	1,824.327 ppb	5,011.712 ppb	1,358.763 ppb	3,875.644 ppb	79.724 %
Concentration per Run 3	78.854 %	88.922 %	49.905 ppb	563.091 ppb	1,828.932 ppb	4,925.890 ppb	1,246.441 ppb	3,619.571 ppb	79.354 %
Concentration RSD	0.2 %	3.6 %	0.6 %	8.1 %	9.2 %	7.6 %	12.2 %	12.4 %	0.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.195 %	204.342 ppb	80.929 ppb	87.897 ppb	314.846 ppb	12,024.028 ppb	59.194 ppb	73.529 ppb	90.143 ppb
Concentration per Run 1	82.858 %	172.931 ppb	74.893 ppb	81.473 ppb	285.530 ppb	10,975.391 ppb	54.414 ppb	67.519 ppb	81.663 ppb
Concentration per Run 2	89.412 %	224.220 ppb	84.689 ppb	90.324 ppb	330.798 ppb	12,760.885 ppb	60.961 ppb	76.706 ppb	94.634 ppb
Concentration per Run 3	86.313 %	215.875 ppb	83.203 ppb	91.893 ppb	328.210 ppb	12,335.807 ppb	62.205 ppb	76.362 ppb	94.131 ppb
Concentration RSD	3.8 %	13.5 %	6.5 %	6.4 %	8.1 %	7.8 %	7.1 %	7.1 %	8.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	197.792 ppb	80.284 %	137.257 ppb	103.388 ppb	40.978 ppb	25.765 ppb	82.855 %	72.051 ppb	106.545 ppb
Concentration per Run 1	177.810 ppb	82.291 %	119.621 ppb	87.203 ppb	36.783 ppb	22.483 ppb	86.588 %	64.406 ppb	91.554 ppb
Concentration per Run 2	210.689 ppb	79.552 %	147.983 ppb	113.783 ppb	43.740 ppb	27.597 ppb	83.685 %	75.125 ppb	113.545 ppb
Concentration per Run 3	204.878 ppb	79.008 %	144.168 ppb	109.177 ppb	42.410 ppb	27.214 ppb	78.293 %	76.622 ppb	114.537 ppb
Concentration RSD	8.9 %	2.2 %	11.2 %	13.7 %	9.0 %	11.1 %	5.1 %	9.2 %	12.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	81.447 %	109.594 ppb	133.845 ppb	164.514 ppb	87.459 %	94.761 %	0.344 ppb	108.502 ppb	152.729 ppb
Concentration per Run 1	85.812 %	90.141 ppb	115.517 ppb	142.232 ppb	91.862 %	100.229 %	0.242 ppb	96.725 ppb	134.753 ppb
Concentration per Run 2	82.525 %	116.357 ppb	142.336 ppb	175.463 ppb	87.196 %	94.655 %	0.368 ppb	113.968 ppb	159.403 ppb
Concentration per Run 3	76.004 %	122.284 ppb	143.682 ppb	175.848 ppb	83.318 %	89.400 %	0.423 ppb	114.813 ppb	164.031 ppb
Concentration RSD	6.1 %	15.6 %	11.9 %	11.7 %	4.9 %	5.7 %	27.0 %	9.4 %	10.3 %

Category	209Bi (KED AGD)
Concentration average	91.440 %
Concentration per Run 1	94.731 %
Concentration per Run 2	93.068 %
Concentration per Run 3	86.522 %
Concentration RSD	4.7 %

Analysis index: 143 | Analysis started at: 3/7/2018 5:28:26 PM | Rack: 2
Analysis label: WG1093817-3D10 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 44

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.391 %	94.280 %	11.479 ppb	16,483.821 ppb	8,196.625 ppb	10,098.043 ppb	4,437.862 ppb	9,671.717 ppb	80.507 %
Concentration per Run 1	78.185 %	94.408 %	11.342 ppb	15,469.336 ppb	7,549.843 ppb	9,344.790 ppb	4,097.185 ppb	8,825.961 ppb	80.309 %
Concentration per Run 2	77.972 %	91.984 %	11.540 ppb	17,373.960 ppb	8,590.936 ppb	10,613.055 ppb	4,649.664 ppb	10,276.417 ppb	79.704 %
Concentration per Run 3	79.016 %	96.449 %	11.556 ppb	16,608.167 ppb	8,449.095 ppb	10,336.284 ppb	4,566.737 ppb	9,912.774 ppb	81.509 %
Concentration RSD	0.7 %	2.4 %	1.0 %	5.8 %	6.9 %	6.6 %	6.7 %	7.8 %	1.1 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	91.260 %	484.940 ppb	146.243 ppb	84.621 ppb	291.623 ppb	19,753.009 ppb	106.445 ppb	114.743 ppb	87.627 ppb
Concentration per Run 1	89.647 %	434.648 ppb	135.320 ppb	77.558 ppb	263.533 ppb	18,043.689 ppb	96.125 ppb	108.054 ppb	79.802 ppb
Concentration per Run 2	91.386 %	514.964 ppb	152.959 ppb	89.022 ppb	304.508 ppb	20,527.003 ppb	110.162 ppb	118.213 ppb	90.951 ppb
Concentration per Run 3	92.748 %	505.209 ppb	150.451 ppb	87.282 ppb	306.826 ppb	20,688.336 ppb	113.047 ppb	117.961 ppb	92.128 ppb
Concentration RSD	1.7 %	9.0 %	6.5 %	7.3 %	8.4 %	7.5 %	8.5 %	5.0 %	7.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	195.385 ppb	82.232 %	31.426 ppb	26.824 ppb	241.615 ppb	188.179 ppb	83.537 %	65.258 ppb	11.525 ppb
Concentration per Run 1	177.200 ppb	83.509 %	28.136 ppb	24.456 ppb	215.682 ppb	166.503 ppb	85.008 %	59.125 ppb	10.617 ppb
Concentration per Run 2	204.404 ppb	81.065 %	33.998 ppb	27.636 ppb	253.937 ppb	198.910 ppb	82.324 %	68.406 ppb	11.852 ppb
Concentration per Run 3	204.552 ppb	82.122 %	32.144 ppb	28.379 ppb	255.226 ppb	199.125 ppb	83.278 %	68.243 ppb	12.106 ppb
Concentration RSD	8.1 %	1.5 %	9.5 %	7.8 %	9.3 %	10.0 %	1.6 %	8.1 %	6.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	83.147 %	229.804 ppb	109.851 ppb	423.242 ppb	88.636 %	95.664 %	0.234 ppb	23.129 ppb	135.111 ppb
Concentration per Run 1	84.424 %	200.170 ppb	97.226 ppb	381.546 ppb	89.114 %	97.149 %	0.155 ppb	20.745 ppb	120.611 ppb
Concentration per Run 2	82.056 %	241.242 ppb	116.362 ppb	444.028 ppb	87.265 %	94.629 %	0.210 ppb	24.334 ppb	142.715 ppb
Concentration per Run 3	82.960 %	248.000 ppb	115.965 ppb	444.152 ppb	89.529 %	95.214 %	0.338 ppb	24.308 ppb	142.006 ppb
Concentration RSD	1.4 %	11.3 %	10.0 %	8.5 %	1.4 %	1.4 %	39.9 %	8.9 %	9.3 %

Category	209Bi (KED AGD)
Concentration average	93.062 %
Concentration per Run 1	95.480 %
Concentration per Run 2	91.887 %
Concentration per Run 3	91.818 %
Concentration RSD	2.3 %

Analysis index: 144 | Analysis started at: 3/7/2018 5:32:19 PM | Rack: 2
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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.509 %	94.663 %	49.294 ppb	18,415.655 ppb	11,089.217 ppb	10,070.827 ppb	6,903.473 ppb	10,221.497 ppb	84.840 %
Concentration per Run 1	79.073 %	100.723 %	49.070 ppb	17,087.146 ppb	10,023.655 ppb	9,352.539 ppb	6,442.698 ppb	8,933.329 ppb	84.380 %
Concentration per Run 2	80.357 %	93.961 %	49.619 ppb	18,949.749 ppb	11,604.135 ppb	10,351.228 ppb	7,021.869 ppb	10,752.613 ppb	85.366 %
Concentration per Run 3	79.097 %	89.304 %	49.193 ppb	19,210.071 ppb	11,639.860 ppb	10,508.716 ppb	7,245.853 ppb	10,978.549 ppb	84.774 %
Concentration RSD	0.9 %	6.1 %	0.6 %	6.3 %	8.3 %	6.2 %	6.0 %	11.0 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	95.677 %	401.192 ppb	89.049 ppb	91.852 ppb	243.987 ppb	25,531.230 ppb	51.673 ppb	62.156 ppb	150.342 ppb
Concentration per Run 1	96.789 %	350.459 ppb	81.003 ppb	83.180 ppb	221.550 ppb	23,213.142 ppb	46.515 ppb	57.142 ppb	132.931 ppb
Concentration per Run 2	96.554 %	422.951 ppb	91.730 ppb	96.249 ppb	256.438 ppb	26,586.902 ppb	54.057 ppb	66.150 ppb	161.984 ppb
Concentration per Run 3	93.688 %	430.166 ppb	94.414 ppb	96.127 ppb	253.972 ppb	26,793.646 ppb	54.448 ppb	63.178 ppb	156.112 ppb
Concentration RSD	1.8 %	11.0 %	8.0 %	8.2 %	8.0 %	7.9 %	8.7 %	7.4 %	10.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	141.749 ppb	84.847 %	51.713 ppb	48.493 ppb	86.099 ppb	52.365 ppb	85.831 %	30.123 ppb	45.125 ppb
Concentration per Run 1	129.561 ppb	86.751 %	47.145 ppb	44.813 ppb	78.950 ppb	45.844 ppb	88.968 %	26.710 ppb	39.988 ppb
Concentration per Run 2	151.628 ppb	82.957 %	55.621 ppb	49.634 ppb	91.078 ppb	56.134 ppb	83.590 %	32.518 ppb	49.007 ppb
Concentration per Run 3	144.058 ppb	84.831 %	52.372 ppb	51.034 ppb	88.268 ppb	55.119 ppb	84.935 %	31.142 ppb	46.380 ppb
Concentration RSD	7.9 %	2.2 %	8.3 %	6.7 %	7.4 %	10.8 %	3.3 %	10.1 %	10.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.916 %	58.082 ppb	56.494 ppb	71.102 ppb	91.197 %	98.251 %	42.081 ppb	43.276 ppb	81.435 ppb
Concentration per Run 1	92.456 %	50.193 ppb	49.341 ppb	62.756 ppb	93.961 %	102.830 %	36.133 ppb	39.431 ppb	72.958 ppb
Concentration per Run 2	83.858 %	62.090 ppb	60.431 ppb	76.705 ppb	88.565 %	94.704 %	44.948 ppb	45.771 ppb	86.873 ppb
Concentration per Run 3	84.434 %	61.962 ppb	59.712 ppb	73.844 ppb	91.065 %	97.219 %	45.162 ppb	44.628 ppb	84.475 ppb
Concentration RSD	5.5 %	11.8 %	11.0 %	10.4 %	3.0 %	4.2 %	12.2 %	7.8 %	9.1 %

Category	209Bi (KED AGD)
Concentration average	96.742 %
Concentration per Run 1	100.451 %
Concentration per Run 2	94.720 %
Concentration per Run 3	95.054 %
Concentration RSD	3.3 %

Analysis index: 145
Analysis label: WG1093817-4D2 A2-6020T
Analysis started at: 3/7/2018 5:36:12 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 46

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.449 %	94.897 %	3.156 ppb	72,225.378 ppb	31,422.249 ppb	46,834.057 ppb	13,513.284 ppb	72,418.514 ppb	75.849 %
Concentration per Run 1	73.736 %	101.361 %	3.265 ppb	65,979.855 ppb	28,731.791 ppb	44,232.636 ppb	12,648.972 ppb	67,848.414 ppb	75.909 %
Concentration per Run 2	72.968 %	90.772 %	3.179 ppb	74,037.340 ppb	32,478.857 ppb	47,470.351 ppb	14,219.484 ppb	74,997.862 ppb	75.390 %
Concentration per Run 3	73.643 %	92.558 %	3.024 ppb	76,658.940 ppb	33,056.097 ppb	48,799.183 ppb	13,671.396 ppb	74,409.267 ppb	76.248 %
Concentration RSD	0.6 %	6.0 %	3.9 %	7.7 %	7.5 %	5.0 %	5.9 %	5.5 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.125 %	1,770.071 ppb	208.879 ppb	212.030 ppb	959.748 ppb	100,992.617 ppb	28.260 ppb	81.725 ppb	223.344 ppb
Concentration per Run 1	101.184 %	1,612.073 ppb	186.258 ppb	186.605 ppb	862.082 ppb	90,142.729 ppb	25.317 ppb	70.287 ppb	200.568 ppb
Concentration per Run 2	91.667 %	1,853.486 ppb	214.534 ppb	218.082 ppb	985.389 ppb	103,999.443 ppb	28.930 ppb	84.318 ppb	231.873 ppb
Concentration per Run 3	86.523 %	1,844.654 ppb	225.845 ppb	231.404 ppb	1,031.772 ppb	108,835.678 ppb	30.533 ppb	90.572 ppb	237.591 ppb
Concentration RSD	8.0 %	7.7 %	9.8 %	10.8 %	9.1 %	9.6 %	9.5 %	12.7 %	8.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	450.311 ppb	78.591 %	33.216 ppb	11.370 ppb	326.716 ppb	38.770 ppb	78.908 %	2.091 ppb	4.564 ppb
Concentration per Run 1	407.211 ppb	82.480 %	30.857 ppb	9.615 ppb	308.452 ppb	35.116 ppb	80.721 %	2.002 ppb	4.361 ppb
Concentration per Run 2	464.891 ppb	77.007 %	33.694 ppb	12.237 ppb	332.148 ppb	40.668 ppb	77.866 %	2.138 ppb	4.507 ppb
Concentration per Run 3	478.832 ppb	76.285 %	35.096 ppb	12.259 ppb	339.546 ppb	40.527 ppb	78.137 %	2.133 ppb	4.826 ppb
Concentration RSD	8.4 %	4.3 %	6.5 %	13.4 %	5.0 %	8.2 %	2.0 %	3.7 %	5.2 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.729 %	24.822 ppb	2.029 ppb	124.939 ppb	83.770 %	85.819 %	2.380 ppb	1.291 ppb	192.084 ppb
Concentration per Run 1	86.977 %	23.404 ppb	1.867 ppb	117.091 ppb	85.307 %	89.639 %	2.398 ppb	1.175 ppb	177.566 ppb
Concentration per Run 2	81.384 %	24.789 ppb	2.136 ppb	127.877 ppb	82.392 %	83.287 %	2.337 ppb	1.330 ppb	196.628 ppb
Concentration per Run 3	79.826 %	26.273 ppb	2.084 ppb	129.849 ppb	83.611 %	84.532 %	2.404 ppb	1.368 ppb	202.057 ppb
Concentration RSD	4.5 %	5.8 %	7.0 %	5.5 %	1.7 %	3.9 %	1.6 %	7.9 %	6.7 %

Category	209Bi (KED AGD)
Concentration average	90.443 %
Concentration per Run 1	92.752 %
Concentration per Run 2	89.505 %
Concentration per Run 3	89.073 %
Concentration RSD	2.2 %

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Analysis label: L1807187-01D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 47

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.221 %	95.471 %	3.386 ppb	67,143.250 ppb	32,566.965 ppb	50,297.863 ppb	14,182.203 ppb	31,103.069 ppb	80.463 %
Concentration per Run 1	74.309 %	94.152 %	3.449 ppb	63,815.934 ppb	30,747.957 ppb	47,310.099 ppb	13,672.485 ppb	29,149.080 ppb	80.169 %
Concentration per Run 2	75.660 %	98.618 %	3.385 ppb	68,792.669 ppb	33,754.844 ppb	52,881.467 ppb	15,063.048 ppb	33,013.093 ppb	80.568 %
Concentration per Run 3	75.696 %	93.642 %	3.326 ppb	68,821.148 ppb	33,198.093 ppb	50,702.024 ppb	13,811.077 ppb	31,147.035 ppb	80.652 %
Concentration RSD	1.1 %	2.9 %	1.8 %	4.3 %	4.9 %	5.6 %	5.4 %	6.2 %	0.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	96.429 %	1,862.855 ppb	228.205 ppb	231.687 ppb	1,011.462 ppb	107,542.151 ppb	29.760 ppb	86.825 ppb	531.467 ppb
Concentration per Run 1	95.709 %	1,750.033 ppb	213.141 ppb	215.023 ppb	946.256 ppb	99,341.277 ppb	28.039 ppb	82.695 ppb	490.764 ppb
Concentration per Run 2	100.760 %	1,945.110 ppb	230.501 ppb	230.966 ppb	1,019.057 ppb	108,959.216 ppb	30.274 ppb	86.031 ppb	534.480 ppb
Concentration per Run 3	92.819 %	1,893.423 ppb	240.973 ppb	249.072 ppb	1,069.075 ppb	114,325.958 ppb	30.968 ppb	91.750 ppb	569.158 ppb
Concentration RSD	4.2 %	5.4 %	6.2 %	7.4 %	6.1 %	7.1 %	5.1 %	5.3 %	7.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	454.967 ppb	84.345 %	35.077 ppb	11.128 ppb	215.302 ppb	40.434 ppb	82.946 %	2.360 ppb	4.860 ppb
Concentration per Run 1	424.994 ppb	84.611 %	32.716 ppb	9.024 ppb	201.364 ppb	38.542 ppb	83.469 %	2.143 ppb	4.680 ppb
Concentration per Run 2	457.818 ppb	88.450 %	35.753 ppb	11.746 ppb	224.655 ppb	39.377 ppb	84.150 %	2.406 ppb	4.882 ppb
Concentration per Run 3	482.090 ppb	79.974 %	36.762 ppb	12.613 ppb	219.888 ppb	43.385 ppb	81.220 %	2.532 ppb	5.019 ppb
Concentration RSD	6.3 %	5.0 %	6.0 %	16.8 %	5.7 %	6.4 %	1.8 %	8.4 %	3.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	84.569 %	21.630 ppb	1.847 ppb	134.426 ppb	84.015 %	88.544 %	1.789 ppb	1.325 ppb	209.091 ppb
Concentration per Run 1	84.760 %	20.260 ppb	1.652 ppb	124.737 ppb	83.870 %	88.880 %	1.553 ppb	1.265 ppb	194.113 ppb
Concentration per Run 2	87.164 %	22.305 ppb	1.937 ppb	139.173 ppb	85.771 %	91.724 %	1.802 ppb	1.350 ppb	213.094 ppb
Concentration per Run 3	81.783 %	22.325 ppb	1.953 ppb	139.367 ppb	82.404 %	85.028 %	2.013 ppb	1.360 ppb	220.066 ppb
Concentration RSD	3.2 %	5.5 %	9.2 %	6.2 %	2.0 %	3.8 %	12.9 %	3.9 %	6.4 %

Category	209Bi (KED AGD)
Concentration average	91.650 %
Concentration per Run 1	92.371 %
Concentration per Run 2	93.897 %
Concentration per Run 3	88.683 %
Concentration RSD	2.9 %

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Analysis label: L1807187-02D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 49

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.212 %	100.340 %	3.505 ppb	67,452.873 ppb	34,077.666 ppb	50,051.876 ppb	13,819.235 ppb	26,708.929 ppb	83.379 %
Concentration per Run 1	75.251 %	99.001 %	3.507 ppb	63,894.126 ppb	31,880.225 ppb	46,654.578 ppb	12,626.773 ppb	23,826.639 ppb	83.238 %
Concentration per Run 2	75.349 %	104.614 %	3.499 ppb	68,576.403 ppb	34,827.798 ppb	52,302.430 ppb	14,759.372 ppb	28,474.000 ppb	83.818 %
Concentration per Run 3	75.035 %	97.406 %	3.510 ppb	69,888.092 ppb	35,524.977 ppb	51,198.620 ppb	14,071.558 ppb	27,826.148 ppb	83.081 %
Concentration RSD	0.2 %	3.8 %	0.2 %	4.7 %	5.7 %	6.0 %	7.9 %	9.4 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.342 %	1,776.114 ppb	200.710 ppb	216.906 ppb	1,385.933 ppb	229,608.778 ppb	56.017 ppb	111.286 ppb	263.147 ppb
Concentration per Run 1	94.910 %	1,603.696 ppb	198.587 ppb	211.546 ppb	1,338.738 ppb	222,021.367 ppb	54.564 ppb	111.681 ppb	259.506 ppb
Concentration per Run 2	111.640 %	1,869.686 ppb	198.134 ppb	214.355 ppb	1,398.577 ppb	227,927.883 ppb	55.288 ppb	110.557 ppb	263.027 ppb
Concentration per Run 3	100.478 %	1,854.959 ppb	205.408 ppb	224.817 ppb	1,420.484 ppb	238,877.084 ppb	58.200 ppb	111.620 ppb	266.908 ppb
Concentration RSD	8.3 %	8.4 %	2.0 %	3.2 %	3.1 %	3.7 %	3.4 %	0.6 %	1.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	388.403 ppb	86.263 %	67.562 ppb	11.992 ppb	269.004 ppb	51.922 ppb	84.690 %	1.585 ppb	4.603 ppb
Concentration per Run 1	379.716 ppb	81.771 %	65.258 ppb	11.578 ppb	248.136 ppb	49.440 ppb	82.884 %	1.490 ppb	4.430 ppb
Concentration per Run 2	390.456 ppb	91.094 %	69.216 ppb	12.001 ppb	282.940 ppb	52.480 ppb	87.859 %	1.618 ppb	4.538 ppb
Concentration per Run 3	395.037 ppb	85.924 %	68.210 ppb	12.395 ppb	275.935 ppb	53.846 ppb	83.327 %	1.646 ppb	4.839 ppb
Concentration RSD	2.0 %	5.4 %	3.0 %	3.4 %	6.8 %	4.3 %	3.3 %	5.2 %	4.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.639 %	695.578 ppb	4.122 ppb	112.911 ppb	88.308 %	91.628 %	1.596 ppb	1.174 ppb	558.527 ppb
Concentration per Run 1	83.658 %	663.853 ppb	3.736 ppb	107.310 ppb	85.371 %	87.490 %	1.520 ppb	1.060 ppb	531.853 ppb
Concentration per Run 2	92.682 %	710.005 ppb	4.438 ppb	115.368 ppb	92.522 %	97.201 %	1.548 ppb	1.180 ppb	562.501 ppb
Concentration per Run 3	86.576 %	712.874 ppb	4.191 ppb	116.054 ppb	87.031 %	90.194 %	1.718 ppb	1.282 ppb	581.225 ppb
Concentration RSD	5.3 %	4.0 %	8.6 %	4.3 %	4.2 %	5.5 %	6.7 %	9.5 %	4.5 %

Category	209Bi (KED AGD)
Concentration average	92.664 %
Concentration per Run 1	90.720 %
Concentration per Run 2	96.588 %
Concentration per Run 3	90.683 %
Concentration RSD	3.7 %

Analysis index: 148 | Analysis started at: 3/7/2018 5:47:51 PM | Rack: 2
Analysis label: L1807187-03D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 50

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.461 %	97.172 %	3.526 ppb	32,894.931 ppb	27,312.064 ppb	50,229.564 ppb	11,762.131 ppb	19,085.214 ppb	76.183 %
Concentration per Run 1	74.026 %	94.408 %	3.453 ppb	30,570.071 ppb	25,366.737 ppb	45,486.027 ppb	10,817.540 ppb	17,025.005 ppb	76.966 %
Concentration per Run 2	73.792 %	95.046 %	3.507 ppb	33,876.370 ppb	27,921.336 ppb	50,672.730 ppb	11,853.665 ppb	19,393.011 ppb	75.400 %
Concentration per Run 3	72.565 %	102.063 %	3.618 ppb	34,238.352 ppb	28,648.120 ppb	54,529.934 ppb	12,615.188 ppb	20,837.625 ppb	76.183 %
Concentration RSD	1.1 %	4.4 %	2.4 %	6.1 %	6.3 %	9.0 %	7.7 %	10.1 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	92.843 %	1,656.608 ppb	214.546 ppb	187.684 ppb	1,224.590 ppb	115,335.155 ppb	28.337 ppb	80.193 ppb	125.325 ppb
Concentration per Run 1	89.107 %	1,489.326 ppb	197.551 ppb	172.701 ppb	1,100.574 ppb	106,610.494 ppb	25.989 ppb	74.626 ppb	117.996 ppb
Concentration per Run 2	90.117 %	1,697.640 ppb	224.906 ppb	195.724 ppb	1,260.300 ppb	120,571.866 ppb	29.754 ppb	85.555 ppb	132.888 ppb
Concentration per Run 3	99.303 %	1,782.859 ppb	221.180 ppb	194.627 ppb	1,312.895 ppb	118,823.103 ppb	29.269 ppb	80.398 ppb	125.092 ppb
Concentration RSD	6.1 %	9.1 %	6.9 %	6.9 %	9.0 %	6.6 %	7.2 %	6.8 %	5.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	504.366 ppb	84.752 %	46.425 ppb	12.155 ppb	193.629 ppb	41.728 ppb	83.799 %	1.508 ppb	4.638 ppb
Concentration per Run 1	468.793 ppb	81.537 %	43.423 ppb	10.918 ppb	172.470 ppb	39.670 ppb	82.886 %	1.387 ppb	4.351 ppb
Concentration per Run 2	527.898 ppb	81.074 %	47.703 ppb	12.659 ppb	200.107 ppb	43.633 ppb	81.834 %	1.625 ppb	4.864 ppb
Concentration per Run 3	516.407 ppb	91.647 %	48.150 ppb	12.888 ppb	208.311 ppb	41.882 ppb	86.676 %	1.513 ppb	4.698 ppb
Concentration RSD	6.2 %	7.0 %	5.6 %	8.9 %	9.7 %	4.8 %	3.0 %	7.9 %	5.6 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.123 %	17.946 ppb	1.929 ppb	98.986 ppb	84.880 %	88.418 %	1.410 ppb	1.219 ppb	155.436 ppb
Concentration per Run 1	82.517 %	16.811 ppb	1.655 ppb	91.018 ppb	82.947 %	85.790 %	1.293 ppb	1.139 ppb	146.064 ppb
Concentration per Run 2	83.138 %	18.410 ppb	2.175 ppb	101.516 ppb	83.449 %	85.567 %	1.507 ppb	1.265 ppb	160.432 ppb
Concentration per Run 3	89.715 %	18.618 ppb	1.957 ppb	104.424 ppb	88.244 %	93.897 %	1.431 ppb	1.253 ppb	159.813 ppb
Concentration RSD	4.7 %	5.5 %	13.5 %	7.1 %	3.4 %	5.4 %	7.7 %	5.7 %	5.2 %

Category	209Bi (KED AGD)
Concentration average	91.546 %
Concentration per Run 1	89.573 %
Concentration per Run 2	90.491 %
Concentration per Run 3	94.575 %
Concentration RSD	2.9 %

Analysis index: 149
Analysis label: WG1093817-6D10 A2-6020T
Analysis started at: 3/7/2018 5:51:45 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 48

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.380 %	98.916 %	0.733 ppb	13,987.869 ppb	6,447.812 ppb	10,124.384 ppb	2,847.986 ppb	6,158.671 ppb	81.227 %
Concentration per Run 1	75.291 %	99.064 %	0.742 ppb	12,711.589 ppb	5,780.740 ppb	8,807.099 ppb	2,552.103 ppb	5,113.495 ppb	80.173 %
Concentration per Run 2	76.185 %	99.320 %	0.710 ppb	14,288.754 ppb	6,543.741 ppb	10,341.944 ppb	2,814.047 ppb	6,125.783 ppb	82.262 %
Concentration per Run 3	74.664 %	98.363 %	0.748 ppb	14,963.265 ppb	7,018.954 ppb	11,224.109 ppb	3,177.808 ppb	7,236.735 ppb	81.245 %
Concentration RSD	1.0 %	0.5 %	2.8 %	8.3 %	9.7 %	12.1 %	11.0 %	17.2 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	96.680 %	370.194 ppb	46.169 ppb	47.422 ppb	203.166 ppb	21,713.871 ppb	6.233 ppb	17.093 ppb	109.651 ppb
Concentration per Run 1	92.419 %	319.574 ppb	40.529 ppb	42.631 ppb	181.991 ppb	19,300.792 ppb	5.487 ppb	15.956 ppb	97.620 ppb
Concentration per Run 2	93.899 %	367.738 ppb	48.707 ppb	50.110 ppb	213.168 ppb	22,650.923 ppb	6.885 ppb	18.021 ppb	117.562 ppb
Concentration per Run 3	103.721 %	423.271 ppb	49.272 ppb	49.525 ppb	214.339 ppb	23,189.898 ppb	6.327 ppb	17.304 ppb	113.772 ppb
Concentration RSD	6.4 %	14.0 %	10.6 %	8.8 %	9.0 %	9.7 %	11.3 %	6.1 %	9.7 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	99.383 ppb	89.236 %	7.163 ppb	2.361 ppb	41.252 ppb	7.556 ppb	90.961 %	0.453 ppb	0.984 ppb
Concentration per Run 1	87.588 ppb	90.122 %	5.874 ppb	1.937 ppb	35.396 ppb	6.371 ppb	90.825 %	0.403 ppb	0.825 ppb
Concentration per Run 2	105.547 ppb	84.747 %	7.978 ppb	1.991 ppb	43.763 ppb	8.474 ppb	89.572 %	0.442 ppb	1.076 ppb
Concentration per Run 3	105.015 ppb	92.839 %	7.636 ppb	3.154 ppb	44.596 ppb	7.823 ppb	92.487 %	0.514 ppb	1.050 ppb
Concentration RSD	10.3 %	4.6 %	15.8 %	29.1 %	12.3 %	14.2 %	1.6 %	12.5 %	14.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.068 %	4.349 ppb	0.420 ppb	25.807 ppb	93.084 %	100.230 %	0.202 ppb	0.256 ppb	39.819 ppb
Concentration per Run 1	90.718 %	3.780 ppb	0.320 ppb	22.149 ppb	93.950 %	100.440 %	0.170 ppb	0.235 ppb	34.701 ppb
Concentration per Run 2	86.159 %	4.618 ppb	0.480 ppb	27.715 ppb	90.380 %	95.540 %	0.180 ppb	0.260 ppb	41.766 ppb
Concentration per Run 3	93.326 %	4.648 ppb	0.460 ppb	27.556 ppb	94.923 %	104.712 %	0.254 ppb	0.271 ppb	42.990 ppb
Concentration RSD	4.0 %	11.3 %	20.7 %	12.3 %	2.6 %	4.6 %	22.8 %	7.2 %	11.2 %

Category	209Bi (KED AGD)
Concentration average	96.471 %
Concentration per Run 1	97.882 %
Concentration per Run 2	93.720 %
Concentration per Run 3	97.812 %
Concentration RSD	2.5 %

Analysis index: 150
Analysis label: L1806872-12D10 CT-SPLP-6020TL
Analysis started at: 3/7/2018 5:55:38 PM
User name: ALPHALAB\metals-instrument
Rack: 2
Vial: 41

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.694 %	91.069 %	0.006 ppb	17,142.711 ppb	22.933 ppb	4.873 ppb	1,288.548 ppb	8,820.502 ppb	73.796 %
Concentration per Run 1	72.572 %	91.473 %	0.003 ppb	15,723.525 ppb	18.703 ppb	4.300 ppb	1,175.471 ppb	7,826.541 ppb	74.907 %
Concentration per Run 2	72.228 %	90.580 %	0.009 ppb	17,780.778 ppb	25.766 ppb	5.452 ppb	1,339.618 ppb	9,293.547 ppb	74.019 %
Concentration per Run 3	70.281 %	91.154 %	0.006 ppb	17,923.831 ppb	24.331 ppb	4.868 ppb	1,350.553 ppb	9,341.417 ppb	72.461 %
Concentration RSD	1.7 %	0.5 %	52.6 %	7.2 %	16.3 %	11.8 %	7.6 %	9.8 %	1.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	89.271 %	13.228 ppb	13.274 ppb	2.585 ppb	0.154 ppb	63.530 ppb	0.125 ppb	1.535 ppb	34.539 ppb
Concentration per Run 1	90.164 %	11.987 ppb	11.094 ppb	2.280 ppb	0.059 ppb	52.490 ppb	0.111 ppb	1.552 ppb	31.171 ppb
Concentration per Run 2	88.379 %	13.689 ppb	13.902 ppb	2.840 ppb	0.216 ppb	53.432 ppb	0.122 ppb	1.375 ppb	34.677 ppb
Concentration per Run 3	89.271 %	14.009 ppb	14.827 ppb	2.637 ppb	0.186 ppb	84.669 ppb	0.142 ppb	1.677 ppb	37.771 ppb
Concentration RSD	1.0 %	8.2 %	14.6 %	11.0 %	54.2 %	28.8 %	12.5 %	9.9 %	9.6 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.802 ppb	88.062 %	0.911 ppb	0.478 ppb	26.953 ppb	4.362 ppb	89.057 %	0.019 ppb	-0.003 ppb
Concentration per Run 1	0.576 ppb	91.176 %	0.775 ppb	0.307 ppb	24.089 ppb	3.613 ppb	91.888 %	0.021 ppb	-0.008 ppb
Concentration per Run 2	0.735 ppb	87.448 %	0.914 ppb	0.327 ppb	27.735 ppb	4.621 ppb	89.123 %	0.018 ppb	-0.003 ppb
Concentration per Run 3	1.095 ppb	85.562 %	1.044 ppb	0.800 ppb	29.036 ppb	4.851 ppb	86.161 %	0.018 ppb	0.001 ppb
Concentration RSD	33.1 %	3.2 %	14.8 %	58.3 %	9.5 %	15.1 %	3.2 %	8.3 %	139.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.695 %	0.785 ppb	0.596 ppb	0.843 ppb	90.191 %	97.665 %	0.689 ppb	0.005 ppb	0.041 ppb
Concentration per Run 1	90.019 %	0.679 ppb	0.551 ppb	0.871 ppb	92.075 %	101.051 %	0.639 ppb	0.001 ppb	0.031 ppb
Concentration per Run 2	85.744 %	0.771 ppb	0.639 ppb	0.862 ppb	88.892 %	95.989 %	0.629 ppb	0.006 ppb	0.048 ppb
Concentration per Run 3	84.321 %	0.904 ppb	0.599 ppb	0.794 ppb	89.606 %	95.956 %	0.801 ppb	0.010 ppb	0.044 ppb
Concentration RSD	3.4 %	14.4 %	7.4 %	5.0 %	1.9 %	3.0 %	14.0 %	81.7 %	20.8 %

Category	209Bi (KED AGD)
Concentration average	94.714 %
Concentration per Run 1	96.432 %
Concentration per Run 2	94.442 %
Concentration per Run 3	93.268 %
Concentration RSD	1.7 %

Analysis index: 151 Analysis started at: 3/7/2018 5:59:31 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.256 %	96.151 %	96.980 ppb	10,390.548 ppb	10,406.716 ppb	101.243 ppb	9,870.151 ppb	10,060.247 ppb	86.052 %
Concentration per Run 1	78.459 %	98.554 %	97.200 ppb	9,476.770 ppb	9,218.428 ppb	88.195 ppb	8,799.503 ppb	8,876.811 ppb	86.800 %
Concentration per Run 2	78.278 %	93.323 %	96.812 ppb	10,880.803 ppb	11,030.947 ppb	108.039 ppb	10,315.247 ppb	10,739.921 ppb	85.772 %
Concentration per Run 3	78.030 %	96.577 %	96.929 ppb	10,814.072 ppb	10,970.773 ppb	107.496 ppb	10,495.705 ppb	10,564.008 ppb	85.584 %
Recovery Percentage 1			96.980 %	103.905 %	104.067 %	101.243 %	98.702 %	100.602 %	
Concentration RSD	0.3 %	2.7 %	0.2 %	7.6 %	9.9 %	11.2 %	9.4 %	10.2 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.639 %	97.468 ppb	104.591 ppb	107.871 ppb	105.380 ppb	10,582.899 ppb	103.619 ppb	103.583 ppb	102.562 ppb
Concentration per Run 1	101.958 %	82.450 ppb	94.174 ppb	96.394 ppb	91.845 ppb	9,354.083 ppb	90.900 ppb	91.958 ppb	89.718 ppb
Concentration per Run 2	102.052 %	103.734 ppb	108.869 ppb	113.095 ppb	113.511 ppb	11,113.695 ppb	110.018 ppb	107.268 ppb	108.426 ppb
Concentration per Run 3	103.908 %	106.221 ppb	110.730 ppb	114.123 ppb	110.784 ppb	11,280.918 ppb	109.939 ppb	111.524 ppb	109.541 ppb
Recovery Percentage 1		97.468 %	104.591 %	107.871 %	105.380 %	105.829 %	103.619 %	103.583 %	102.562 %
Concentration RSD	1.1 %	13.4 %	8.7 %	9.2 %	11.2 %	10.1 %	10.6 %	9.9 %	10.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	98.618 ppb	90.789 %	101.185 ppb	103.656 ppb	98.949 ppb	102.258 ppb	90.763 %	101.616 ppb	100.670 ppb
Concentration per Run 1	88.292 ppb	92.086 %	90.873 ppb	91.028 ppb	87.618 ppb	90.668 ppb	91.565 %	91.517 ppb	88.074 ppb
Concentration per Run 2	103.519 ppb	90.765 %	104.397 ppb	107.962 ppb	103.710 ppb	107.379 ppb	89.841 %	105.630 ppb	105.935 ppb
Concentration per Run 3	104.043 ppb	89.515 %	108.286 ppb	111.978 ppb	105.519 ppb	108.726 ppb	90.884 %	107.701 ppb	108.001 ppb
Recovery Percentage 1	98.618 %		101.185 %	103.656 %	98.949 %	102.258 %		101.616 %	100.670 %
Concentration RSD	9.1 %	1.4 %	9.0 %	10.7 %	10.0 %	9.8 %	1.0 %	8.7 %	10.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.534 %	98.009 ppb	95.498 ppb	102.315 ppb	93.072 %	99.223 %	98.797 ppb	98.374 ppb	96.561 ppb
Concentration per Run 1	91.146 %	85.772 ppb	84.312 ppb	91.240 ppb	94.241 %	99.867 %	88.120 ppb	90.078 ppb	86.968 ppb
Concentration per Run 2	90.574 %	98.959 ppb	98.837 ppb	104.448 ppb	92.681 %	98.151 %	102.786 ppb	100.902 ppb	99.540 ppb
Concentration per Run 3	89.884 %	109.296 ppb	103.345 ppb	111.256 ppb	92.294 %	99.651 %	105.484 ppb	104.142 ppb	103.176 ppb
Recovery Percentage 1		98.009 %	95.498 %	102.315 %			98.797 %	98.374 %	96.561 %
Concentration RSD	0.7 %	12.0 %	10.4 %	9.9 %	1.1 %	0.9 %	9.5 %	7.5 %	8.8 %

Category	209Bi (KED AGD)
Concentration average	96.787 %
Concentration per Run 1	98.616 %
Concentration per Run 2	96.227 %
Concentration per Run 3	95.519 %
Recovery Percentage 1	
Concentration RSD	1.7 %

Analysis index: 152 Analysis started at: 3/7/2018 6:03:27 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.187 %	99.979 %	0.007 ppb	51.342 ppb	2.479 ppb	0.605 ppb	4.798 ppb	-0.290 ppb	80.325 %
Concentration per Run 1	79.788 %	100.021 %	0.003 ppb	32.394 ppb	4.969 ppb	0.713 ppb	-0.375 ppb	-1.085 ppb	81.528 %
Concentration per Run 2	79.474 %	98.873 %	0.011 ppb	70.243 ppb	0.415 ppb	0.633 ppb	3.040 ppb	1.067 ppb	80.396 %
Concentration per Run 3	78.300 %	101.042 %	0.009 ppb	51.390 ppb	2.053 ppb	0.470 ppb	11.730 ppb	-0.853 ppb	79.050 %
Recovery Percentage 1			1.491 %	51.342 %	2.479 %	6.054 %	4.798 %	-0.290 %	
Concentration RSD	1.0 %	1.1 %	55.2 %	36.9 %	93.1 %	20.5 %	130.1 %	407.1 %	1.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.852 %	0.178 ppb	-0.006 ppb	0.117 ppb	0.046 ppb	23.965 ppb	0.007 ppb	-0.098 ppb	-0.005 ppb
Concentration per Run 1	92.889 %	0.023 ppb	0.008 ppb	0.134 ppb	0.029 ppb	24.896 ppb	0.015 ppb	-0.164 ppb	0.064 ppb
Concentration per Run 2	92.208 %	0.433 ppb	-0.012 ppb	0.103 ppb	0.114 ppb	26.934 ppb	0.002 ppb	-0.174 ppb	-0.046 ppb
Concentration per Run 3	96.460 %	0.076 ppb	-0.012 ppb	0.113 ppb	-0.005 ppb	20.064 ppb	0.002 ppb	0.045 ppb	-0.035 ppb
Recovery Percentage 1		35.533 %	-0.113 %	11.659 %	4.614 %	47.929 %	1.338 %	-4.886 %	-0.547 %
Concentration RSD	2.4 %	125.6 %	208.4 %	13.7 %	133.1 %	14.7 %	112.7 %	126.4 %	1,109.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.025 ppb	91.045 %	0.065 ppb	0.081 ppb	0.040 ppb	0.456 ppb	93.213 %	0.069 ppb	0.001 ppb
Concentration per Run 1	-0.044 ppb	87.778 %	0.089 ppb	0.131 ppb	0.044 ppb	0.459 ppb	93.701 %	0.070 ppb	0.009 ppb
Concentration per Run 2	0.115 ppb	92.685 %	0.046 ppb	0.177 ppb	0.076 ppb	0.465 ppb	93.862 %	0.063 ppb	0.001 ppb
Concentration per Run 3	0.004 ppb	92.673 %	0.059 ppb	-0.065 ppb	-0.001 ppb	0.445 ppb	92.077 %	0.073 ppb	-0.008 ppb
Recovery Percentage 1	0.249 %		12.924 %	1.625 %	7.908 %	22.823 %		17.151 %	0.269 %
Concentration RSD	327.1 %	3.1 %	33.7 %	158.5 %	97.6 %	2.2 %	1.1 %	7.6 %	1,527.5 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	92.233 %	4.440 ppb	2.192 ppb	0.551 ppb	92.543 %	99.194 %	0.877 ppb	0.025 ppb	0.018 ppb
Concentration per Run 1	92.529 %	4.751 ppb	2.203 ppb	0.475 ppb	92.373 %	98.139 %	0.834 ppb	0.026 ppb	0.017 ppb
Concentration per Run 2	92.425 %	4.436 ppb	2.202 ppb	0.517 ppb	93.602 %	100.849 %	0.894 ppb	0.030 ppb	0.021 ppb
Concentration per Run 3	91.744 %	4.132 ppb	2.171 ppb	0.661 ppb	91.656 %	98.594 %	0.904 ppb	0.018 ppb	0.015 ppb
Recovery Percentage 1		147.997 %	54.799 %	110.144 %			43.874 %	4.937 %	3.504 %
Concentration RSD	0.5 %	7.0 %	0.8 %	17.7 %	1.1 %	1.5 %	4.3 %	26.4 %	17.4 %

Category	209Bi (KED AGD)
Concentration average	97.449 %
Concentration per Run 1	95.213 %
Concentration per Run 2	100.251 %
Concentration per Run 3	96.883 %
Recovery Percentage 1	
Concentration RSD	2.6 %

Analysis index: 153 | Analysis started at: 3/7/2018 6:07:23 PM | Rack: 2
Analysis label: L1807187-04D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.858 %	97.299 %	3.620 ppb	38,199.007 ppb	26,708.591 ppb	49,113.055 ppb	12,200.614 ppb	24,402.832 ppb	82.523 %
Concentration per Run 1	76.034 %	98.426 %	3.631 ppb	35,824.375 ppb	24,881.875 ppb	45,642.474 ppb	11,379.417 ppb	22,448.340 ppb	84.206 %
Concentration per Run 2	75.779 %	95.683 %	3.597 ppb	38,806.867 ppb	26,849.309 ppb	49,633.794 ppb	12,606.956 ppb	25,432.722 ppb	83.040 %
Concentration per Run 3	75.761 %	97.789 %	3.632 ppb	39,965.778 ppb	28,394.591 ppb	52,062.898 ppb	12,615.469 ppb	25,327.432 ppb	80.323 %
Concentration RSD	0.2 %	1.5 %	0.5 %	5.6 %	6.6 %	6.6 %	5.8 %	6.9 %	2.4 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	102.506 %	1,683.087 ppb	203.884 ppb	193.020 ppb	986.461 ppb	110,104.270 ppb	28.660 ppb	82.303 ppb	136.157 ppb
Concentration per Run 1	102.757 %	1,530.183 ppb	187.716 ppb	181.038 ppb	913.413 ppb	102,416.505 ppb	26.818 ppb	77.143 ppb	128.264 ppb
Concentration per Run 2	105.482 %	1,779.035 ppb	206.559 ppb	195.745 ppb	1,004.217 ppb	112,073.266 ppb	28.916 ppb	86.627 ppb	138.611 ppb
Concentration per Run 3	99.280 %	1,740.044 ppb	217.378 ppb	202.277 ppb	1,041.753 ppb	115,823.037 ppb	30.246 ppb	83.139 ppb	141.598 ppb
Concentration RSD	3.0 %	8.0 %	7.4 %	5.6 %	6.7 %	6.3 %	6.0 %	5.8 %	5.1 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	411.371 ppb	84.302 %	43.247 ppb	12.423 ppb	204.006 ppb	43.828 ppb	84.375 %	2.004 ppb	4.985 ppb
Concentration per Run 1	392.037 ppb	81.036 %	41.768 ppb	12.170 ppb	189.416 ppb	40.338 ppb	85.511 %	1.905 ppb	4.685 ppb
Concentration per Run 2	416.600 ppb	85.562 %	44.177 ppb	12.753 ppb	211.019 ppb	44.600 ppb	84.244 %	2.063 ppb	5.063 ppb
Concentration per Run 3	425.476 ppb	86.307 %	43.797 ppb	12.346 ppb	211.583 ppb	46.546 ppb	83.370 %	2.043 ppb	5.206 ppb
Concentration RSD	4.2 %	3.4 %	3.0 %	2.4 %	6.2 %	7.2 %	1.3 %	4.3 %	5.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	85.393 %	19.035 ppb	3.092 ppb	100.282 ppb	84.724 %	86.067 %	2.058 ppb	1.253 ppb	178.981 ppb
Concentration per Run 1	85.439 %	17.380 ppb	2.878 ppb	93.453 ppb	84.480 %	86.813 %	1.829 ppb	1.156 ppb	166.845 ppb
Concentration per Run 2	84.971 %	19.751 ppb	3.130 ppb	102.507 ppb	84.591 %	84.655 %	2.112 ppb	1.268 ppb	181.792 ppb
Concentration per Run 3	85.769 %	19.975 ppb	3.268 ppb	104.887 ppb	85.101 %	86.733 %	2.233 ppb	1.337 ppb	188.307 ppb
Concentration RSD	0.5 %	7.6 %	6.4 %	6.0 %	0.4 %	1.4 %	10.1 %	7.3 %	6.1 %

Category	209Bi (KED AGD)
Concentration average	92.190 %
Concentration per Run 1	92.302 %
Concentration per Run 2	92.869 %
Concentration per Run 3	91.398 %
Concentration RSD	0.8 %

Analysis index: 154 | Analysis started at: 3/7/2018 6:11:16 PM | Rack: 2
Analysis label: L1807187-05D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 52

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.858 %	98.533 %	4.119 ppb	49,474.534 ppb	31,664.707 ppb	57,318.773 ppb	13,523.203 ppb	17,310.812 ppb	79.190 %
Concentration per Run 1	75.261 %	95.492 %	4.106 ppb	47,623.915 ppb	30,160.232 ppb	53,989.168 ppb	13,253.158 ppb	16,965.794 ppb	78.380 %
Concentration per Run 2	74.734 %	98.426 %	4.045 ppb	50,001.687 ppb	32,043.722 ppb	58,174.285 ppb	13,923.660 ppb	17,624.384 ppb	80.309 %
Concentration per Run 3	74.580 %	101.680 %	4.206 ppb	50,797.999 ppb	32,790.168 ppb	59,792.866 ppb	13,392.792 ppb	17,342.259 ppb	78.883 %
Concentration RSD	0.5 %	3.1 %	2.0 %	3.3 %	4.3 %	5.2 %	2.6 %	1.9 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.109 %	1,788.128 ppb	265.561 ppb	231.277 ppb	1,098.060 ppb	129,721.265 ppb	33.003 ppb	95.600 ppb	158.456 ppb
Concentration per Run 1	93.758 %	1,734.344 ppb	247.085 ppb	215.743 ppb	1,024.139 ppb	121,591.023 ppb	30.749 ppb	90.389 ppb	149.340 ppb
Concentration per Run 2	95.544 %	1,837.302 ppb	267.633 ppb	233.218 ppb	1,121.934 ppb	131,233.455 ppb	33.587 ppb	95.558 ppb	162.379 ppb
Concentration per Run 3	90.023 %	1,792.738 ppb	281.967 ppb	244.871 ppb	1,148.108 ppb	136,339.318 ppb	34.673 ppb	100.851 ppb	163.649 ppb
Concentration RSD	3.0 %	2.9 %	6.6 %	6.3 %	6.0 %	5.8 %	6.1 %	5.5 %	5.0 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	450.667 ppb	83.235 %	47.887 ppb	13.789 ppb	216.092 ppb	53.998 ppb	81.909 %	2.094 ppb	5.598 ppb
Concentration per Run 1	425.408 ppb	82.172 %	45.680 ppb	13.228 ppb	201.054 ppb	49.986 ppb	83.520 %	1.917 ppb	5.156 ppb
Concentration per Run 2	460.684 ppb	82.964 %	48.972 ppb	13.564 ppb	224.506 ppb	57.269 ppb	81.777 %	2.099 ppb	5.723 ppb
Concentration per Run 3	465.909 ppb	84.570 %	49.010 ppb	14.576 ppb	222.717 ppb	54.740 ppb	80.431 %	2.267 ppb	5.915 ppb
Concentration RSD	4.9 %	1.5 %	4.0 %	5.1 %	6.0 %	6.8 %	1.9 %	8.4 %	7.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.218 %	18.555 ppb	2.530 ppb	126.247 ppb	81.855 %	84.563 %	1.592 ppb	1.335 ppb	197.388 ppb
Concentration per Run 1	82.267 %	17.145 ppb	2.415 ppb	113.378 ppb	80.909 %	85.378 %	1.453 ppb	1.291 ppb	185.961 ppb
Concentration per Run 2	82.456 %	19.272 ppb	2.557 ppb	130.598 ppb	82.877 %	84.201 %	1.637 ppb	1.360 ppb	202.082 ppb
Concentration per Run 3	81.932 %	19.249 ppb	2.619 ppb	134.766 ppb	81.777 %	84.109 %	1.686 ppb	1.353 ppb	204.120 ppb
Concentration RSD	0.3 %	6.6 %	4.1 %	9.0 %	1.2 %	0.8 %	7.7 %	2.9 %	5.0 %

Category	209Bi (KED AGD)
Concentration average	88.825 %
Concentration per Run 1	87.558 %
Concentration per Run 2	88.937 %
Concentration per Run 3	89.980 %
Concentration RSD	1.4 %

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Analysis label: L1807187-06D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 53

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.539 %	93.919 %	3.106 ppb	73,764.024 ppb	29,306.381 ppb	44,320.623 ppb	12,002.641 ppb	18,904.273 ppb	74.575 %
Concentration per Run 1	71.941 %	92.685 %	3.066 ppb	70,811.726 ppb	27,678.453 ppb	41,767.226 ppb	11,489.943 ppb	18,001.834 ppb	75.495 %
Concentration per Run 2	70.017 %	94.089 %	3.176 ppb	74,707.466 ppb	29,934.539 ppb	45,506.430 ppb	12,312.195 ppb	18,909.939 ppb	74.731 %
Concentration per Run 3	69.658 %	94.982 %	3.077 ppb	75,772.880 ppb	30,306.151 ppb	45,688.213 ppb	12,205.785 ppb	19,801.046 ppb	73.500 %
Concentration RSD	1.7 %	1.2 %	2.0 %	3.5 %	4.9 %	5.0 %	3.7 %	4.8 %	1.3 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.523 %	1,443.837 ppb	216.630 ppb	188.905 ppb	856.491 ppb	98,712.097 ppb	25.449 ppb	75.241 ppb	135.824 ppb
Concentration per Run 1	87.133 %	1,362.868 ppb	198.346 ppb	174.610 ppb	783.898 ppb	91,728.074 ppb	23.764 ppb	71.486 ppb	130.067 ppb
Concentration per Run 2	85.654 %	1,492.542 ppb	224.142 ppb	194.831 ppb	884.309 ppb	101,670.246 ppb	26.448 ppb	75.306 ppb	140.268 ppb
Concentration per Run 3	86.781 %	1,476.101 ppb	227.403 ppb	197.275 ppb	901.267 ppb	102,737.970 ppb	26.133 ppb	78.932 ppb	137.139 ppb
Concentration RSD	0.9 %	4.9 %	7.3 %	6.6 %	7.4 %	6.2 %	5.8 %	4.9 %	3.8 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	380.946 ppb	79.523 %	35.781 ppb	9.604 ppb	198.045 ppb	37.940 ppb	79.947 %	1.681 ppb	4.498 ppb
Concentration per Run 1	360.589 ppb	78.409 %	34.157 ppb	8.265 ppb	183.293 ppb	35.454 ppb	80.489 %	1.674 ppb	4.226 ppb
Concentration per Run 2	390.067 ppb	80.201 %	37.237 ppb	9.731 ppb	207.121 ppb	38.400 ppb	79.716 %	1.673 ppb	4.769 ppb
Concentration per Run 3	392.182 ppb	79.959 %	35.949 ppb	10.816 ppb	203.721 ppb	39.967 ppb	79.635 %	1.694 ppb	4.498 ppb
Concentration RSD	4.6 %	1.2 %	4.3 %	13.3 %	6.5 %	6.0 %	0.6 %	0.7 %	6.0 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	79.905 %	15.921 ppb	1.878 ppb	97.423 ppb	80.901 %	85.350 %	1.543 ppb	1.060 ppb	169.334 ppb
Concentration per Run 1	78.997 %	14.735 ppb	1.613 ppb	91.262 ppb	78.736 %	83.332 %	1.474 ppb	0.981 ppb	157.652 ppb
Concentration per Run 2	79.603 %	16.426 ppb	1.890 ppb	99.597 ppb	82.010 %	86.284 %	1.602 ppb	1.126 ppb	175.879 ppb
Concentration per Run 3	81.114 %	16.603 ppb	2.130 ppb	101.409 ppb	81.958 %	86.435 %	1.553 ppb	1.072 ppb	174.472 ppb
Concentration RSD	1.4 %	6.5 %	13.8 %	5.6 %	2.3 %	2.0 %	4.2 %	6.9 %	6.0 %

Category	209Bi (KED AGD)
Concentration average	86.335 %
Concentration per Run 1	85.967 %
Concentration per Run 2	85.584 %
Concentration per Run 3	87.454 %
Concentration RSD	1.1 %

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Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.144 %	91.494 %	2.826 ppb	83,949.002 ppb	30,452.673 ppb	42,314.394 ppb	11,817.141 ppb	12,421.459 ppb	76.714 %
Concentration per Run 1	73.219 %	93.770 %	2.682 ppb	77,328.267 ppb	27,860.401 ppb	38,641.756 ppb	10,761.168 ppb	10,973.500 ppb	78.948 %
Concentration per Run 2	71.959 %	91.920 %	2.905 ppb	84,746.685 ppb	30,793.007 ppb	43,057.494 ppb	12,090.854 ppb	13,141.062 ppb	75.950 %
Concentration per Run 3	71.254 %	88.794 %	2.889 ppb	89,772.053 ppb	32,704.609 ppb	45,243.931 ppb	12,599.400 ppb	13,149.814 ppb	75.243 %
Concentration RSD	1.4 %	2.7 %	4.4 %	7.5 %	8.0 %	7.9 %	8.0 %	10.1 %	2.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.128 %	1,419.136 ppb	204.304 ppb	174.419 ppb	790.636 ppb	92,274.291 ppb	24.393 ppb	72.498 ppb	128.862 ppb
Concentration per Run 1	88.543 %	1,284.336 ppb	188.986 ppb	162.218 ppb	723.464 ppb	85,573.718 ppb	22.539 ppb	67.688 ppb	118.378 ppb
Concentration per Run 2	89.624 %	1,467.096 ppb	211.821 ppb	177.752 ppb	806.151 ppb	93,719.399 ppb	24.736 ppb	72.665 ppb	132.245 ppb
Concentration per Run 3	86.217 %	1,505.975 ppb	212.106 ppb	183.288 ppb	842.294 ppb	97,529.755 ppb	25.905 ppb	77.140 ppb	135.962 ppb
Concentration RSD	2.0 %	8.3 %	6.5 %	6.3 %	7.7 %	6.6 %	7.0 %	6.5 %	7.2 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	365.735 ppb	80.341 %	35.786 ppb	9.822 ppb	180.168 ppb	39.070 ppb	78.992 %	1.563 ppb	4.281 ppb
Concentration per Run 1	338.377 ppb	80.511 %	33.370 ppb	9.143 ppb	165.565 ppb	36.061 ppb	79.379 %	1.487 ppb	4.030 ppb
Concentration per Run 2	376.586 ppb	80.004 %	36.923 ppb	8.912 ppb	183.473 ppb	40.194 ppb	79.375 %	1.572 ppb	4.536 ppb
Concentration per Run 3	382.240 ppb	80.508 %	37.066 ppb	11.411 ppb	191.465 ppb	40.953 ppb	78.223 %	1.631 ppb	4.278 ppb
Concentration RSD	6.5 %	0.4 %	5.9 %	14.1 %	7.4 %	6.7 %	0.8 %	4.6 %	5.9 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	77.961 %	15.282 ppb	1.880 ppb	99.741 ppb	80.196 %	85.719 %	1.475 ppb	1.067 ppb	163.394 ppb
Concentration per Run 1	78.950 %	13.898 ppb	1.586 ppb	91.117 ppb	80.722 %	87.106 %	1.276 ppb	0.971 ppb	149.536 ppb
Concentration per Run 2	77.576 %	15.902 ppb	2.009 ppb	102.335 ppb	80.202 %	84.926 %	1.543 ppb	1.103 ppb	169.014 ppb
Concentration per Run 3	77.356 %	16.048 ppb	2.046 ppb	105.769 ppb	79.666 %	85.125 %	1.607 ppb	1.127 ppb	171.633 ppb
Concentration RSD	1.1 %	7.9 %	13.6 %	7.7 %	0.7 %	1.4 %	11.9 %	7.9 %	7.4 %

Category	209Bi (KED AGD)
Concentration average	86.082 %
Concentration per Run 1	87.000 %
Concentration per Run 2	85.517 %
Concentration per Run 3	85.729 %
Concentration RSD	0.9 %

Analysis index: 157 | Analysis started at: 3/7/2018 6:22:56 PM | Rack: 2
Analysis label: L1807187-08D2 A2-6020T | User name: ALPHALAB\metals-instrument | Vial: 55

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.030 %	89.942 %	3.431 ppb	61,985.110 ppb	29,838.063 ppb	47,965.623 ppb	12,480.574 ppb	12,740.705 ppb	74.359 %
Concentration per Run 1	70.223 %	86.625 %	3.432 ppb	58,236.880 ppb	28,131.570 ppb	45,069.898 ppb	11,978.900 ppb	11,907.271 ppb	74.571 %
Concentration per Run 2	70.253 %	94.025 %	3.465 ppb	61,084.347 ppb	29,742.719 ppb	47,646.978 ppb	12,302.519 ppb	13,110.709 ppb	74.536 %
Concentration per Run 3	69.613 %	89.177 %	3.397 ppb	66,634.103 ppb	31,639.902 ppb	51,179.993 ppb	13,160.304 ppb	13,204.136 ppb	73.971 %
Concentration RSD	0.5 %	4.2 %	1.0 %	6.9 %	5.9 %	6.4 %	4.9 %	5.7 %	0.5 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	85.513 %	1,615.277 ppb	235.887 ppb	211.843 ppb	921.296 ppb	104,679.356 ppb	29.376 ppb	84.792 ppb	171.439 ppb
Concentration per Run 1	84.152 %	1,494.417 ppb	219.281 ppb	195.228 ppb	846.799 ppb	96,287.744 ppb	28.219 ppb	80.860 ppb	167.310 ppb
Concentration per Run 2	88.285 %	1,618.781 ppb	240.167 ppb	213.219 ppb	933.491 ppb	105,189.081 ppb	29.018 ppb	83.602 ppb	168.966 ppb
Concentration per Run 3	84.103 %	1,732.634 ppb	248.215 ppb	227.081 ppb	983.599 ppb	112,561.242 ppb	30.892 ppb	89.915 ppb	178.042 ppb
Concentration RSD	2.8 %	7.4 %	6.3 %	7.5 %	7.5 %	7.8 %	4.7 %	5.5 %	3.4 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	598.203 ppb	77.864 %	39.379 ppb	12.245 ppb	176.224 ppb	45.325 ppb	79.465 %	2.058 ppb	5.247 ppb
Concentration per Run 1	568.489 ppb	74.016 %	38.089 ppb	11.670 ppb	165.588 ppb	43.608 ppb	78.538 %	1.934 ppb	4.779 ppb
Concentration per Run 2	597.116 ppb	80.474 %	39.298 ppb	11.732 ppb	180.232 ppb	46.787 ppb	79.930 %	2.149 ppb	5.642 ppb
Concentration per Run 3	629.005 ppb	79.102 %	40.751 ppb	13.333 ppb	182.851 ppb	45.580 ppb	79.927 %	2.093 ppb	5.321 ppb
Concentration RSD	5.1 %	4.4 %	3.4 %	7.7 %	5.3 %	3.5 %	1.0 %	5.4 %	8.3 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	77.902 %	18.400 ppb	2.453 ppb	106.819 ppb	79.331 %	82.716 %	1.589 ppb	1.282 ppb	250.229 ppb
Concentration per Run 1	76.120 %	16.911 ppb	2.155 ppb	100.683 ppb	78.344 %	81.163 %	1.480 ppb	1.168 ppb	232.879 ppb
Concentration per Run 2	78.967 %	18.409 ppb	2.564 ppb	108.358 ppb	79.907 %	83.367 %	1.630 ppb	1.310 ppb	257.384 ppb
Concentration per Run 3	78.620 %	19.880 ppb	2.639 ppb	111.415 ppb	79.741 %	83.619 %	1.659 ppb	1.367 ppb	260.426 ppb
Concentration RSD	2.0 %	8.1 %	10.6 %	5.2 %	1.1 %	1.6 %	6.0 %	8.0 %	6.0 %

Category	209Bi (KED AGD)
Concentration average	86.558 %
Concentration per Run 1	85.805 %
Concentration per Run 2	86.285 %
Concentration per Run 3	87.583 %
Concentration RSD	1.1 %

Analysis index: 158 | Analysis started at: 3/7/2018 6:26:50 PM | Rack: 2
Analysis label: 048-45 SCAN | User name: ALPHALAB\metals-instrument | Vial: 56

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.120 %	90.814 %	0.007 ppb	202.872 ppb	1.690 ppb	3.977 ppb	13.771 ppb	2.819 ppb	70.548 %
Concentration per Run 1	72.886 %	84.775 %	0.004 ppb	244.170 ppb	5.898 ppb	6.178 ppb	7.031 ppb	1.050 ppb	71.408 %
Concentration per Run 2	74.110 %	94.854 %	0.008 ppb	179.992 ppb	-0.738 ppb	2.486 ppb	5.636 ppb	2.257 ppb	71.886 %
Concentration per Run 3	72.363 %	92.813 %	0.008 ppb	184.456 ppb	-0.092 ppb	3.266 ppb	28.646 ppb	5.151 ppb	68.350 %
Concentration RSD	1.2 %	5.9 %	32.5 %	17.7 %	216.6 %	48.9 %	93.7 %	74.8 %	2.7 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	71.701 %	1.582 ppb	0.006 ppb	0.173 ppb	0.092 ppb	49.351 ppb	0.001 ppb	-0.439 ppb	0.060 ppb
Concentration per Run 1	63.317 %	2.054 ppb	0.044 ppb	0.266 ppb	0.186 ppb	52.471 ppb	-0.004 ppb	-0.470 ppb	0.073 ppb
Concentration per Run 2	74.801 %	1.434 ppb	-0.012 ppb	0.147 ppb	-0.022 ppb	56.886 ppb	0.003 ppb	-0.387 ppb	0.003 ppb
Concentration per Run 3	76.986 %	1.258 ppb	-0.012 ppb	0.107 ppb	0.111 ppb	38.695 ppb	0.003 ppb	-0.458 ppb	0.104 ppb
Concentration RSD	10.2 %	26.5 %	511.0 %	47.6 %	115.1 %	19.2 %	480.5 %	10.2 %	85.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.285 ppb	84.924 %	0.027 ppb	0.055 ppb	0.007 ppb	0.189 ppb	86.190 %	0.003 ppb	0.000 ppb
Concentration per Run 1	0.248 ppb	77.765 %	-0.004 ppb	0.030 ppb	0.032 ppb	0.170 ppb	79.117 %	0.003 ppb	-0.008 ppb
Concentration per Run 2	0.273 ppb	89.439 %	0.061 ppb	0.128 ppb	0.001 ppb	0.306 ppb	90.785 %	-0.004 ppb	-0.003 ppb
Concentration per Run 3	0.333 ppb	87.568 %	0.023 ppb	0.006 ppb	-0.012 ppb	0.092 ppb	88.667 %	0.011 ppb	0.010 ppb
Concentration RSD	15.3 %	7.4 %	123.0 %	118.0 %	310.3 %	57.2 %	7.2 %	215.6 %	2,759.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	82.343 %	-0.004 ppb	0.117 ppb	0.010 ppb	87.219 %	92.875 %	0.554 ppb	-0.001 ppb	0.035 ppb
Concentration per Run 1	74.426 %	-0.056 ppb	0.101 ppb	0.066 ppb	79.567 %	84.575 %	0.333 ppb	-0.001 ppb	0.050 ppb
Concentration per Run 2	87.762 %	0.043 ppb	0.118 ppb	-0.019 ppb	91.153 %	98.057 %	0.446 ppb	-0.002 ppb	0.030 ppb
Concentration per Run 3	84.841 %	0.001 ppb	0.133 ppb	-0.018 ppb	90.938 %	95.993 %	0.884 ppb	-0.001 ppb	0.026 ppb
Concentration RSD	8.5 %	1,268.2 %	13.9 %	501.8 %	7.6 %	7.8 %	52.6 %	39.1 %	36.6 %

Category	209Bi (KED AGD)
Concentration average	85.605 %
Concentration per Run 1	76.304 %
Concentration per Run 2	90.190 %
Concentration per Run 3	90.322 %
Concentration RSD	9.4 %

Analysis index: 159 Analysis started at: 3/7/2018 6:30:43 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.600 %	93.132 %	94.824 ppb	10,381.617 ppb	10,328.337 ppb	103.520 ppb	9,639.162 ppb	10,031.897 ppb	82.142 %
Concentration per Run 1	75.353 %	98.554 %	95.184 ppb	9,311.333 ppb	9,143.529 ppb	96.226 ppb	8,434.051 ppb	8,498.015 ppb	81.858 %
Concentration per Run 2	74.826 %	88.029 %	94.896 ppb	10,709.151 ppb	10,506.368 ppb	104.677 ppb	10,113.894 ppb	10,376.878 ppb	82.986 %
Concentration per Run 3	73.619 %	92.813 %	94.391 ppb	11,124.368 ppb	11,335.113 ppb	109.657 ppb	10,369.541 ppb	11,220.799 ppb	81.582 %
Recovery Percentage 1			94.824 %	103.816 %	103.283 %	103.520 %	96.392 %	100.319 %	
Concentration RSD	1.2 %	5.7 %	0.4 %	9.1 %	10.7 %	6.6 %	10.9 %	13.9 %	0.9 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	99.155 %	98.625 ppb	104.413 ppb	108.247 ppb	105.202 ppb	10,545.372 ppb	105.951 ppb	105.169 ppb	102.839 ppb
Concentration per Run 1	99.303 %	82.072 ppb	95.225 ppb	97.232 ppb	93.949 ppb	9,617.891 ppb	96.123 ppb	96.336 ppb	93.965 ppb
Concentration per Run 2	97.850 %	106.841 ppb	105.645 ppb	110.774 ppb	109.794 ppb	10,862.174 ppb	109.493 ppb	110.308 ppb	107.490 ppb
Concentration per Run 3	100.313 %	106.962 ppb	112.369 ppb	116.735 ppb	111.864 ppb	11,156.052 ppb	112.235 ppb	108.864 ppb	107.062 ppb
Recovery Percentage 1		98.625 %	104.413 %	108.247 %	105.202 %	105.454 %	105.951 %	105.169 %	102.839 %
Concentration RSD	1.2 %	14.5 %	8.3 %	9.2 %	9.3 %	7.7 %	8.1 %	7.3 %	7.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	99.614 ppb	87.684 %	102.176 ppb	103.455 ppb	99.312 ppb	103.881 ppb	88.890 %	102.977 ppb	100.398 ppb
Concentration per Run 1	88.687 ppb	88.246 %	92.301 ppb	89.302 ppb	85.780 ppb	90.103 ppb	91.903 %	90.838 ppb	86.269 ppb
Concentration per Run 2	103.584 ppb	84.855 %	107.198 ppb	105.888 ppb	103.924 ppb	105.897 ppb	87.618 %	107.839 ppb	105.065 ppb
Concentration per Run 3	106.571 ppb	89.950 %	107.028 ppb	115.175 ppb	108.233 ppb	115.643 ppb	87.148 %	110.253 ppb	109.861 ppb
Recovery Percentage 1	99.614 %		102.176 %	103.455 %	99.312 %	103.881 %		102.977 %	100.398 %
Concentration RSD	9.6 %	3.0 %	8.4 %	12.7 %	12.0 %	12.4 %	2.9 %	10.3 %	12.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.216 %	99.739 ppb	94.696 ppb	104.603 ppb	89.889 %	95.334 %	100.425 ppb	99.120 ppb	97.573 ppb
Concentration per Run 1	90.631 %	84.963 ppb	81.126 ppb	95.021 ppb	92.766 %	99.754 %	87.800 ppb	90.977 ppb	86.338 ppb
Concentration per Run 2	83.964 %	102.726 ppb	97.782 ppb	107.104 ppb	85.863 %	90.755 %	104.782 ppb	100.962 ppb	100.564 ppb
Concentration per Run 3	87.052 %	111.528 ppb	105.179 ppb	111.685 ppb	91.037 %	95.493 %	108.692 ppb	105.421 ppb	105.816 ppb
Recovery Percentage 1		99.739 %	94.696 %	104.603 %			100.425 %	99.120 %	97.573 %
Concentration RSD	3.8 %	13.6 %	13.0 %	8.2 %	4.0 %	4.7 %	11.1 %	7.5 %	10.3 %

Category	209Bi (KED AGD)
Concentration average	93.822 %
Concentration per Run 1	97.278 %
Concentration per Run 2	89.841 %
Concentration per Run 3	94.348 %
Recovery Percentage 1	
Concentration RSD	4.0 %

Analysis index: 160 Analysis started at: 3/7/2018 6:34:39 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.031 %	93.897 %	0.011 ppb	75.284 ppb	0.250 ppb	0.495 ppb	-2.107 ppb	-3.204 ppb	77.692 %
Concentration per Run 1	76.209 %	98.044 %	0.010 ppb	54.255 ppb	1.623 ppb	0.789 ppb	-1.734 ppb	-9.997 ppb	78.444 %
Concentration per Run 2	76.636 %	88.539 %	0.010 ppb	88.196 ppb	-0.738 ppb	-0.024 ppb	0.437 ppb	3.107 ppb	77.722 %
Concentration per Run 3	75.249 %	95.109 %	0.013 ppb	83.401 ppb	-0.136 ppb	0.720 ppb	-5.024 ppb	-2.721 ppb	76.910 %
Recovery Percentage 1			2.216 %	75.284 %	0.250 %	4.952 %	-2.107 %	-3.204 %	
Concentration RSD	0.9 %	5.2 %	15.7 %	24.4 %	491.6 %	91.0 %	130.5 %	205.0 %	1.0 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	86.195 %	0.171 ppb	0.010 ppb	0.033 ppb	-0.005 ppb	24.139 ppb	0.017 ppb	0.087 ppb	0.040 ppb
Concentration per Run 1	88.332 %	0.119 ppb	0.009 ppb	0.063 ppb	-0.028 ppb	28.684 ppb	0.016 ppb	0.120 ppb	0.029 ppb
Concentration per Run 2	82.226 %	0.140 ppb	0.033 ppb	0.047 ppb	0.042 ppb	17.265 ppb	0.025 ppb	0.117 ppb	0.024 ppb
Concentration per Run 3	88.026 %	0.255 ppb	-0.012 ppb	-0.011 ppb	-0.028 ppb	26.466 ppb	0.009 ppb	0.024 ppb	0.068 ppb
Recovery Percentage 1		34.271 %	0.199 %	3.271 %	-0.454 %	48.277 %	3.347 %	4.365 %	4.045 %
Concentration RSD	4.0 %	42.6 %	230.8 %	119.0 %	894.8 %	25.1 %	45.8 %	62.5 %	59.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.153 ppb	84.486 %	0.110 ppb	0.168 ppb	0.021 ppb	0.390 ppb	87.531 %	0.055 ppb	0.003 ppb
Concentration per Run 1	0.093 ppb	85.413 %	0.146 ppb	0.337 ppb	0.019 ppb	0.215 ppb	90.561 %	0.054 ppb	-0.003 ppb
Concentration per Run 2	0.188 ppb	80.566 %	0.054 ppb	0.161 ppb	0.026 ppb	0.525 ppb	84.527 %	0.043 ppb	0.015 ppb
Concentration per Run 3	0.177 ppb	87.478 %	0.129 ppb	0.006 ppb	0.019 ppb	0.429 ppb	87.504 %	0.069 ppb	-0.003 ppb
Recovery Percentage 1	1.526 %		21.909 %	3.360 %	4.235 %	19.479 %		13.745 %	1.426 %
Concentration RSD	33.9 %	4.2 %	44.7 %	98.4 %	19.4 %	40.8 %	3.4 %	23.8 %	377.7 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	86.360 %	3.903 ppb	2.357 ppb	0.573 ppb	87.672 %	93.843 %	0.906 ppb	0.031 ppb	0.021 ppb
Concentration per Run 1	89.122 %	3.589 ppb	2.032 ppb	0.444 ppb	90.427 %	96.691 %	0.773 ppb	0.031 ppb	0.015 ppb
Concentration per Run 2	82.328 %	4.128 ppb	2.546 ppb	0.634 ppb	83.677 %	89.725 %	0.950 ppb	0.030 ppb	0.031 ppb
Concentration per Run 3	87.629 %	3.991 ppb	2.494 ppb	0.641 ppb	88.913 %	95.114 %	0.994 ppb	0.033 ppb	0.016 ppb
Recovery Percentage 1		130.084 %	58.929 %	114.594 %			45.290 %	6.239 %	4.200 %
Concentration RSD	4.1 %	7.2 %	12.0 %	19.5 %	4.0 %	3.9 %	13.0 %	5.1 %	42.5 %

Category	209Bi (KED AGD)
Concentration average	91.458 %
Concentration per Run 1	94.181 %
Concentration per Run 2	86.879 %
Concentration per Run 3	93.313 %
Recovery Percentage 1	
Concentration RSD	4.4 %

Analysis index: 161 Analysis started at: 3/7/2018 6:38:35 PM Rack: 0
Analysis label: CCV User name: ALPHALAB\metals-instrument Vial: 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.822 %	95.067 %	101.266 ppb	10,561.541 ppb	10,493.005 ppb	105.718 ppb	9,772.893 ppb	10,019.806 ppb	82.978 %
Concentration per Run 1	76.691 %	100.723 %	103.401 ppb	9,852.626 ppb	9,477.483 ppb	97.585 ppb	8,616.678 ppb	8,689.780 ppb	83.296 %
Concentration per Run 2	74.859 %	91.282 %	99.731 ppb	11,084.931 ppb	11,120.117 ppb	113.368 ppb	10,596.452 ppb	11,127.097 ppb	82.179 %
Concentration per Run 3	75.917 %	93.196 %	100.665 ppb	10,747.067 ppb	10,881.415 ppb	106.201 ppb	10,105.549 ppb	10,242.540 ppb	83.461 %
Recovery Percentage 1			101.266 %	105.615 %	104.930 %	105.718 %	97.729 %	100.198 %	
Concentration RSD	1.2 %	5.2 %	1.9 %	6.0 %	8.5 %	7.5 %	10.5 %	12.3 %	0.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	100.087 %	100.097 ppb	108.459 ppb	110.129 ppb	107.106 ppb	10,750.334 ppb	106.800 ppb	104.707 ppb	103.048 ppb
Concentration per Run 1	98.316 %	85.588 ppb	102.964 ppb	103.040 ppb	99.743 ppb	9,983.503 ppb	100.211 ppb	96.676 ppb	95.045 ppb
Concentration per Run 2	102.592 %	107.381 ppb	110.889 ppb	113.402 ppb	108.777 ppb	11,033.012 ppb	108.035 ppb	108.949 ppb	105.523 ppb
Concentration per Run 3	99.352 %	107.323 ppb	111.526 ppb	113.944 ppb	112.798 ppb	11,234.487 ppb	112.153 ppb	108.494 ppb	108.576 ppb
Recovery Percentage 1		100.097 %	108.459 %	110.129 %	107.106 %	107.503 %	106.800 %	104.707 %	103.048 %
Concentration RSD	2.2 %	12.6 %	4.4 %	5.6 %	6.2 %	6.2 %	5.7 %	6.6 %	6.9 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	99.809 ppb	89.699 %	100.921 ppb	101.832 ppb	98.098 ppb	102.577 ppb	89.504 %	102.399 ppb	101.779 ppb
Concentration per Run 1	92.035 ppb	90.166 %	92.128 ppb	98.061 ppb	89.461 ppb	93.035 ppb	92.832 %	93.648 ppb	91.167 ppb
Concentration per Run 2	102.889 ppb	90.991 %	104.593 ppb	105.374 ppb	103.254 ppb	106.755 ppb	90.212 %	105.325 ppb	105.621 ppb
Concentration per Run 3	104.503 ppb	87.939 %	106.042 ppb	102.062 ppb	101.579 ppb	107.942 ppb	85.468 %	108.226 ppb	108.549 ppb
Recovery Percentage 1	99.809 %		100.921 %	101.832 %	98.098 %	102.577 %		102.399 %	101.779 %
Concentration RSD	6.8 %	1.8 %	7.6 %	3.6 %	7.7 %	8.1 %	4.2 %	7.5 %	9.1 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	87.608 %	101.043 ppb	102.240 ppb	103.686 ppb	91.307 %	97.942 %	100.060 ppb	99.241 ppb	97.476 ppb
Concentration per Run 1	90.933 %	89.348 ppb	91.554 ppb	94.468 ppb	93.714 %	101.578 %	88.624 ppb	91.049 ppb	87.396 ppb
Concentration per Run 2	89.639 %	103.064 ppb	104.423 ppb	106.767 ppb	92.442 %	100.399 %	101.798 ppb	102.371 ppb	101.802 ppb
Concentration per Run 3	82.252 %	110.717 ppb	110.744 ppb	109.823 ppb	87.765 %	91.849 %	109.759 ppb	104.303 ppb	103.230 ppb
Recovery Percentage 1		101.043 %	102.240 %	103.686 %			100.060 %	99.241 %	97.476 %
Concentration RSD	5.3 %	10.7 %	9.6 %	7.8 %	3.4 %	5.4 %	10.7 %	7.2 %	9.0 %

Category	209Bi (KED AGD)
Concentration average	94.701 %
Concentration per Run 1	97.418 %
Concentration per Run 2	95.775 %
Concentration per Run 3	90.909 %
Recovery Percentage 1	
Concentration RSD	3.6 %

Analysis index: 162 Analysis started at: 3/7/2018 6:42:30 PM Rack: 4
Analysis label: LLCCV User name: ALPHALAB\metals-instrument Vial: 51

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.033 %	95.513 %	0.320 ppb	174.649 ppb	83.008 ppb	13.456 ppb	109.325 ppb	108.674 ppb	79.345 %
Concentration per Run 1	78.443 %	97.278 %	0.321 ppb	169.900 ppb	77.601 ppb	9.877 ppb	99.575 ppb	111.073 ppb	78.776 %
Concentration per Run 2	79.330 %	97.852 %	0.306 ppb	164.513 ppb	87.589 ppb	16.331 ppb	108.399 ppb	106.850 ppb	79.505 %
Concentration per Run 3	79.326 %	91.410 %	0.334 ppb	189.534 ppb	83.834 ppb	14.159 ppb	119.999 ppb	108.100 ppb	79.753 %
Recovery Percentage 1			106.781 %	174.649 %	118.583 %	134.556 %	109.325 %	108.674 %	
Concentration RSD	0.6 %	3.7 %	4.3 %	7.5 %	6.1 %	24.4 %	9.4 %	2.0 %	0.6 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	88.419 %	0.613 ppb	5.901 ppb	0.771 ppb	1.297 ppb	87.453 ppb	0.603 ppb	1.667 ppb	1.066 ppb
Concentration per Run 1	86.523 %	0.417 ppb	4.935 ppb	0.702 ppb	1.159 ppb	75.918 ppb	0.531 ppb	1.675 ppb	0.918 ppb
Concentration per Run 2	93.030 %	0.735 ppb	6.926 ppb	0.706 ppb	1.508 ppb	76.476 ppb	0.612 ppb	1.663 ppb	1.314 ppb
Concentration per Run 3	85.703 %	0.688 ppb	5.842 ppb	0.903 ppb	1.224 ppb	109.965 ppb	0.664 ppb	1.663 ppb	0.964 ppb
Recovery Percentage 1		122.635 %	118.020 %	154.108 %	129.703 %	174.906 %	120.508 %	83.349 %	106.556 %
Concentration RSD	4.5 %	27.9 %	16.9 %	14.9 %	14.3 %	22.3 %	11.1 %	0.4 %	20.3 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	11.558 ppb	89.962 %	0.665 ppb	6.425 ppb	0.578 ppb	2.487 ppb	90.550 %	0.522 ppb	0.221 ppb
Concentration per Run 1	10.415 ppb	91.685 %	0.618 ppb	6.007 ppb	0.483 ppb	2.103 ppb	93.340 %	0.458 ppb	0.212 ppb
Concentration per Run 2	11.835 ppb	91.663 %	0.721 ppb	7.029 ppb	0.639 ppb	2.694 ppb	89.719 %	0.540 ppb	0.224 ppb
Concentration per Run 3	12.424 ppb	86.539 %	0.655 ppb	6.240 ppb	0.613 ppb	2.666 ppb	88.590 %	0.567 ppb	0.227 ppb
Recovery Percentage 1	115.579 %		132.910 %	128.510 %	115.612 %	124.375 %		130.431 %	110.587 %
Concentration RSD	8.9 %	3.3 %	7.8 %	8.3 %	14.5 %	13.4 %	2.7 %	10.9 %	3.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	88.193 %	7.007 ppb	7.530 ppb	0.529 ppb	89.371 %	95.010 %	2.878 ppb	0.556 ppb	0.524 ppb
Concentration per Run 1	91.106 %	6.111 ppb	7.003 ppb	0.413 ppb	91.479 %	98.230 %	2.512 ppb	0.502 ppb	0.475 ppb
Concentration per Run 2	88.379 %	7.498 ppb	7.582 ppb	0.634 ppb	89.980 %	97.164 %	2.986 ppb	0.579 ppb	0.539 ppb
Concentration per Run 3	85.092 %	7.414 ppb	8.006 ppb	0.539 ppb	86.654 %	89.637 %	3.136 ppb	0.587 ppb	0.559 ppb
Recovery Percentage 1		233.579 %	188.259 %	105.729 %			143.881 %	111.180 %	104.822 %
Concentration RSD	3.4 %	11.1 %	6.7 %	20.9 %	2.8 %	4.9 %	11.3 %	8.5 %	8.4 %

Category	209Bi (KED AGD)
Concentration average	94.140 %
Concentration per Run 1	95.799 %
Concentration per Run 2	96.439 %
Concentration per Run 3	90.181 %
Recovery Percentage 1	
Concentration RSD	3.7 %

Analysis index: 163 Analysis started at: 3/7/2018 6:46:27 PM Rack: 0
Analysis label: CCB User name: ALPHALAB\metals-instrument Vial: 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.531 %	97.618 %	0.006 ppb	45.809 ppb	0.425 ppb	0.867 ppb	8.880 ppb	-0.492 ppb	80.950 %
Concentration per Run 1	79.951 %	100.149 %	0.005 ppb	26.916 ppb	-0.168 ppb	0.906 ppb	12.822 ppb	-7.909 ppb	81.488 %
Concentration per Run 2	78.728 %	98.426 %	0.005 ppb	47.701 ppb	-0.159 ppb	0.942 ppb	-0.730 ppb	3.972 ppb	79.322 %
Concentration per Run 3	79.914 %	94.280 %	0.009 ppb	62.811 ppb	1.601 ppb	0.752 ppb	14.546 ppb	2.461 ppb	82.038 %
Recovery Percentage 1			1.289 %	45.809 %	0.425 %	8.667 %	8.880 %	-0.492 %	
Concentration RSD	0.9 %	3.1 %	32.5 %	39.3 %	239.9 %	11.7 %	94.2 %	1,314.5 %	1.8 %

Category	45Sc (KED AGD)	48Ti (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)
Concentration average	93.218 %	-0.075 ppb	-0.012 ppb	0.063 ppb	0.008 ppb	14.022 ppb	0.002 ppb	-0.049 ppb	-0.014 ppb
Concentration per Run 1	93.171 %	-0.091 ppb	-0.012 ppb	0.080 ppb	0.085 ppb	13.741 ppb	-0.004 ppb	-0.046 ppb	-0.007 ppb
Concentration per Run 2	91.902 %	0.001 ppb	-0.012 ppb	0.066 ppb	-0.001 ppb	6.984 ppb	0.003 ppb	0.027 ppb	-0.018 ppb
Concentration per Run 3	94.581 %	-0.134 ppb	-0.012 ppb	0.043 ppb	-0.060 ppb	21.342 ppb	0.009 ppb	-0.127 ppb	-0.018 ppb
Recovery Percentage 1		-14.997 %	-0.249 %	6.297 %	0.789 %	28.044 %	0.496 %	-2.452 %	-1.406 %
Concentration RSD	1.4 %	92.1 %	0.0 %	29.1 %	924.8 %	51.2 %	255.3 %	157.3 %	46.5 %

Category	66Zn (KED AGD)	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)
Concentration average	0.035 ppb	89.963 %	0.022 ppb	0.168 ppb	0.012 ppb	0.148 ppb	91.432 %	0.023 ppb	0.001 ppb
Concentration per Run 1	-0.010 ppb	91.461 %	0.009 ppb	0.120 ppb	0.034 ppb	0.086 ppb	93.702 %	0.020 ppb	-0.004 ppb
Concentration per Run 2	0.016 ppb	89.664 %	0.048 ppb	0.002 ppb	0.016 ppb	0.089 ppb	90.531 %	0.026 ppb	0.009 ppb
Concentration per Run 3	0.098 ppb	88.766 %	0.009 ppb	0.384 ppb	-0.013 ppb	0.268 ppb	90.062 %	0.023 ppb	-0.003 ppb
Recovery Percentage 1	0.345 %		4.393 %	3.369 %	2.485 %	7.381 %		5.743 %	0.402 %
Concentration RSD	162.8 %	1.5 %	102.6 %	116.1 %	190.7 %	70.4 %	2.2 %	13.5 %	923.4 %

Category	115In (KED AGD)	118Sn (KED AGD)	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	183W (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)
Concentration average	90.037 %	1.717 ppb	0.799 ppb	0.638 ppb	90.859 %	97.734 %	0.270 ppb	0.012 ppb	-0.001 ppb
Concentration per Run 1	92.375 %	1.328 ppb	0.614 ppb	0.767 ppb	92.527 %	99.254 %	0.206 ppb	0.010 ppb	-0.002 ppb
Concentration per Run 2	89.034 %	1.692 ppb	0.874 ppb	0.675 ppb	90.670 %	97.097 %	0.247 ppb	0.011 ppb	0.001 ppb
Concentration per Run 3	88.704 %	2.131 ppb	0.909 ppb	0.471 ppb	89.381 %	96.850 %	0.356 ppb	0.016 ppb	-0.001 ppb
Recovery Percentage 1		57.223 %	19.986 %	127.579 %			13.488 %	2.493 %	-0.165 %
Concentration RSD	2.3 %	23.4 %	20.2 %	23.7 %	1.7 %	1.4 %	28.7 %	28.3 %	146.8 %

Category	209Bi (KED AGD)
Concentration average	97.255 %
Concentration per Run 1	98.618 %
Concentration per Run 2	98.829 %
Concentration per Run 3	94.318 %
Recovery Percentage 1	
Concentration RSD	2.6 %

Analysis index:	164	Analysis started at:	3/7/2018 6:50:23 PM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Analysis index:	165	Analysis started at:	3/7/2018 6:54:15 PM	Rack:	0
Analysis label:	Rinse	User name:	ALPHALAB\metals-instrument	Vial:	1

Sample Preparation

METALS ELN REPORT

Workgroup: WG1094297

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	HNO3	C799058	HCl	C800677	METALS	METSPIKE2	IPS,FPS,MIX	METPSMS	IPS,FPS,MIX	142

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Splp Extract Date	Comments
L1806872-01 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-02 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-03 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-04 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-05 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-06 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-07 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-08 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-09 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-10 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-11 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
L1806872-12 SOIL	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	
WG1094297-1 BLANK	03/03/18 17:00	Alp Demiroz	50	<2		03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	IPS1805021120KA; FPS1805021050KA; MIX1808221315AD

Reported: 14-MAR-18 04:57 PM

METALS ELN REPORT

Workgroup: WG1094297

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Splp Extract Date	Comments
WG1094297-2 LCS	03/03/18 17:00	Alp Demiroz	50	<2	.5	03/03/18 17:00	2039	50	03/03/18 17:32	50	03/01/18 17:42	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 14-MAR-18 04:57 PM

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806996-01	3/1/18	02:01	TW	5.0	96.5	7.5	3.5mL	161021018	<5	1	
-02	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-01											
-04											
L1805099-02									↓	↓	
-03									>5	2	
-08									<5	1	
-09									>5	2	
-23									>5	2	
-24									<5	1	
-25									>5	2	
L1806568-02									<5	1	
L1806669-01											
L1806666-01											
-02											
-03											
L1806738-01											
L1806832-01											
-02											
-03											
-04	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

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Initials: TW

Date: 3/1/18

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806832-05	3/1/18	02:01	TW	5.0	96.5	>5	3.5mL	HCL032017	<5	1	
-06	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-03											
-02											
-09											
-10											
-11											
-12											
L1807015-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

3/1/18

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Initials: TW

Date: 3/1/18

WG#: 1093318 & 1093351

TCLP Fluid Lot #:	1:1 HNO3	Temp(° C)	Unit ID#: 2	TCLP Fluid ID
Prep Date: 2-27-18/3-22-18 pH on Date Used: 4.91/2.93	Lot#: 1246302007	Max: 23.9 Min: 22.9	Acceptable Temp Range: 20°-25°C	(circle one) #3 #2 DI

Sample Type (Check Column): Organic	Inorganic	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO3 (preservative)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	2	3/1/18	05:08	23.4	TW	3/1/18	21:05	23.6	TW	4.92	2.5mL	TW	
			Fluid 2 Blank	—											3.28			
			L1806916 - 01	10.0											4.91			Blank
			-02												4.96			
			-03												4.94			
			-04												4.91			
			L1805059 - 02												4.90			
			-03												4.95			Fluid 2
			-06			8									4.80			
			-09												5.42			Fluid 2
			-23												5.00			↓
			-24												4.93			
			-25												4.99			Fluid 2
			L1806811 - 01												5.60			
			-02												6.45			
			-03												6.56			
			-04			6									5.79			
	↓		-05	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	6.82	↓	↓	↓

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Initials: TW

Date: 3/2/18

WG#: 1097318

TCLP Fluid Lot #: FTCLP0227435	1:1 HNO3 Lot#: 1H0302207	Temp(° C) Max: 23.9 Min: 22.4 Unit ID#: 266	TCLP Fluid ID (circle one) #3 #2 DI
Prep Date: 3-12-18 pH on Date Used: 4.91		Acceptable Temp Range: 21°-25°C	

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	6	3/1/18	15:08	23.4	TW	3/1/18	21:08	23.6	CM	4.92	2.5mL	TW	
			L1806873-06	100											5.40			Rush
			-07												5.35			
			-08												6.21			
			-09												6.46			
			-10			↓									5.48			
			-11			10									6.20			
			-12	↓	↓										6.29			↓
			L1806568-02	32	640										4.91			
			L1806664-01	100	2000										4.89			
			L1806666-01												5.15			
			-02												5.17			
			-03	↓	↓										5.58			
			L1806778-01	20	400										5.00			
	V		L1807015-01	100	2000	↓	↓	↓	↓	↓	↓	↓	↓	↓	4.95	↓	↓	
			3/1/18 TW															

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Initials: TW

Date: 3/2/18

WG#: 1093528

SPLP Fluid Lot #: SPLP0223-18-3	1:1 HNO3 Lot#: 1111-0630-2018	Temp(°C) Unit ID: 267 Max: 33.9 Min: 22.6	SPLP Fluid ID (circle one) #1 DI
prep. date: 02-27-18 pH: 4.21			

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	SPLP Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
X	X		PBSP (Prep Blank SPLP)	—	2000	13	3/1/18	17:42	23.6	EYA	3/2/18	9:43	23.3	LF	4.65	2.5mL	LF	Run Extr. this one before filtering
			LIB06832-01	100											10.24			Rush
			-02												10.57			
			-03												10.42			
			-04												9.71			
			-05												10.24			
			-06												10.38			
			-07												9.67			
			-08												9.87			
			-09												10.84			
			-10												9.96			
			-11			↓									9.59			
↓			-12			5									10.17			↓
			LIB06936-02												10.30			
	↓		LIB05999-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	10.12	↓	↓	

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Initials: _____

Date: _____

True Values

Interference Check Solutions
(ICP-MS)

Solution Component	Solution A Concentration (ug/L)	Solution AB Concentration (ug/L)
Al	20,000	20,000
Ca	60,000	60,000
Fe	50,000	50,000
Mg	20,000	20,000
Na	50,000	50,000
K	20,000	20,000
Mo	400	400
As	0.0	20
Cd	0.0	20
Cr	0.0	40
Co	0.0	40
Cu	0.0	40
Mn	0.0	40
Ni	0.0	40
Se	0.0	20
Ag	0.0	10
V	0.0	40
Zn	0.0	20

LCS & MS Concentrations
(ICP-MS)

Element	Liquid Concentration (mg/L)
Aluminum	2.00
Antimony	0.5
Arsenic	0.12
Barium	2.00
Beryllium	0.05
Cadmium	0.051
Calcium	10.0
Chromium	0.20
Cobalt	0.50
Copper	0.25
Iron	1.00
Lead	0.51
Magnesium	10.0
Manganese	0.50
Molybdenum	1.00
Nickel	0.50
Potassium	10.0
Selenium	0.12
Silver	0.05
Sodium	10.0
Thallium	0.12
Vanadium	0.50
Zinc	0.50

ERA

A Waters Company

Reference Materials

• Certificate of Analysis •

Product:
Catalog Number:
Lot No.
Certificate Issue Date:
Expiration Date:
Revision Number:
Revision Date: May 23, 2017

Convert to %

Parameter	Certified Value[1]	Reference Value[1]	Uncertainty[1]	QC Performance Acceptance Limits[1]	PT Performance Acceptance Limits[1]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	9870	8770	2.08	4785 - 13900	3450 - 12900
Antimony	245	117	3.49	51 - 236	24.5 - 295
Arsenic	31.5	29.6	47.6	20.8 - 38.5	18.3 - 57.9
Barium	213	198	3.05	164 - 237	145 - 251
Beryllium	97.5	92.0	5.26	76.3 - 108	68.5 - 116
Boron	147	122	4.08	87.8 - 150	72.0 - 166
Cadmium	76.6	71.5	5.50	59.4 - 80.6	52.3 - 140.5
Calcium	12400	6010	0.498	4230 - 7490	3470 - 7960
Chromium	102	102	5.10	81.5 - 122	70.8 - 139
Cobalt	54.2	51.4	5.25	43.2 - 59.5	39.2 - 64.6
Copper	164	153	8.22	125 - 180	115 - 190
Iron	29800	15200	5.39	7170 - 23200	5660 - 24700
Lead	156	139	8.13	114 - 163	101 - 176
Magnesium	4550	2760	1.81	2120 - 5410	1790 - 3730
Manganese	476	270	6.15	370 - 590	199 - 540
Mercury	6.55	6.56	3.97	4.82 - 8.53	3.41 - 9.91
Molybdenum	45.1	39.7	6.35	30.8 - 47.3	26.2 - 59.9
Nickel	144	129	3.50	107 - 151	94.2 - 164
Potassium	29200	2420	3.22	1720 - 3110	1460 - 3370
Selenium	67.0	62.6	5.60	47.4 - 73.9	36.8 - 84.5
Silver	38.0	35.4	8.26	27.6 - 45.2	23.9 - 48.9
Sodium	14400	819	7.50	588 - 1050	475 - 1160
Strontium	264	88.4	7.51	72.0 - 105	62.1 - 115

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Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
[illegible]	[illegible]	101	7.96	90.0 - 122	67.6 - 134
Tin	96.4	85.8	6.46	56.3 - 105	47.4 - 124
[illegible]	2240	477	4.50	155 - 500	157 - 797
[illegible]	63.1	60.1	3.32	42.5 - [illegible]	[illegible] - 83.9
Vanadium	[illegible]	87.1	[illegible]	[illegible] - 99.1	50.4 - 112
Zinc	247	220	6.16	185 - 20[illegible]	157 - 289

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	59700	8770	88.2	152	-	-
Antimony	246	117	47.8	163	-	-
Arsenic	31.6	29.6	96.4	191	-	-
Barium	813	768	96.8	181	-	-
Beryllium	97.5	92.0	95.5	172	-	-
Boron	147	120	79.9	115	-	-
Cadmium	76.8	71.5	90.7	198	-	-
Calcium	[illegible]2700	6310	98.3	139	-	-
Chromium	192	107	91.8	185	-	-
Cobalt	54.2	51.4	96.9	170	-	-
Copper	164	153	9[illegible].8	163	-	-
Iron	29800	[illegible]5200	90.2	154	-	-
Lead	159	152	95.0	202	-	-
Magnesium	4550	2760	9[illegible].7	144	-	-
Manganese	475	2[illegible]	[illegible].0	172	-	-
Mercury	6.05	6.06	100	129	-	-
Molybdenum	46.9	39.1	98.6	171	-	-
Nickel	144	128	9[illegible].6	192	-	-
Potassium	2[illegible]200	2420	9[illegible].8	143	-	-

[illegible]041 Table Mountain Pkwy - Golden, CO 80403 • T: 800.392.8122 • 303.431.8454 • www.[illegible]

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[2]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Selenium	6.70	6.46	96.5	131	-	-
Silver	38.0	36.4	95.8	173	-	-
Sodium	7440	6739	92.7	142	-	-
Strontium	264	238.4	121	115	-	-
Thallium	111	101	90.1	171	-	-
Tin	96.4	86.8	91.0	125	-	
Titanium	2640	677	90.9	119	-	-
Uranium	63.1	60.1	1.53	25	-	-
Vanadium	129	81.3	92.0	146	-	-
Zinc	247	223	135	130	-	-

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[illegible]

[illegible]

[illegible]

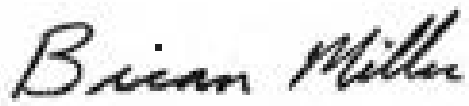
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[illegible]

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If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Larson





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ERA

A Waters Company

Reference Materials

• Certificate of Analysis •

Product:	Metals in Soil
Catalog Number:	5[illegible]
Lot No:	[illegible]
Certificate Issue Date:	June 25, 2007
Expiration Date:	January 31, 2[illegible]
Revision Number:	Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

[illegible]

Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	7900	n/c	3690 - 12100	3070 - 12700
Antimony	184	98.5	1.64	6.37 - 191	18.4 - 253
Arsenic	178	166	7.65	138 - 194	117 - 215
Barium	228	213	9.52	175 - 251	156 - 270
Beryllium	67.3	58.6	8.37	48.3 - 57.7	42.5 - 73.5
Boron	91.7	89.1	2.22	45.0 - 89.3	41.5 - 101
Cadmium	143	129	6.88	106 - 151	94.2 - 152
Calcium	5190	4720	6.57	3840 - 5590	3420 - 6010
Chromium	107	101	3.09	83.4 - 120	70.5 - 132
Cobalt	77.4	68.4	5.06	57.4 - 79.5	50.9 - 86.0
Copper	116	110	2.37	94.9 - 128	81.9 - 138
Iron	15000	14100	10.5	8910 - 19700	4950 - 23300
Lead	210	200	8.96	167 - 238	147 - 254
Magnesium	2370	2190	4.87	1730 - 2850	1420 - 3160
Manganese	363	370	5.74	304 - 436	280 - 460
Mercury	83.7	12.8	1.50	6.40 - 19.1	6.56 - 26.1
Molybdenum	32.8	32.4	n/a	25.5 - 39.2	20.3 - 44.4
Nickel	96.4	87.1	n/c	71.8 - 102	62.6 - 112
Potassium	2490	1990	6.19	1380 - 2010	1140 - 2530
Selenium	130	117	6.86	91.2 - 141	77.3 - 156
Silver	91.4	88.5	8.20	69.3 - 104	58.4 - 115
Sodium	590	620	6.19	458 - 785	338 - 904
Strontium	59.1	59.6	1.20	48.9 - 70.3	41.5 - 77.6
Thallium	156	142	9.14	114 - 169	96.6 - 187

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Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	151	135	6.93	100 - 203	80.1 - 191
Titanium	450	336	3.79	65.5 - 606	63.9 - 601
Tungsten	113	109	7.77	82.0 - 136	75.4 - 143
Vanadium	104	97.5	5.44	76.9 - 117	63.7 - 131
Zinc	254	240	4.89	194 - 286	170 - 311

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	13100	7900	78.2	149	-	-
Antimony	184	98.5	52.5	158	-	-
Arsenic	178	166	93.3	192	-	-
Barium	228	213	93.4	165	-	-
Beryllium	61.3	58.0	94.6	165	-	-
Boron	91.7	69.1	75.4	108	-	-
Cadmium	143	129	89.9	189	-	-
Calcium	5190	4720	90.9	131	-	-
Chromium	137	131	94.9	184	-	-
Cobalt	71.4	68.4	95.9	154	-	-
Copper	116	110	94.6	151	-	-
Iron	15000	14100	93.9	144	-	-
Lead	213	203	96.5	256	-	-
Magnesium	2570	2290	89.1	137	-	-
Manganese	383	370	96.6	158	-	-
Mercury	20.7	12.8	58.8	128	-	-
Molybdenum	38.8	32.4	83.5	154	-	-
Nickel	96.4	87.1	91.3	184	-	-
Potassium	2420	1990	82.4	137	-	-
Selenium	130	117	89.7	179	-	-

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Parameter	Certified Value*	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery†	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	9.4	8.8	94.8	158	-	-
Sodium	690	621	90.0	125	-	
Strontium	58.1	54.6	101	93	-	-
Thallium	1.56	1.42	90.8	161	-	-
Tin	1.57	1.35	85.6	109	-	-
Titanium	450	336	74.6	134	-	-
Uranium	1.10	1.09	99.2	31	-	-
Vanadium	1.34	97.0	99.0	150	-	-
Zinc	254	240	94.6	182	-	-

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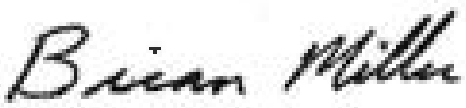
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[illegible]

[illegible]

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Larson





Mercury
Analysis

Sequence Logs

REVIEWED
By drm at 12:18 pm, Mar 14, 2018

00

S:2	rinse	0		1.0000	1.0000	1.0000	
S:2	Calibration Blank		1		1.0000	1.0000	
1.0000							
S:4	Standard #1	1		1.0000	1.0000		1.0000
S:6	Standard #2	1		1.0000	1.0000		1.0000
S:8	Standard #3	1		1.0000	1.0000		1.0000
S:10	Standard #4	1		1.0000	1.0000		1.0000
S:1	Standard #5	1		1.0000	1.0000		1.0000
S:3	Standard #6	1		1.0000	1.0000		1.0000
S:5	ICV	6		1.0000	1.0000	1.0000	
S:3	Replacement: Standard #6		1		1.0000		1.0000
1.0000							
S:5	ICV	6		1.0000	1.0000	1.0000	
S:5	ICV	6		1.0000	1.0000	1.0000	
S:7	ICB	4		1.0000	1.0000	1.0000	
1:1	WG1095386-1 S	0		1.0000	1.0000		1.0000
1:2	WG1095386-2 S	0		1.0000	1.0000		1.0000
1:3	L1807489-01 S	0		1.0000	1.0000		1.0000
1:4	WG1095386-3 S	0		1.0000	1.0000		1.0000
1:5	WG1095386-4 S	0		1.0000	1.0000		1.0000
1:6	L1807489-02 S	0		1.0000	1.0000		1.0000
1:7	L1807489-03 S	0		1.0000	1.0000		1.0000
1:8	L1807489-04 S	0		1.0000	1.0000		1.0000
1:9	L1807489-05 S	0		1.0000	1.0000		1.0000
1:10	L1807489-06 S	0		1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
1:11	L1807749-01 S	0		1.0000	1.0000		1.0000
1:12	WG1095466-1 C	0		1.0000	1.0000		1.0000
1:13	WG1095466-2 C	0		1.0000	1.0000		1.0000
1:14	L1806011-02 C	0		1.0000	1.0000		1.0000
1:15	WG1095466-3 C	0		1.0000	1.0000		1.0000
1:16	WG1095466-4 C	0		1.0000	1.0000		1.0000
1:17	L1806011-04 C	0		1.0000	1.0000		1.0000
1:18	WG1095467-1 C	0		1.0000	1.0000		1.0000
1:19	WG1095467-2 C	0		1.0000	1.0000		1.0000
1:20	L1806011-05 C	0		1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
1:21	WG1095467-3 C	0		1.0000	1.0000		1.0000
2:1	WG1095467-4 C	0		1.0000	1.0000		1.0000
2:2	L1806011-06 C	0		1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
S:2	rinse	0		1.0000	1.0000	1.0000	
S:2	Calibration Blank		1		1.0000	1.0000	
1.0000							
S:4	Standard #1	1		1.0000	1.0000		1.0000
S:6	Standard #2	1		1.0000	1.0000		1.0000
S:8	Standard #3	1		1.0000	1.0000		1.0000
S:10	Standard #4	1		1.0000	1.0000		1.0000
S:1	Standard #5	1		1.0000	1.0000		1.0000
S:3	Standard #6	1		1.0000	1.0000		1.0000
S:5	ICV	6		1.0000	1.0000	1.0000	
S:7	ICB	4		1.0000	1.0000	1.0000	
1:1	WG1095362-1 T	0		1.0000	1.0000		1.0000
1:2	WG1095362-2 T	0		1.0000	1.0000		1.0000
1:3	L1807246-23 T	0		1.0000	1.0000		1.0000
1:4	WG1095362-3 T	0		1.0000	1.0000		1.0000
1:5	WG1095362-4 T	0		1.0000	1.0000		1.0000
1:6	L1807246-22 T	0		1.0000	1.0000		1.0000
1:7	L1807246-24 T	0		1.0000	1.0000		1.0000
1:8	L1807246-25 T	0		1.0000	1.0000		1.0000
1:9	L1807246-27 T	0		1.0000	1.0000		1.0000
1:10	L1807766-07 T	0		1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	

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1:11	WG1095363-1	S	0	1.0000	1.0000		1.0000
1:12	WG1095363-2	S	0	1.0000	1.0000		1.0000
1:13	L1807516-01	S	0	1.0000	1.0000		1.0000
1:14	WG1095363-3	S	0	1.0000	1.0000		1.0000
1:15	WG1095363-4	S	0	1.0000	1.0000		1.0000
1:16	L1807395-03	S	0	1.0000	1.0000		1.0000
1:17	L1807516-02	S	0	1.0000	1.0000		1.0000
1:18	L1807516-03	S	0	1.0000	1.0000		1.0000
1:19	L1807516-04	S	0	1.0000	1.0000		1.0000
1:20	L1807516-05	S	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
1:21	L1807516-06	S	0	1.0000	1.0000		1.0000
2:1	L1807516-07	S	0	1.0000	1.0000		1.0000
2:2	L1807516-08	S	0	1.0000	1.0000		1.0000
2:3	L1807516-10	S	0	1.0000	1.0000		1.0000
2:4	L1807516-11	S	0	1.0000	1.0000		1.0000
2:5	L1807516-12	S	0	1.0000	1.0000		1.0000
2:6	L1807516-13	S	0	1.0000	1.0000		1.0000
2:7	L1807516-14	S	0	1.0000	1.0000		1.0000
2:8	L1807516-16	S	0	1.0000	1.0000		1.0000
2:9	L1807516-17	S	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
2:10	WG1095394-1	C	0	1.0000	1.0000		1.0000
2:11	WG1095394-2	C	0	1.0000	1.0000		1.0000
2:12	L1806872-01	C	0	1.0000	1.0000		1.0000
2:13	L1806872-02	C	0	1.0000	1.0000		1.0000
2:14	L1806872-03	C	0	1.0000	1.0000		1.0000
2:15	L1806872-04	C	0	1.0000	1.0000		1.0000
2:16	L1806872-05	C	0	1.0000	1.0000		1.0000
2:17	L1806872-06	C	0	1.0000	1.0000		1.0000
2:18	L1806872-07	C	0	1.0000	1.0000		1.0000
2:19	L1806872-08	C	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
2:20	L1806872-09	C	0	1.0000	1.0000		1.0000
2:21	L1806872-10	C	0	1.0000	1.0000		1.0000
1:1	L1806872-11	C	0	1.0000	1.0000		1.0000
1:2	L1806872-12	C	0	1.0000	1.0000		1.0000
1:3	WG1095393-1	P	0	1.0000	1.0000		1.0000
1:4	WG1095393-2	P	0	1.0000	1.0000		1.0000
1:5	L1806872-01	P	0	1.0000	1.0000		1.0000
1:6	L1806872-02	P	0	1.0000	1.0000		1.0000
1:7	L1806872-03	P	0	1.0000	1.0000		1.0000
1:8	L1806872-04	P	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
2:1	WG1095551-1	C	0	1.0000	1.0000		1.0000
2:2	WG1095551-2	C	0	1.0000	1.0000		1.0000
2:3	L1807698-01	C	0	1.0000	1.0000		1.0000
2:4	WG1095551-3	C	0	1.0000	1.0000		1.0000
2:5	WG1095551-4	C	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	
1:9	L1806872-05	P	0	1.0000	1.0000		1.0000
1:10	L1806872-06	P	0	1.0000	1.0000		1.0000
1:11	L1806872-07	P	0	1.0000	1.0000		1.0000
1:12	L1806872-08	P	0	1.0000	1.0000		1.0000
1:13	L1806872-09	P	0	1.0000	1.0000		1.0000
1:14	L1806872-10	P	0	1.0000	1.0000		1.0000
1:15	L1806872-11	P	0	1.0000	1.0000		1.0000
1:16	L1806872-12	P	0	1.0000	1.0000		1.0000
1:17	WG1095371-1	T	0	1.0000	1.0000		1.0000
1:18	WG1095371-2	T	0	1.0000	1.0000		1.0000
S:9	CCV	5		1.0000	1.0000	1.0000	
S:7	CCB	3		1.0000	1.0000	1.0000	

					00			
1:19	L1807052-01	T	0		1.0000	1.0000		1.0000
1:20	WG1095371-3	T	0		1.0000	1.0000		1.0000
1:21	WG1095371-4	T	0		1.0000	1.0000		1.0000
S:9	CCV	5		1.0000		1.0000	1.0000	
S:7	CCB	3		1.0000		1.0000	1.0000	

Sample Raw Data

Report Generated By CETAC QuickTrace
Analyst: metals-instrument
Worksheet file: C:\Program Files\QuickTrace\Worksheets\WG1095505-030818A.wsz
Date Started: 3/8/2018 11:17:22 AM
Comment:

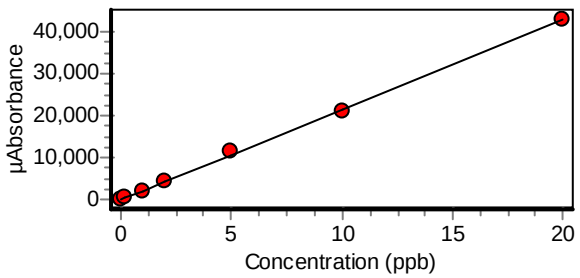
REVIEWED
By drm at 12:18 pm, Mar 14, 2018

Results--Mercury Analysis

Sample Name				Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
rinse				UNK	03/08/18 11:55:04 am	0.000	42	64.80	
Replicates	74.7	46.3	41.0	7.7					
Calibration Blank				STD	03/08/18 11:56:53 am	0.000	97	55.10	
Replicates	121.1	54.5	161.5	51.7					
Standard #1				STD	03/08/18 11:58:35 am	0.200	512	6.85	
Replicates	498.6	499.5	485.0	563.2					
Standard #2				STD	03/08/18 12:00:19 pm	1.000	2016	2.07	
Replicates	1975.4	2070.2	1992.3	2025.0					
Standard #3				STD	03/08/18 12:02:03 pm	2.000	4168	2.34	
Replicates	4265.1	4219.0	4041.7	4144.5					
Standard #4				STD	03/08/18 12:03:47 pm	5.000	11533	1.29	
Replicates	11716.0	11574.2	11475.3	11364.8					
Standard #5				STD	03/08/18 12:05:29 pm	10.000	20783	0.70	
Replicates	20686.7	20767.3	20684.2	20992.5					
Standard #6				STD	03/08/18 12:07:11 pm	20.000	39369	0.68	
Replicates	39350.1	39223.2	39149.0	39752.8					

Calibration

Equation: A = 97.202 + 2124.629C
R2: 0.99918
SEE: 514.7789
Flags:



Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
ICV					ICV	03/08/18 12:08:53 pm	2.640	5698	0.57	FQ
	Replicates	5659.4	5700.8	5692.5	5738.7					
	% Recovery	87.87								
Replacement: Standard #6					STD	03/08/18 12:10:56 pm	20.000	42695	0.54	
	Replicates	42977.6	42672.8	42411.2	42720.2					

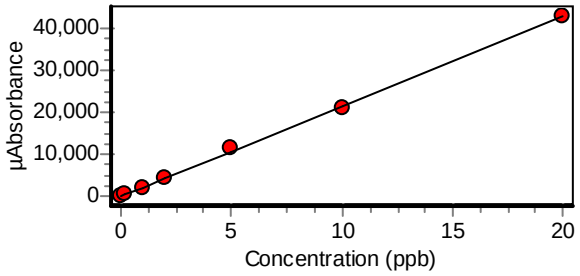
Calibration

Equation: A = 97.202 + 2124.629C

R2: 0.99918

SEE: 514.7789

Flags:



ICV					ICV	03/08/18 12:13:08 pm	2.620	5660	1.59	Q
	Replicates	5644.6	5593.2	5610.5	5791.0					
	% Recovery	87.27								
ICV					ICV	03/08/18 12:19:05 pm	2.780	6008	1.27	Q
	Replicates	6051.1	5900.2	6008.3	6071.8					
	% Recovery	92.73								
ICB					ICB	03/08/18 12:21:14 pm	-0.056	-22	183.49	
	Replicates	-53.4	36.3	-24.2	-48.7					
WG1095386-1 S					UNK	03/08/18 12:22:56 pm	-0.063	-36	129.13	
	Replicates	-74.1	-71.5	23.3	-21.3					
WG1095386-2 S					UNK	03/08/18 12:24:38 pm	0.999	2221	0.96	
	Replicates	2220.6	2246.5	2221.3	2194.3					
L1807489-01 S					UNK	03/08/18 12:26:20 pm	-0.079	-70	78.01	
	Replicates	-31.7	-37.3	-150.2	-62.0					
WG1095386-3 S					UNK	03/08/18 12:28:03 pm	4.970	10649	0.69	
	Replicates	10705.7	10707.8	10630.5	10552.5					
WG1095386-4 S					UNK	03/08/18 12:29:47 pm	-0.082	-76	35.39	
	Replicates	-89.6	-61.8	-46.8	-106.8					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
L1807489-02 S					UNK	03/08/18 12:31:31 pm	-0.084	-81	48.45	
Replicates	-37.9	-108.7	-58.3	-119.7						
L1807489-03 S					UNK	03/08/18 12:33:15 pm	-0.101	-117	42.69	
Replicates	-140.6	-81.8	-175.7	-69.7						
L1807489-04 S					UNK	03/08/18 12:34:56 pm	-0.099	-113	35.20	
Replicates	-98.9	-158.0	-65.7	-130.3						
L1807489-05 S					UNK	03/08/18 12:36:38 pm	-0.077	-66	37.32	
Replicates	-31.7	-88.7	-67.0	-78.5						
L1807489-06 S					UNK	03/08/18 12:38:21 pm	-0.097	-109	15.01	
Replicates	-120.9	-126.0	-95.7	-94.8						
CCV					CCV	03/08/18 12:40:05 pm	10.500	22300	1.51	
Replicates	22694.1	22449.8	22108.3	21946.3						
% Recovery	104.50									
CCB					CCB	03/08/18 12:41:48 pm	-0.074	-60	75.86	
Replicates	-62.4	-85.8	5.0	-95.2						
L1807749-01 S					UNK	03/08/18 12:45:44 pm	-0.101	-116	36.22	
Replicates	-146.6	-156.7	-68.3	-94.2						
WG1095466-1 C					UNK	03/08/18 12:47:28 pm	-0.125	-168	32.95	
Replicates	-178.3	-176.7	-224.2	-91.7						
WG1095466-2 C					UNK	03/08/18 12:49:12 pm	0.808	1814	2.77	
Replicates	1789.7	1843.3	1866.0	1755.3						
L1806011-02 C					UNK	03/08/18 12:50:56 pm	-0.124	-167	39.68	
Replicates	-117.1	-102.3	-223.2	-224.7						
WG1095466-3 C					UNK	03/08/18 12:52:38 pm	4.630	9930	0.95	
Replicates	10020.3	9980.7	9916.5	9804.2						

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
WG1095466-4 C					UNK	03/08/18 12:54:20 pm	-0.109	-134	34.90	
	Replicates	-89.4	-185.2	-160.5	-99.2					
L1806011-04 C					UNK	03/08/18 12:56:03 pm	-0.033	27	166.22	
	Replicates	59.7	-11.0	-12.5	73.5					
WG1095467-1 C					UNK	03/08/18 12:57:46 pm	-0.117	-152	25.78	
	Replicates	-136.3	-133.2	-129.0	-211.2					
WG1095467-2 C					UNK	03/08/18 12:59:29 pm	0.809	1816	3.11	
	Replicates	1859.3	1846.2	1825.7	1734.2					
L1806011-05 C					UNK	03/08/18 01:01:13 pm	-0.122	-162	46.54	
	Replicates	-164.3	-251.3	-66.8	-165.7					
CCV					CCV	03/08/18 01:02:57 pm	9.400	20065	0.81	
	Replicates	20271.4	20118.8	19944.5	19924.5					
	% Recovery	93.98								
CCB					CCB	03/08/18 01:04:40 pm	-0.064	-39	66.06	
	Replicates	-55.7	-1.8	-41.3	-56.8					
WG1095467-3 C					UNK	03/08/18 01:06:24 pm	4.720	10133	2.48	
	Replicates	10311.6	10292.8	10155.7	9770.7					
WG1095467-4 C					UNK	03/08/18 01:08:07 pm	-0.112	-141	31.43	
	Replicates	-146.9	-77.5	-178.7	-161.3					
L1806011-06 C					UNK	03/08/18 01:09:49 pm	-0.100	-115	39.70	
	Replicates	-110.9	-147.7	-51.8	-149.2					
CCV					CCV	03/08/18 01:11:33 pm	9.380	20036	0.70	
	Replicates	20162.6	20153.0	19917.5	19911.3					
	% Recovery	93.85								
CCB					CCB	03/08/18 01:13:16 pm	-0.064	-39	132.44	
	Replicates	-39.9	-104.5	-36.0	23.0					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
rinse					UNK	03/08/18 01:52:10 pm	-0.016	63	45.28	
	Replicates	50.7	37.2	103.3	61.2					
Calibration Blank					STD	03/08/18 01:53:59 pm	0.000	95	51.92	
	Replicates	99.4	161.7	50.0	67.5					
Standard #1					STD	03/08/18 01:55:42 pm	0.200	458	4.94	
	Replicates	489.9	442.7	459.0	441.2					
Standard #2					STD	03/08/18 01:57:25 pm	1.000	2018	2.55	
	Replicates	2013.1	2070.0	2039.0	1949.0					
Standard #3					STD	03/08/18 01:59:09 pm	2.000	4061	4.11	
	Replicates	4184.3	4222.5	3942.3	3893.5					
Standard #4					STD	03/08/18 02:00:53 pm	5.000	10490	0.92	
	Replicates	10596.1	10486.2	10516.0	10363.5					
Standard #5					STD	03/08/18 02:02:35 pm	10.000	20428	0.54	
	Replicates	20494.9	20483.8	20264.2	20470.0					
Standard #6					STD	03/08/18 02:04:17 pm	20.000	39127	0.55	
	Replicates	39284.4	39296.5	38834.8	39092.0					

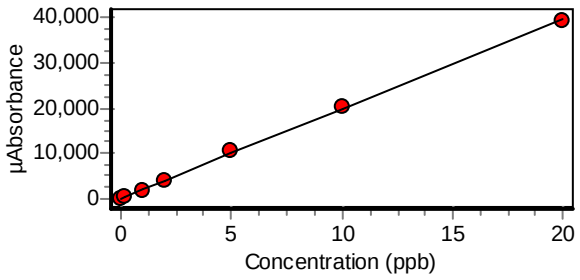
Calibration

Equation: A = 94.649 + 1973.225C

R2: 0.99924

SEE: 456.2904

Flags:



ICV					ICV	03/08/18 02:06:00 pm	2.990	5985	1.58	
	Replicates	6107.4	5909.2	5911.3	6013.3					
	% Recovery	99.51								
ICB					ICB	03/08/18 02:07:42 pm	-0.029	36	25.70	
	Replicates	43.1	45.5	25.8	31.5					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
WG1095362-1 T					UNK	03/08/18 02:09:24 pm	-0.040	15	322.29	
Replicates	-37.3	50.0	-14.5	61.8						
WG1095362-2 T					UNK	03/08/18 02:11:06 pm	1.010	2097	2.16	
Replicates	2126.4	2126.7	2103.8	2031.2						
L1807246-23 T					UNK	03/08/18 02:12:48 pm	-0.026	43	112.05	
Replicates	18.0	94.0	-11.3	72.0						
WG1095362-3 T					UNK	03/08/18 02:14:31 pm	5.170	10304	1.70	
Replicates	10483.7	10417.3	10203.8	10112.5						
WG1095362-4 T					UNK	03/08/18 02:16:15 pm	4.850	9662	2.10	
Replicates	9855.7	9800.8	9573.3	9419.0						
L1807246-22 T					UNK	03/08/18 02:17:59 pm	-0.045	5	164.28	
Replicates	19.1	-69.7	4.0	65.8						
L1807246-24 T					UNK	03/08/18 02:19:43 pm	-0.036	24	187.59	
Replicates	34.7	80.3	9.8	-28.0						
L1807246-25 T					UNK	03/08/18 02:21:25 pm	-0.034	28	202.90	
Replicates	-56.3	65.0	44.7	58.7						
L1807246-27 T					UNK	03/08/18 02:23:07 pm	-0.036	24	151.06	
Replicates	21.4	-25.5	42.7	56.0						
L1807766-07 T					UNK	03/08/18 02:24:49 pm	-0.028	40	98.56	
Replicates	19.6	48.8	90.5	0.3						
CCV					CCV	03/08/18 02:26:33 pm	11.200	22252	1.12	Q
Replicates	22540.7	22374.0	22093.2	22000.3						
% Recovery	112.29									
CCV					CCV	03/08/18 02:28:43 pm	11.000	21823	4.29	Q
Replicates	22653.6	22370.5	21717.7	20549.2						
% Recovery	110.11									

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCB					CCB	03/08/18 02:30:44 pm	-0.039	17	608.28	
	Replicates	50.4	23.5	120.8	-126.3					
WG1095363-1 S					UNK	03/08/18 02:32:27 pm	-0.057	-18	132.72	
	Replicates	-20.6	-43.5	14.2	-22.0					
WG1095363-2 S					UNK	03/08/18 02:34:11 pm	0.926	1921	2.36	
	Replicates	1955.9	1949.0	1922.8	1856.5					
L1807516-01 S					UNK	03/08/18 02:35:55 pm	-0.073	-50	84.61	
	Replicates	-93.1	-3.8	-78.2	-25.3					
WG1095363-3 S					UNK	03/08/18 02:37:39 pm	5.070	10108	4.75	
	Replicates	10446.4	10402.3	10173.7	9410.2					
WG1095363-4 S					UNK	03/08/18 02:39:21 pm	-0.047	2	451.45	
	Replicates	22.7	-20.5	-39.3	43.3					
L1807395-03 S					UNK	03/08/18 02:41:03 pm	-0.085	-73	78.49	
	Replicates	-42.9	-159.7	-45.2	-45.7					
L1807516-02 S					UNK	03/08/18 02:42:45 pm	-0.075	-53	72.92	
	Replicates	-16.9	-100.3	-68.5	-26.5					
L1807516-03 S					UNK	03/08/18 02:44:28 pm	-0.075	-54	39.99	
	Replicates	-50.0	-26.5	-61.5	-77.8					
L1807516-04 S					UNK	03/08/18 02:46:12 pm	-0.083	-69	109.63	
	Replicates	37.7	-102.7	-136.2	-74.0					
L1807516-05 S					UNK	03/08/18 02:47:56 pm	-0.093	-89	34.30	
	Replicates	-69.7	-122.5	-57.5	-106.8					
CCV					CCV	03/08/18 02:49:39 pm	10.000	19860	0.78	
	Replicates	20032.9	19919.0	19821.7	19665.5					
	% Recovery	100.17								

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCB					CCB	03/08/18 02:51:22 pm	-0.058	-20	155.20	
	Replicates	-19.4	-55.3	-28.0	21.2					
L1807516-06 S					UNK	03/08/18 02:53:06 pm	-0.073	-50	116.60	
	Replicates	-4.7	-26.5	-134.7	-32.8					
L1807516-07 S					UNK	03/08/18 02:54:49 pm	-0.086	-76	21.67	
	Replicates	-79.6	-95.3	-72.2	-55.8					
L1807516-08 S					UNK	03/08/18 02:56:31 pm	-0.076	-55	24.09	
	Replicates	-43.3	-52.8	-73.7	-49.3					
L1807516-10 S					UNK	03/08/18 02:58:14 pm	-0.088	-80	48.10	
	Replicates	-125.0	-79.5	-31.2	-83.7					
L1807516-11 S					UNK	03/08/18 02:59:57 pm	-0.100	-102	8.46	
	Replicates	-107.4	-110.7	-100.2	-91.2					
L1807516-12 S					UNK	03/08/18 03:01:40 pm	-0.094	-90	19.26	
	Replicates	-90.4	-114.2	-81.2	-74.5					
L1807516-13 S					UNK	03/08/18 03:03:24 pm	-0.077	-56	69.86	
	Replicates	-67.1	-11.5	-104.7	-42.3					
L1807516-14 S					UNK	03/08/18 03:05:09 pm	-0.098	-99	31.26	
	Replicates	-85.1	-129.3	-62.3	-119.5					
L1807516-16 S					UNK	03/08/18 03:06:52 pm	-0.079	-61	46.54	
	Replicates	-102.0	-38.7	-59.0	-45.2					
L1807516-17 S					UNK	03/08/18 03:08:35 pm	-0.102	-106	28.62	
	Replicates	-131.7	-77.3	-132.3	-82.0					
CCV					CCV	03/08/18 03:10:18 pm	11.200	22271	1.44	Q
	Replicates	22642.4	22429.7	22043.0	21968.0					
	% Recovery	112.39								

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV					CCV	03/08/18 03:12:27 pm	10.900	21668	0.72	
	Replicates	21712.7	21850.5	21631.3	21477.8					
	% Recovery	109.33								
CCB					CCB	03/08/18 03:14:10 pm	-0.068	-40	79.55	
	Replicates	-6.6	-53.2	-77.5	-22.2					
WG1095394-1 C					UNK	03/08/18 03:15:53 pm	-0.104	-110	12.53	
	Replicates	-124.1	-93.2	-118.3	-105.5					
WG1095394-2 C					UNK	03/08/18 03:17:36 pm	1.020	2106	2.85	
	Replicates	2180.4	2083.2	2038.8	2120.3					
L1806872-01 C					UNK	03/08/18 03:19:19 pm	-0.100	-102	14.79	
	Replicates	-110.0	-103.0	-115.2	-80.8					
L1806872-02 C					UNK	03/08/18 03:21:03 pm	-0.110	-122	32.10	
	Replicates	-124.7	-80.8	-109.2	-174.5					
L1806872-03 C					UNK	03/08/18 03:22:47 pm	-0.115	-132	28.05	
	Replicates	-115.6	-88.8	-172.8	-148.8					
L1806872-04 C					UNK	03/08/18 03:24:31 pm	-0.115	-133	27.71	
	Replicates	-111.1	-138.2	-183.0	-100.2					
L1806872-05 C					UNK	03/08/18 03:26:14 pm	-0.095	-93	69.13	
	Replicates	-121.7	2.7	-116.5	-135.7					
L1806872-06 C					UNK	03/08/18 03:27:58 pm	-0.123	-148	30.19	
	Replicates	-137.6	-102.8	-209.8	-142.5					
L1806872-07 C					UNK	03/08/18 03:29:41 pm	-0.086	-76	55.03	
	Replicates	-65.3	-26.2	-126.5	-86.2					
L1806872-08 C					UNK	03/08/18 03:31:25 pm	-0.120	-141	15.14	
	Replicates	-129.4	-126.3	-136.5	-172.7					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV					CCV	03/08/18 03:33:08 pm	10.200	20188	0.85	
	Replicates	20372.7	20294.3	20024.5	20058.7					
	% Recovery	101.83								
CCB					CCB	03/08/18 03:34:51 pm	-0.099	-101	28.64	
	Replicates	-137.9	-109.5	-80.7	-75.3					
L1806872-09 C					UNK	03/08/18 03:36:35 pm	-0.121	-145	11.53	
	Replicates	-137.6	-153.8	-162.8	-125.3					
L1806872-10 C					UNK	03/08/18 03:38:20 pm	-0.130	-162	31.64	
	Replicates	-162.4	-109.0	-231.0	-144.8					
L1806872-11 C					UNK	03/08/18 03:40:01 pm	-0.112	-126	36.10	
	Replicates	-136.1	-173.3	-63.8	-132.3					
L1806872-12 C					UNK	03/08/18 03:41:43 pm	-0.093	-90	58.76	
	Replicates	-36.3	-62.8	-157.7	-102.5					
WG1095393-1 P					UNK	03/08/18 03:43:25 pm	-0.139	-180	8.95	
	Replicates	-178.6	-183.0	-159.7	-198.8					
WG1095393-2 P					UNK	03/08/18 03:45:08 pm	0.855	1782	3.04	
	Replicates	1747.9	1846.0	1727.2	1805.7					
L1806872-01 P					UNK	03/08/18 03:46:52 pm	-0.127	-156	15.88	
	Replicates	-162.6	-151.2	-184.0	-124.7					
L1806872-02 P					UNK	03/08/18 03:48:36 pm	-0.143	-188	8.24	
	Replicates	-202.9	-197.3	-181.0	-169.0					
L1806872-03 P					UNK	03/08/18 03:50:20 pm	-0.131	-163	12.86	
	Replicates	-157.0	-147.8	-193.8	-153.0					
L1806872-04 P					UNK	03/08/18 03:52:02 pm	-0.142	-186	8.92	
	Replicates	-176.6	-198.5	-168.2	-202.3					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV					CCV	03/08/18 03:53:45 pm	10.200	20138	1.04	
	Replicates	20391.7	20224.7	20004.7	19932.7					
	% Recovery	101.58								
CCB					CCB	03/08/18 03:55:28 pm	-0.086	-75	42.38	
	Replicates	-51.4	-109.5	-94.5	-44.8					
WG1095551-1 C					UNK	03/08/18 04:00:06 pm	-0.165	-232	31.73	
	Replicates	-162.6	-318.0	-179.3	-267.0					
WG1095551-2 C					UNK	03/08/18 04:01:49 pm	0.977	2023	3.91	
	Replicates	2139.9	2003.2	1983.7	1966.8					
L1807698-01 C					UNK	03/08/18 04:03:31 pm	-0.156	-214	13.59	
	Replicates	-202.6	-180.3	-247.7	-226.0					
WG1095551-3 C					UNK	03/08/18 04:05:14 pm	5.370	10691	2.42	
	Replicates	10307.1	10860.7	10762.5	10832.5					
WG1095551-4 C					UNK	03/08/18 04:06:57 pm	-0.146	-194	12.56	
	Replicates	-169.6	-220.7	-209.2	-178.2					
CCV					CCV	03/08/18 04:08:41 pm	10.100	19986	1.14	
	Replicates	20157.6	20188.5	19891.3	19707.7					
	% Recovery	100.81								
CCB					CCB	03/08/18 04:10:24 pm	-0.124	-149	27.14	
	Replicates	-162.4	-103.2	-134.0	-198.3					
L1806872-05 P					UNK	03/08/18 04:12:06 pm	-0.159	-220	9.55	
	Replicates	-230.7	-197.7	-206.7	-243.0					
L1806872-06 P					UNK	03/08/18 04:13:48 pm	-0.156	-212	21.31	
	Replicates	-205.1	-159.8	-270.0	-214.2					
L1806872-07 P					UNK	03/08/18 04:15:31 pm	-0.144	-190	21.65	
	Replicates	-174.9	-138.5	-223.8	-222.3					

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
L1806872-08 P					UNK	03/08/18 04:17:15 pm	-0.141	-184	34.72	
Replicates	-106.9	-238.8	-233.8	-156.0						
L1806872-09 P					UNK	03/08/18 04:18:58 pm	-0.152	-205	15.06	
Replicates	-207.3	-227.5	-160.5	-224.0						
L1806872-10 P					UNK	03/08/18 04:20:43 pm	-0.142	-185	19.35	
Replicates	-198.0	-208.2	-132.0	-203.7						
L1806872-11 P					UNK	03/08/18 04:22:25 pm	-0.156	-214	15.99	
Replicates	-245.9	-232.5	-210.3	-167.7						
L1806872-12 P					UNK	03/08/18 04:24:07 pm	-0.165	-232	12.31	
Replicates	-266.6	-242.5	-204.7	-212.3						
WG1095371-1 T					UNK	03/08/18 04:25:49 pm	-0.169	-239	23.16	
Replicates	-166.1	-243.7	-245.5	-300.8						
WG1095371-2 T					UNK	03/08/18 04:27:32 pm	0.849	1770	1.37	
Replicates	1761.1	1770.0	1803.3	1745.8						
CCV					CCV	03/08/18 04:29:16 pm	10.600	21090	1.90	
Replicates	21395.4	21441.2	20916.5	20606.2						
% Recovery	106.40									
CCB					CCB	03/08/18 04:30:59 pm	-0.141	-184	15.19	
Replicates	-181.7	-202.2	-145.3	-206.7						
L1807052-01 T					UNK	03/08/18 04:32:42 pm	-0.140	-182	25.56	
Replicates	-193.0	-132.7	-241.7	-162.0						
WG1095371-3 T					UNK	03/08/18 04:35:45 pm	5.310	10578	1.16	
Replicates	10641.4	10661.5	10613.2	10397.0						
WG1095371-4 T					UNK	03/08/18 04:37:30 pm	-0.154	-209	27.52	
Replicates	-258.7	-255.0	-176.3	-144.0						

Sample Name					Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags
CCV					CCV	03/08/18 04:39:13 pm	10.200	20231	1.35	
	Replicates	20463.9	20422.8	20161.3	19875.5					
	% Recovery	102.05								
CCB					CCB	03/08/18 04:40:56 pm	-0.141	-184	36.40	
	Replicates	-215.7	-150.8	-259.7	-109.2					

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 14 2018, 04:59 pm

Work Group: WG1095393 for Department: 5 Inorganics Preparation

Created: 07-MAR-18 Due: Operator: rc

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1806872-01	SDT-DS-BFT-PC03	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-02	SDT-DS-BFT-PC06	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-03	SDT-DS-BFT-PC08	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-04	SDT-DS-BFT-CC03	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-05	SDT-DS-BFT-CC06	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-06	SDT-DS-BFT-CC08	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-07	SDT-DS-GVT-PC02	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-08	SDT-DS-GVT-PC04	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-09	SDT-DS-GVT-PC05	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-10	SDT-DS-GVT-CC02	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-11	SDT-DS-GVT-CC04	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-12	SDT-DS-GVT-CC05	S	CT-SPLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
WG1095393-1	Laboratory Method Bl	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-10	Initial Calibration	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-11	Initial Calibration	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-12	Continuing Calibrati	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-13	Continuing Calibrati	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-2	Laboratory Control S	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-3	Calibration Blank	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-4	Cal Standard 1	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-5	Cal Standard 2	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-6	Cal Standard 3	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-7	Cal Standard 4	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-8	Cal Standard 5	S	CT-SPLP-HG	SOIL	DONE	U				
WG1095393-9	Cal Standard 6	S	CT-SPLP-HG	SOIL	DONE	U				

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 14 2018, 04:59 pm

Work Group: WG1095394 for Department: 5 Inorganics Preparation

Created: 07-MAR-18 Due: Operator: rc

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1806872-01	SDT-DS-BFT-PC03	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-02	SDT-DS-BFT-PC06	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-03	SDT-DS-BFT-PC08	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-04	SDT-DS-BFT-CC03	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-05	SDT-DS-BFT-CC06	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-06	SDT-DS-BFT-CC08	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-07	SDT-DS-GVT-PC02	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-08	SDT-DS-GVT-PC04	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-09	SDT-DS-GVT-PC05	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-10	SDT-DS-GVT-CC02	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-11	SDT-DS-GVT-CC04	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
L1806872-12	SDT-DS-GVT-CC05	C	CT-TCLP-HG	SOIL	DONE	U	0327	0314	S0	EPlastic-C.25
WG1095394-1	Laboratory Method Bl	S	CT-TCLP-HG	SOIL	DONE	U				
WG1095394-2	Laboratory Control S	S	CT-TCLP-HG	SOIL	DONE	U				

Sample Preparation

METALS ELN REPORT

Workgroup: WG1095393

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	C798208	H2SO4	C689965	METALS	METSPIKE	HG18100609 15MG	METSPIKE	HG18100609 15MG	WHG26,15,2 11,76

Additional Reagent/Std	
	ICV1810060905MG
K2O8S2	PS1810051200RC
KMnO4	PP1808201510RC
NaCl-NH2OH.HCl	HH1809021819EA

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Splp Extract Date	Comments
L1806872-01 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-02 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-03 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-04 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-05 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-06 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-07 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-08 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-09 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-10 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-11 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
L1806872-12 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	

Reported: 14-MAR-18 04:59 PM

METALS ELN REPORT

Workgroup: WG1095393

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Splp Extract Date	Comments
WG1095393-1 BLANK	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-2 LCS	03/07/18 15:40	Raldi Cabral	5	.250	03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-3 CALBLANK	03/07/18 15:40	Raldi Cabral	0		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-4 STD1	03/07/18 15:40	Raldi Cabral	.050		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-5 STD2	03/07/18 15:40	Raldi Cabral	.250		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-6 STD3	03/07/18 15:40	Raldi Cabral	.5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-7 STD4	03/07/18 15:40	Raldi Cabral	1.25		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-8 STD5	03/07/18 15:40	Raldi Cabral	2.5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-9 STD6	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-10 ICV	03/07/18 15:40	Raldi Cabral	.250		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-11 ICB	03/07/18 15:40	Raldi Cabral	0		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-12 CCV	03/07/18 15:40	Raldi Cabral	2.5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	
WG1095393-13 CCB	03/07/18 15:40	Raldi Cabral	0		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 17:42	

Reported: 14-MAR-18 04:59 PM

METALS ELN REPORT

Workgroup: WG1095393

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 14-MAR-18 04:59 PM

METALS ELN REPORT

Workgroup: WG1095394

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	C798208	H2SO4	C689965	METALS	METSPIKE	HG18100609 15MG	METSPIKE	HG18100609 15MG	WHG26,15,2 11,76

Additional Reagent/Std	ICV1810060905MG
K2O8S2	PS1810051200RC
KMnO4	PP1808201510RC
NaCl-NH2OH.HCl	HH1809021819EA

Sample/ Type	Digestion Date	Analyst	Sample Vol **ml**	Spike Amt **ml**	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Tclp Extract Date	**Comments**
L1806872-01 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-02 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-03 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-04 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-05 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-06 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-07 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-08 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-09 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-10 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-11 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
L1806872-12 SOIL	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	

Reported: 14-MAR-18 05:00 PM

METALS ELN REPORT

Workgroup: WG1095394

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Tclp Extract Date	Comments
WG1095394-1 BLANK	03/07/18 15:40	Raldi Cabral	5		03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	
WG1095394-2 LCS	03/07/18 15:40	Raldi Cabral	5	.250	03/07/18 15:40	5	94.1	03/07/18 17:40	25	03/01/18 05:08	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 14-MAR-18 05:00 PM

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806996-01	3/1/18	02:01	TW	5.0	96.5	7.5	3.5mL	161022101F	2.5	1	
-02	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-01											
-04											
L1805098-02									↓	↓	
-03									7.5	2	
-08									<5	1	
-09									>5	2	
-23									>5	2	
-24									<5	1	
-25									>5	2	
L1806568-02									<5	1	
L1806669-01											
L1806666-01											
-02											
-03											
L1806738-01											
L1806832-01											
-02											
-03											
-04	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

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Initials: TW

Date: 3/1/18

Sample Number	Date	Time	Initials	Amount (g)	DI Vol. (mL)	pH (i)	1N HCL Vol (mL)	1N HCL Lot #	pH (f)	Fluid Number	Comments
L1806832-05	3/1/18	02:01	TW	5.0	96.5	>5	3.5mL	HCL032017	<5	1	
-06	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
-03											
-02											
-09											
-10											
-11											
-12											
L1807015-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

3/1/18

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Initials: TW

Date: 3/1/18

WG#: 1093318 & 1093351

TCLP Fluid Lot #:	1:1 HNO3	Temp(° C)	Unit ID#: 2	TCLP Fluid ID
Prep Date: 2-27-18/3-22-18 pH on Date Used: 4.91/2.93	Lot#: 1246302009	Max: 23.9 Min: 22.9	Acceptable Temp Range: 20°-25°C	(circle one) #3 #2 DI

Sample Type (Check Column): Organic	Inorganic	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO3 (preserved)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	2	3/1/18	05:05	19.4	TW	3/1/18	21:05	23.6	EYH	4.92	2.5mL	TW	
			Fluid 2 Blank	—											3.28			
			L1806916-01	10.0											4.91			Blank
			-02												4.96			
			-03												4.94			
			-04												4.91			
			L1805059-02												4.90			
			-03												4.95			Fluid 2
			-06			8									4.90			
			-09												5.42			Fluid 2
			-23												5.00			↓
			-24												4.93			
			-25												4.99			Fluid
			L1806811-01												5.60			
			-02												6.45			
			-03												6.56			
			-04			6									5.79			
	↓		-05	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	6.82	↓	↓	↓

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Initials: TW

Date: 3/2/18

WG#: 1097318

TCLP Fluid Lot #: FTCLP0227435	1:1 HNO3 Lot#: 1H0302207	Temp(° C) Max: 23.9 Min: 22.4	Unit ID#: 266	TCLP Fluid ID (circle one) #3 #2 DI
Prep Date: 3-12-18 pH on Date Used: 4.91		Acceptable Temp Range: 21°-25°C		

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
	X		Method Blank/PBC	—	2000	6	3/1/18	15:08	23.4	TW	3/2/18	2:08	23.6	CM	4.92	2.5mL	TW	
			L1806873-06	100											5.40			Push
			-04												5.35			
			-08												6.21			
			-09												6.46			
			-10			↓									5.48			
			-11			10									6.20			
			-12	↓	↓										6.29			↓
			L1806568-02	32	640										4.91			
			L1806664-01	100	2000										4.89			
			L1806666-01												5.15			
			-02												5.17			
			-03	↓	↓										5.58			
			L1806778-01	20	400										5.00			
	V		L1807015-01	100	2000	↓	↓	↓	↓	↓	↓	↓	↓	↓	4.95	↓	↓	
			3/1/18 TW															

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Initials: TW
Date: 3/2/18

WG#: 1093528

SPLP Fluid Lot #: SPLP0223-18-3	1:1 HNO3 Lot#: 1111-0630-2018	Temp(°C) Unit ID: 267 Max: 33.9 Min: 22.6	SPLP Fluid ID (circle one) #1 DI
prep. date: 02-27-18 pH: 4.21			

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	SPLP Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
X	X		PBSP (Prep Blank SPLP)	—	2000	13	3/1/18	17:42	23.6	EYA	3/2/18	09:42	23.3	LF	4.65	2.5mL	LF	Run Extr. this batch before filtering
			LB1806832-01	100											10.24			Rush
			-02												10.57			
			-03												10.42			
			-04												9.71			
			-05												10.24			
			-06												10.38			
			-07												9.67			
			-08												9.87			
			-09												10.84			
			-10												9.96			
			-11			↓									9.59			
↓			-12			5									10.17			↓
			LB1806936-02												10.30			
	↓		LB1805999-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	10.12	↓	↓	

Page Scanned and Saved to TCLPEXT -> SPLPEXT Folder

Initials: _____

Date: _____

True Values

As of 6/1/13, Mercury True Value criteria is as follows:

ICV	3 ug/l
LCSW	1 ug/l
MS(aq)	5 ug/l
MS(soil)	1 ug/l
CCV	10 ug/l

ERA

A Waters Company

Reference Materials

• Certificate of Analysis •

Product:	[illegible]
Catalog Number:	540
Lot No.	D933-540
Certificate Issue Date:	[illegible]
Expiration Date:	October 31, 2019
Revision Number:	2
Revision Date:	May 29, 2017

Product use instructions are included as part of the Instructions, Definitions and Explanations (separately) with the Certificate of Analysis. Please refer to the product use instructions for catalog [illegible]

[illegible]

Convert to %

Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[5]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	5970	6170	2.08	4780 - 7160	3460 - 12900
Antimony	245	217	3.49	174 - 261	24.5 - 295
Arsenic	31.5	29.6	47.6	20.8 - 38.5	18.3 - 57.9
Barium	213	198	3.05	164 - 232	145 - 251
Beryllium	97.5	92.0	5.26	76.3 - 108	68.5 - 116
Boron	147	122	4.08	87.8 - 150	32.0 - 186
Cadmium	76.6	71.5	5.50	59.4 - 83.6	52.3 - 140.5
Calcium	12400	6010	0.498	4230 - 7430	3470 - 7960
Chromium	102	102	5.10	81.5 - 122	70.8 - 139
Cobalt	54.2	51.4	5.25	43.2 - 59.5	39.2 - 64.6
Copper	164	153	8.22	125 - 180	115 - 190
Iron	29800	15200	5.39	7170 - 23200	5660 - 24700
Lead	156	139	8.13	114 - 163	101 - 176
Magnesium	4550	2760	1.81	2120 - 3410	1790 - 3730
Manganese	476	270	6.15	370 - 590	109 - 540
Mercury	8.55	8.56	3.97	6.82 - 8.53	3.41 - 9.91
Molybdenum	45.1	39.7	6.35	30.8 - 47.3	26.2 - 59.9
Nickel	144	129	3.50	107 - 151	94.2 - 164
Potassium	29200	2420	3.22	1720 - 3110	1460 - 3370
Selenium	67.0	62.6	5.60	47.4 - 73.9	36.8 - 84.5
Silver	38.0	35.4	8.26	27.6 - 45.2	23.9 - 48.9
Sodium	14400	819	7.50	588 - 1050	475 - 1160
Strontium	264	88.4	7.51	72.0 - 105	62.1 - 115

[illegible] Eagle Mountain Pkwy • Goodyear, AZ 85338 • 1-800-372-0122 • ph: 1-623-551-6455 • [illegible]

• Certificate of Analysis •

Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
[illegible]	[illegible]	101	7.96	80.0 - 122	67.6 - 134
Tin	96.4	85.8	6.46	58.3 - 105	47.4 - 124
[illegible]	2240	477	4.50	155 - 500	157 - 797
[illegible]	63.1	60.1	3.32	42.5 - [illegible]	[illegible] - 83.9
Vanadium	[illegible]	87.1	[illegible]	[illegible] - 99.1	50.4 - 112
Zinc	247	220	6.16	185 - 20[illegible]	157 - 289

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	59700	8770	88.2	152	-	-
Antimony	246	117	47.8	163	-	-
Arsenic	31.6	29.6	96.4	191	-	-
Barium	813	198	90.8	181	-	-
Beryllium	97.5	92.0	95.5	172	-	-
Boron	147	120	79.0	115	-	-
Cadmium	76.8	71.5	90.7	198	-	-
Calcium	[illegible]2700	6310	98.3	139	-	-
Chromium	139	107	91.8	185	-	-
Cobalt	54.2	51.4	96.9	170	-	-
Copper	164	153	91.9	183	-	-
Iron	29800	15200	90.2	154	-	-
Lead	159	157	95.0	202	-	-
Magnesium	4550	2760	91.7	144	-	-
Manganese	475	220	96.0	172	-	-
Mercury	6.05	6.86	100	129	-	-
Molybdenum	46.9	39.1	98.6	171	-	-
Nickel	144	128	91.6	192	-	-
Potassium	21200	2420	91.8	143	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[2]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Selenium	6.70	6.46	96.5	130	-	-
Silver	38.0	36.4	93.2	173	-	-
Sodium	7440	6739	92.7	142	-	-
Strontium	264	238.4	137	115	-	-
Thallium	111	107	96.1	171	-	-
Tin	96.4	86.8	91.0	125	-	
Titanium	2640	677	96.9	119	-	-
Uranium	63.1	60.1	1.53	25	-	-
Vanadium	129	81.3	92.3	146	-	-
Zinc	247	223	135	130	-	-

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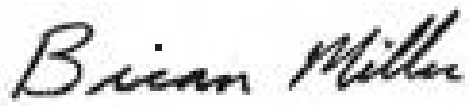
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If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Lesson





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ERA

A Waters Company

Reference Materials

• Certificate of Analysis •

Product:	Metals in Soil
Catalog Number:	540
Lot No:	0208-540
Certificate Issue Date:	June 25, 2012
Expiration Date:	January 31, 2013
Revision Number:	Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

Certified Values

Parameter	Certified Value¹	Reference Value²	Uncertainty³	QC Performance Acceptance Limits⁴	PT Performance Acceptance Limits⁴
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	7900	n/c	3690 - 12100	3070 - 12700
Antimony	184	98.5	1.64	6.37 - 191	18.4 - 253
Arsenic	178	166	7.65	138 - 194	117 - 215
Barium	228	213	9.52	175 - 251	156 - 270
Beryllium	67.3	58.6	8.37	48.3 - 57.7	42.5 - 73.5
Boron	91.7	89.1	3.22	45.0 - 89.3	41.5 - 131
Cadmium	143	129	6.88	106 - 151	94.2 - 152
Calcium	5190	4720	6.57	3840 - 5590	3420 - 6010
Chromium	107	101	3.09	83.4 - 120	70.5 - 132
Cobalt	77.4	68.4	5.06	57.4 - 79.5	50.9 - 86.0
Copper	116	110	7.37	91.9 - 128	81.9 - 138
Iron	15000	14100	10.5	8710 - 19700	4950 - 23300
Lead	210	200	8.96	167 - 238	147 - 254
Magnesium	2370	2240	4.87	1730 - 2850	1420 - 3160
Manganese	363	370	5.74	304 - 436	280 - 460
Mercury	13.7	12.8	7.50	6.40 - 19.1	6.56 - 26.1
Molybdenum	32.8	32.4	n/c	25.5 - 39.2	20.3 - 44.4
Nickel	84.4	87.1	6.82	71.8 - 102	62.8 - 112
Potassium	2420	1990	6.19	1380 - 2010	1140 - 2530
Selenium	130	117	6.86	91.2 - 141	77.3 - 156
Silver	91.4	88.5	8.20	69.3 - 104	58.4 - 115
Sodium	590	620	6.19	458 - 785	338 - 904
Strontium	59.1	59.6	1.20	48.9 - 70.3	41.5 - 77.6
Thallium	156	142	9.14	114 - 169	96.8 - 187

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Parameter	Certified Value[1]	Reference Value[2]	Uncertainty[3]	QC Performance Acceptance Limits[4]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	151	135	6.93	100 - 203	80.1 - 191
Titanium	450	336	3.79	65.5 - 606	63.9 - 601
Tungsten	113	109	7.77	82.0 - 136	75.4 - 143
Vanadium	104	97.5	5.44	76.9 - 117	63.7 - 131
Zinc	254	240	4.89	194 - 286	170 - 311

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	13100	7900	78.2	149	-	-
Antimony	184	98.5	52.5	158	-	-
Arsenic	178	166	93.3	192	-	-
Barium	228	213	93.4	165	-	-
Beryllium	61.3	58.0	94.6	165	-	-
Boron	91.7	69.1	75.4	108	-	-
Cadmium	143	129	89.9	189	-	-
Calcium	5190	4720	90.9	131	-	-
Chromium	137	131	94.9	184	-	-
Cobalt	71.4	68.4	95.9	154	-	-
Copper	116	110	94.6	151	-	-
Iron	15000	14100	93.9	144	-	-
Lead	213	203	96.5	256	-	-
Magnesium	2570	2290	89.1	137	-	-
Manganese	383	370	96.6	158	-	-
Mercury	20.7	12.8	59.8	128	-	-
Molybdenum	38.8	32.4	83.5	154	-	-
Nickel	96.4	87.1	91.3	184	-	-
Potassium	2420	1990	82.4	137	-	-
Selenium	130	117	89.7	179	-	-

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Parameter	Certified Value*	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery†	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	9.4	8.8	94.8	158	-	-
Sodium	690	621	90.0	125	-	
Strontium	58.1	59.6	101	93	-	-
Thallium	156	142	90.8	161	-	-
Tin	157	135	85.6	109	-	-
Titanium	450	336	74.6	134	-	-
Uranium	110	109	99.2	31	-	-
Vanadium	134	97.0	99.0	150	-	-
Zinc	254	240	94.6	182	-	-

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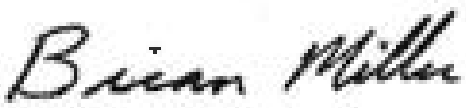
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If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer	Quality Officer
Brian Miller	Patrick Larson





Organics

PAH/PCB Congeners
by Method 8270
Selective Ion Monitoring

Initial Calibration

Response Factor Report BNA2

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
1)	i	Cl2-BZ#15-C13	ISTD								
2)	s	Cl3-BZ#19-C13 ...	0.366	0.347	0.335	0.344	0.351	0.354	0.366	0.352	3.17
3)	A1	Cl1-BZ#1-Cal/RTW	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
4)	A2	Monochlorobiph...	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
5)	A2	Cl1- conf Ion	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
6)	T	Cl1-BZ#2	1.014	0.947	0.922	0.952	0.967	0.979	1.008	0.970	3.42
7)	T	Cl1-BZ#3-RTW	0.956	0.923	0.914	0.942	0.956	0.973	1.001	0.952	3.09
8)	T	Cl2-BZ#4/#10-RTW	0.552	0.547	0.532	0.558	0.560	0.568	0.581	0.557	2.81
9)	T	Cl2-BZ#9	0.709	0.687	0.681	0.711	0.719	0.739	0.767	0.716	4.15
10)	T	Cl2-BZ#7	0.676	0.668	0.670	0.699	0.710	0.723	0.738	0.698	3.93
11)	T	Cl2-BZ#6	0.793	0.734	0.728	0.755	0.771	0.785	0.812	0.768	4.03
12)	T	Cl2-BZ#5	0.732	0.682	0.657	0.679	0.694	0.706	0.734	0.698	4.07
13)	A1	Cl2-BZ#8	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
14)	A2	Dichlorobiphenyls	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
15)	A2	Cl2-Conf Ion	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
16)	T	Cl3-BZ#19-RTW	0.411	0.387	0.369	0.384	0.389	0.397	0.407	0.392	3.67
17)	T	Cl2-BZ#14	0.754	0.737	0.723	0.752	0.774	0.797	0.825	0.766	4.63
18)	T	Cl3-BZ#30	0.611	0.612	0.594	0.621	0.630	0.647	0.666	0.626	3.88
19)	T	Cl3-BZ#18	0.465	0.436	0.406	0.424	0.429	0.437	0.452	0.436	4.37
20)	T	Cl2-BZ#11	0.805	0.777	0.772	0.815	0.841	0.867	0.877	0.822	5.05
21)	T	Cl3-BZ#17	0.434	0.386	0.375	0.397	0.407	0.414	0.425	0.406	5.16
22)	T	Cl2-BZ#12	0.712	0.676	0.692	0.719	0.739	0.762	0.791	0.727	5.50
23)	T	Cl3-BZ#27	0.550	0.544	0.530	0.559	0.571	0.583	0.595	0.562	4.05
24)	T	Cl2-BZ#13	0.800	0.836	0.786	0.819	0.848	0.874	0.903	0.838	4.89
25)	T	Cl3-BZ#24	0.568	0.566	0.544	0.571	0.585	0.596	0.612	0.577	3.88
26)	T	Cl3-BZ#16	0.369	0.350	0.333	0.349	0.352	0.359	0.369	0.354	3.61
27)	T	Cl3-BZ#32	0.652	0.607	0.579	0.605	0.617	0.631	0.649	0.620	4.18
28)	T	Cl2-BZ#15-RTW	0.873	0.873	0.818	0.845	0.845	0.837	0.852	0.849	2.33
29)	T	Cl3-BZ#34	0.573	0.554	0.552	0.577	0.585	0.598	0.617	0.579	3.99
30)	T	Cl3-BZ#23	0.569	0.521	0.535	0.567	0.580	0.596	0.612	0.569	5.62
31)	T	Cl4-BZ#54-RTW	0.526	0.510	0.505	0.532	0.538	0.544	0.556	0.530	3.39

Response Factor Report BNA2

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
32)	A1	Cl3-BZ#29-Cal	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
33)	A2	Trichlorobiphe...	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
34)	A2	Cl3- Conf Ion	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
35)	A1	Cl4-BZ#50-Cal	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
36)	A2	Tetrachlorobip...	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
37)	A2	Cl4-Conf Ion	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
38)	T	Cl3-BZ#26	0.675	0.609	0.601	0.630	0.645	0.665	0.682	0.644	4.94
39)	T	Cl3-BZ#25	0.603	0.628	0.588	0.616	0.630	0.650	0.674	0.627	4.62
40)	T	Cl4-BZ#53	0.499	0.468	0.467	0.486	0.487	0.499	0.513	0.489	3.51
41)	T	Cl3-BZ#-31	0.858	0.901	0.803	0.845	0.864	0.885	0.904	0.866	4.09
42)	T	Cl3-BZ#28	0.869	0.828	0.784	0.830	0.858	0.877	0.924	0.853	5.21
43)	T	Cl3-BZ#33	0.542	0.555	0.557	0.619	0.644	0.646	0.693	0.608	9.48
44)	T	Cl3-BZ#21/#20	0.708	0.749	0.746	0.770	0.795	0.812	0.808	0.770	4.95
45)	T	Cl4-BZ#51	0.538	0.484	0.515	0.543	0.561	0.564	0.570	0.539	5.70
46)	T	Cl4-BZ#45	0.419	0.400	0.400	0.417	0.429	0.436	0.447	0.421	4.18
47)	T	Cl3-BZ#22	0.714	0.703	0.711	0.751	0.770	0.783	0.818	0.750	5.74
48)	T	Cl4-BZ#73/#46	0.514	0.549	0.535	0.563	0.586	0.589	0.604	0.563	5.75
49)	T	Cl4-BZ#69	0.631	0.648	0.632	0.667	0.687	0.703	0.740	0.673	5.97
50)	T	Cl4-BZ#43	0.449	0.433	0.423	0.441	0.447	0.460	0.457	0.444	2.97
51)	T	Cl3-BZ#36	0.747	0.757	0.794	0.847	0.867	0.904	0.925	0.835	8.43
52)	T	Cl4-BZ#52	0.601	0.527	0.504	0.535	0.546	0.552	0.562	0.547	5.57
53)	T	Cl4-BZ#48	0.461	0.457	0.459	0.489	0.501	0.508	0.525	0.486	5.59
54)	T	Cl4-BZ#49	0.553	0.514	0.479	0.511	0.526	0.533	0.544	0.523	4.67
55)	T	Cl5-BZ#104-RTW	0.512	0.534	0.523	0.539	0.548	0.556	0.566	0.540	3.46
56)	T	Cl4-BZ#47	0.635	0.602	0.600	0.497	0.525	0.529	0.558	0.564	8.87
57)	T	Cl4-BZ#65/#75/#62	0.608	0.598	0.601	0.682	0.703	0.716	0.729	0.662	8.76
58)	T	Cl3-BZ#39	0.720	0.733	0.726	0.764	0.781	0.811	0.848	0.769	6.22
59)	T	Cl3-BZ#38	0.651	0.679	0.705	0.757	0.776	0.801	0.822	0.742	8.68
60)	T	Cl4-BZ#44	0.417	0.470	0.429	0.454	0.458	0.469	0.488	0.455	5.39
61)	T	Cl4-BZ#59	0.653	0.685	0.651	0.644	0.660	0.672	0.706	0.667	3.28
62)	T	Cl4-BZ#42	0.436	0.387	0.378	0.440	0.453	0.463	0.470	0.432	8.36
63)	T	Cl4-BZ#71	0.699	0.677	0.663	0.693	0.706	0.724	0.744	0.701	3.92

Response Factor Report BNA2

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
64)	T	Cl3-BZ#35	0.712	0.736	0.731	0.770	0.797	0.827	0.857	0.776	6.92
65)	T	Cl4-BZ#41	0.416	0.378	0.407	0.430	0.435	0.449	0.464	0.426	6.64
66)	T	Cl4-BZ#72	0.657	0.704	0.679	0.737	0.772	0.792	0.794	0.733	7.52
67)	T	Cl5-BZ#96	0.524	0.573	0.561	0.594	0.604	0.613	0.616	0.584	5.67
68)	T	Cl5-BZ#103	0.425	0.419	0.423	0.455	0.465	0.474	0.497	0.451	6.64
69)	T	Cl4-BZ#68/#64	0.628	0.617	0.642	0.685	0.713	0.722	0.747	0.679	7.49
70)	T	Cl4-BZ#40	0.331	0.308	0.313	0.329	0.339	0.346	0.350	0.331	4.83
71)	T	Cl3-BZ#37-RTW	0.924	0.996	0.970	1.027	1.063	1.093	1.146	1.031	7.34
72)	T	Cl5-BZ#100	0.481	0.447	0.457	0.486	0.501	0.505	0.527	0.486	5.71
73)	T	Cl5-BZ#94	0.302	0.318	0.361	0.367	0.377	0.388	0.400	0.359	10.10
74)	T	Cl4-BZ#57	0.660	0.651	0.697	0.740	0.772	0.792	0.796	0.730	8.35
75)	T	Cl4-BZ#67/#58	0.658	0.668	0.699	0.740	0.766	0.793	0.818	0.735	8.41
76)	T	Cl5-BZ#102	0.480	0.487	0.500	0.518	0.534	0.544	0.554	0.517	5.58
77)	T	Cl4-BZ#61	0.693	0.667	0.688	0.714	0.742	0.761	0.798	0.723	6.35
78)	T	Cl5-BZ#98	0.436	0.446	0.458	0.471	0.490	0.500	0.512	0.473	6.08
79)	T	Cl4-BZ#76	0.691	0.698	0.723	0.772	0.797	0.819	0.851	0.764	8.12
80)	T	Cl5-BZ#93	0.365	0.333	0.368	0.390	0.395	0.407	0.416	0.382	7.45
81)	T	Cl4-BZ#63	0.637	0.657	0.647	0.685	0.709	0.717	0.749	0.686	6.03
82)	T	Cl5-BZ#121/#95...	0.459	0.470	0.487	0.511	0.530	0.539	0.552	0.507	7.07
83)	T	Cl4-BZ#74	0.711	0.707	0.716	0.749	0.781	0.806	0.840	0.759	6.86
84)	T	Cl6-BZ#155-RTW	0.551	0.530	0.536	0.565	0.575	0.582	0.595	0.562	4.27
85)	T	Cl4-BZ#70	0.761	0.721	0.744	0.770	0.806	0.824	0.844	0.781	5.73
86)	T	Cl4-BZ#66	0.650	0.659	0.662	0.709	0.736	0.751	0.785	0.707	7.41
87)	T	Cl5-BZ#91	0.446	0.439	0.425	0.437	0.449	0.457	0.474	0.447	3.49
88)	T	Cl4-BZ#80	0.684	0.710	0.692	0.733	0.761	0.783	0.821	0.741	6.80
89)	T	Cl4-BZ#55	0.700	0.717	0.712	0.745	0.780	0.799	0.841	0.756	6.89
90)	T	Cl5-BZ#92	0.416	0.409	0.415	0.435	0.449	0.456	0.472	0.436	5.47
91)	T	Cl5-BZ#89/#84	0.400	0.406	0.393	0.415	0.429	0.434	0.446	0.418	4.69
92)	T	Cl5-BZ#101/#90	0.462	0.435	0.458	0.483	0.501	0.510	0.519	0.481	6.43
93)	s	Cl5-BZ#101-C13...	0.477	0.483	0.481	0.512	0.535	0.547	0.563	0.514	6.77
94)	T	Cl4-BZ#56	0.696	0.704	0.700	0.738	0.778	0.794	0.826	0.748	6.92
95)	T	Cl5-BZ#113	0.520	0.523	0.553	0.562	0.579	0.595	0.627	0.566	6.83

Response Factor Report BNA2

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
96)	T	Cl5-BZ#99	0.540	0.511	0.516	0.535	0.550	0.564	0.587	0.543	4.91
97)	T	Cl6-BZ#150	0.589	0.573	0.573	0.599	0.619	0.621	0.644	0.602	4.46
98)	T	Cl4-BZ#60	0.777	0.733	0.745	0.791	0.827	0.842	0.881	0.800	6.71
99)	T	Cl6-BZ#152	0.599	0.614	0.618	0.656	0.667	0.671	0.696	0.646	5.57
100)	T	Cl5-BZ#119	0.634	0.567	0.626	0.668	0.685	0.704	0.722	0.658	8.09
101)	T	Cl5-BZ#83/#125...	0.523	0.504	0.520	0.546	0.566	0.579	0.596	0.548	6.22
102)	T	Cl5-BZ#86/#109	0.519	0.498	0.524	0.531	0.553	0.581	0.606	0.545	6.94
103)	T	Cl5-BZ#97	0.363	0.376	0.391	0.416	0.432	0.423	0.440	0.406	7.24
104)	T	Cl5-BZ#116	0.530	0.524	0.527	0.562	0.576	0.590	0.613	0.560	6.21
105)	A1	Cl5-BZ#87/#111	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
106)	A2	Pentachlorobip...	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
107)	A2	Cl5-Conf Ion	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
108)	T	Cl6-BZ#145	0.672	0.621	0.631	0.666	0.685	0.685	0.708	0.667	4.63
109)	T	Cl6-BZ#148	0.451	0.430	0.427	0.453	0.467	0.471	0.490	0.456	4.96
110)	T	Cl4-BZ#79	0.703	0.687	0.676	0.736	0.757	0.784	0.811	0.736	6.91
111)	A1	Cl6-BZ#154-Cal	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
112)	A2	Hexachlorobiph...	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
113)	A2	Cl6-Conf Ion	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
114)	T	Cl4-BZ#78	0.800	0.831	0.854	0.919	0.956	0.982	1.039	0.912	9.54
115)	T	Cl6-BZ#136	0.564	0.542	0.551	0.589	0.603	0.606	0.631	0.584	5.59
116)	T	Cl5-BZ#117	0.647	0.646	0.663	0.699	0.722	0.729	0.746	0.693	5.97
117)	T	Cl5-BZ#115	0.647	0.638	0.654	0.684	0.703	0.724	0.759	0.687	6.46
118)	T	Cl5-BZ#85	0.426	0.433	0.402	0.410	0.423	0.442	0.467	0.429	4.99
119)	T	Cl5-BZ#120	0.620	0.624	0.637	0.674	0.688	0.708	0.750	0.671	7.16
120)	T	Cl5-BZ#110	0.689	0.619	0.604	0.631	0.654	0.668	0.672	0.648	4.78
121)	T	Cl4-BZ#81	0.689	0.715	0.695	0.724	0.754	0.775	0.824	0.739	6.51
122)	i	Cl7-BZ#180-C13	----------ISTD----------								
123)	T	Cl6-BZ#151	0.842	0.884	0.803	0.838	0.857	0.874	0.887	0.855	3.50
124)	T	Cl6-BZ#135	0.881	0.825	0.868	0.899	0.936	0.944	0.959	0.902	5.30
125)	T	Cl5-BZ#82	0.710	0.722	0.746	0.774	0.797	0.818	0.833	0.771	6.15
126)	T	Cl6-BZ#144	0.889	0.795	0.834	0.876	0.902	0.922	0.937	0.879	5.65

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
127)	T	Cl6-BZ#147/#149	0.989	0.872	0.880	0.927	0.951	0.967	0.985	0.939	5.10
128)	T	Cl4-BZ#77-RTW	1.242	1.198	1.185	1.256	1.315	1.367	1.417	1.283	6.77
129)	T	Cl6-BZ#143/#139	0.872	0.822	0.854	0.905	0.938	0.956	0.968	0.902	6.09
130)	T	Cl5-BZ#124	1.124	1.145	1.159	1.205	1.255	1.282	1.321	1.213	6.16
131)	T	Cl5-BZ#108	1.139	1.179	1.173	1.229	1.309	1.307	1.288	1.232	5.69
132)	T	Cl5-BZ#107/#123	1.279	1.199	1.248	1.297	1.334	1.401	1.437	1.314	6.37
133)	T	Cl6-BZ#140	0.866	0.864	0.818	0.847	0.889	0.905	0.914	0.872	3.86
134)	A1	Cl7-BZ#188-Cal...	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
135)	A2	Heptachlorobip...	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
136)	A2	Cl7-Conf Ion	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
137)	T	Cl6-BZ#134	0.695	0.658	0.707	0.756	0.780	0.799	0.807	0.743	7.69
138)	T	Cl5-BZ#106	1.068	1.039	1.064	1.255	1.333	1.197	1.405	1.194	12.05
139)	T	Cl6-BZ#133	1.065	0.897	0.947	1.015	1.080	1.052	1.024	1.011	6.58
140)	T	Cl6-BZ#142	0.706	0.637	0.646	0.660	0.642	0.712	0.755	0.680	6.65
141)	T	Cl5-BZ#118	1.142	1.086	1.085	1.147	1.188	1.217	1.249	1.159	5.41
142)	T	Cl6-BZ#131	0.798	0.730	0.729	0.782	0.794	0.817	0.832	0.783	5.12
143)	T	Cl7-BZ#184	1.020	0.986	0.944	1.008	1.030	1.044	1.061	1.013	3.82
144)	T	Cl6-BZ#165	1.079	1.037	1.032	1.100	1.133	1.161	1.170	1.102	5.08
145)	T	Cl6-BZ#146	0.972	0.912	0.918	0.949	0.976	1.000	1.024	0.964	4.28
146)	T	Cl6-BZ#161	1.204	1.145	1.143	1.211	1.262	1.304	1.320	1.227	5.80
147)	T	Cl5-BZ#122	1.034	1.006	1.001	1.052	1.094	1.134	1.156	1.068	5.74
148)	T	Cl6-BZ#168	1.209	1.095	1.091	1.170	1.240	1.233	1.215	1.179	5.34
149)	T	Cl5-BZ#114	1.133	1.064	1.112	1.161	1.213	1.248	1.282	1.173	6.65
150)	T	Cl6-BZ#153	1.085	1.012	0.996	1.010	1.024	1.080	1.141	1.050	5.09
151)	s	Cl6-BZ#153-C13...	0.962	0.816	0.856	0.911	0.945	0.963	0.982	0.919	6.73
152)	T	Cl6-BZ#132	0.857	0.850	0.797	0.822	0.847	0.855	0.870	0.842	2.97
153)	T	Cl7-BZ#179	1.064	1.039	1.004	1.029	1.052	1.058	1.078	1.046	2.35
154)	T	Cl6-BZ#141	0.868	0.810	0.792	0.828	0.852	0.864	0.886	0.843	4.01
155)	T	Cl7-BZ#176	1.032	0.985	0.940	0.968	0.993	1.007	1.030	0.994	3.33
156)	T	Cl5-BZ#105	1.428	1.491	1.334	1.391	1.420	1.475	1.508	1.435	4.26
157)	T	Cl6-BZ#137	0.799	0.823	0.833	0.861	0.890	0.912	0.929	0.864	5.62
158)	T	Cl5-BZ#127	1.541	1.587	1.488	1.518	1.578	1.633	1.674	1.574	4.12

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
159)	T	Cl7-BZ#186	1.091	1.023	1.075	1.102	1.137	1.145	1.167	1.106	4.42
160)	T	Cl6-BZ#130/#164	0.999	0.954	0.954	0.989	1.030	1.051	1.077	1.008	4.68
161)	T	Cl7-BZ#178	0.777	0.735	0.711	0.740	0.768	0.779	0.793	0.758	3.88
162)	T	Cl6-BZ#138	1.059	0.997	0.971	0.982	1.031	1.045	1.086	1.024	4.15
163)	T	Cl6-BZ#163/#160	1.070	1.103	1.105	1.165	1.203	1.224	1.239	1.158	5.73
164)	T	Cl6-BZ#129/#158	0.936	0.942	0.910	0.950	0.969	1.003	1.050	0.966	4.90
165)	T	Cl7-BZ#182/#175	0.805	0.808	0.837	0.872	0.905	0.919	0.926	0.867	5.93
166)	T	Cl7-BZ#187	0.881	0.907	0.851	0.870	0.896	0.894	0.919	0.888	2.61
167)	T	Cl7-BZ#183	0.853	0.823	0.814	0.851	0.867	0.873	0.895	0.854	3.29
168)	T	Cl6-BZ#166	1.294	1.194	1.190	1.237	1.274	1.289	1.331	1.258	4.24
169)	T	Cl6-BZ#159	1.208	1.248	1.189	1.233	1.277	1.304	1.351	1.258	4.47
170)	T	Cl5-BZ#126-RTW	1.402	1.520	1.455	1.516	1.576	1.623	1.681	1.539	6.24
171)	T	Cl7-BZ#185	0.886	0.718	0.735	0.775	0.796	0.814	0.835	0.794	7.33
172)	T	Cl6-BZ#162	1.138	1.023	1.113	1.213	1.188	1.221	1.267	1.166	7.01
173)	T	Cl7-BZ#174	0.787	0.753	0.758	0.779	0.801	0.813	0.828	0.788	3.51
174)	T	Cl6-BZ#128	0.889	0.772	0.821	0.849	0.878	0.902	0.926	0.862	6.11
175)	T	Cl6-BZ#167	1.488	1.492	1.480	1.521	1.572	1.609	1.670	1.547	4.66
176)	T	Cl8-BZ#202-RTW	0.923	0.807	0.854	0.883	0.912	0.924	0.942	0.892	5.32
177)	s	Cl8-BZ#202-C13...	1.071	0.901	0.873	0.905	0.941	0.939	0.964	0.942	6.83
178)	T	Cl7-BZ#181	0.842	0.809	0.846	0.895	0.920	0.934	0.959	0.886	6.25
179)	T	Cl7-BZ#177	0.768	0.720	0.763	0.757	0.779	0.789	0.805	0.769	3.51
180)	A1	Cl8-BZ#204/#20...	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
181)	A2	Octachlorobiph...	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
182)	A2	Cl8-Conf Ion	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
183)	T	Cl7-BZ#171	0.725	0.742	0.730	0.745	0.763	0.771	0.794	0.753	3.23
184)	T	Cl7-BZ#173	0.720	0.777	0.707	0.723	0.745	0.749	0.771	0.742	3.54
185)	T	Cl7-BZ#172	0.826	0.782	0.769	0.780	0.790	0.805	0.829	0.797	2.93
186)	T	Cl7-BZ#192	1.036	1.056	1.061	1.075	1.112	1.137	1.168	1.092	4.39
187)	T	Cl6-BZ#156	1.290	1.099	1.139	1.178	1.212	1.239	1.285	1.206	5.99
188)	T	Cl6-BZ#157	1.336	1.206	1.178	1.225	1.247	1.249	1.279	1.246	4.12
189)	T	Cl7-BZ#180	0.970	0.959	0.986	0.945	0.961	0.946	1.024	0.970	2.86
190)	T	Cl7-BZ#193	1.024	1.025	0.910	1.005	1.020	1.022	0.983	0.998	4.19

Response Factor Report BNA2

Method Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Method File : 209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018
Response Via : Initial Calibration

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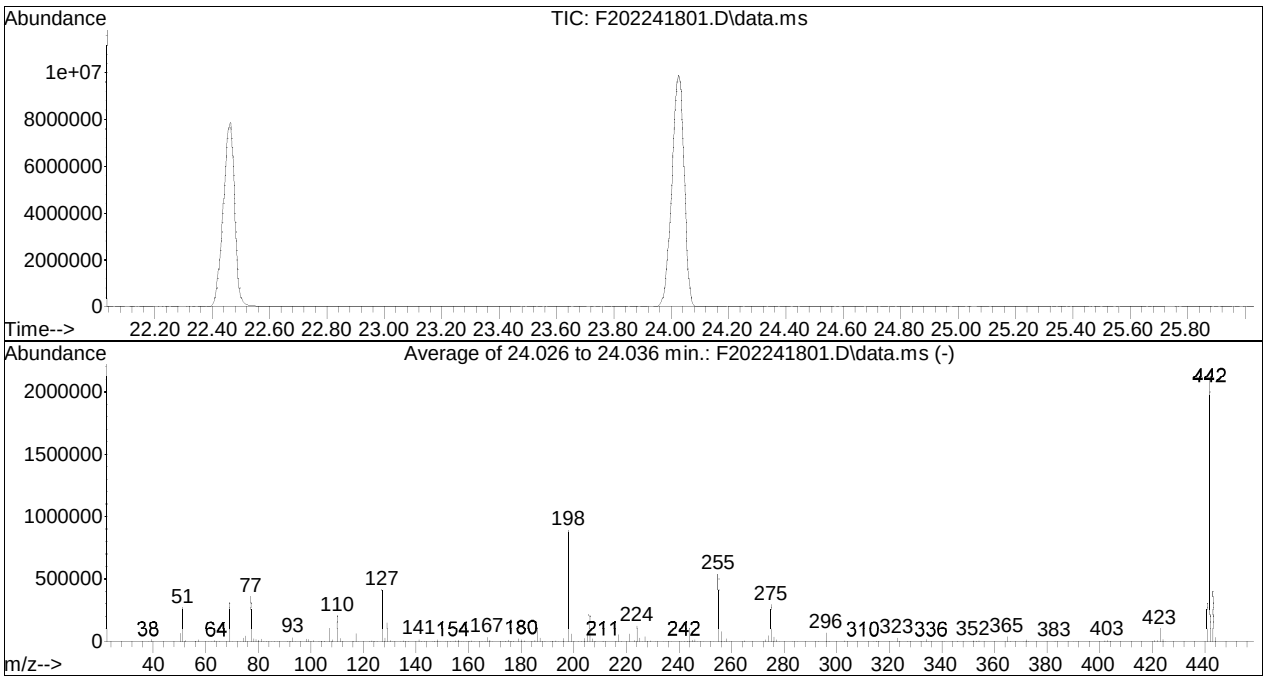
	Compound	.5	1	10	20	50	200	500	Avg	%RSD
191) T	Cl8-BZ#197	0.917	0.851	0.859	0.887	0.905	0.908	0.934	0.894	3.44
192) T	Cl7-BZ#191	1.071	0.997	0.985	1.019	1.041	1.057	1.086	1.037	3.64
193) T	Cl8-BZ#199	0.915	0.904	0.848	0.868	0.887	0.891	0.908	0.889	2.66
194) T	Cl8-BZ#198	0.810	0.689	0.737	0.770	0.703	0.782	0.789	0.754	6.04
195) T	Cl8-BZ#201	0.710	0.612	0.619	0.618	0.701	0.634	0.662	0.651	6.29
196) T	Cl7-BZ#170	0.771	0.786	0.699	0.726	0.746	0.752	0.778	0.751	4.09
197) T	Cl7-BZ#190	1.037	1.068	1.067	1.086	1.106	1.128	1.161	1.093	3.82
198) T	Cl8-BZ#196	0.757	0.686	0.641	0.685	0.721	0.720	0.730	0.706	5.37
199) T	Cl8-BZ#203	0.728	0.738	0.749	0.767	0.770	0.778	0.809	0.763	3.59
200) T	Cl6-BZ#169-RTW	1.317	1.356	1.239	1.294	1.330	1.361	1.426	1.332	4.41
201) T	Cl9-BZ#208-RTW	1.142	0.924	0.878	0.903	0.910	0.908	0.936	0.943	9.49
202) T	Cl9-BZ#207	0.948	0.891	0.891	0.910	0.928	0.925	0.950	0.921	2.64
203) T	Cl7-BZ#189-RTW	0.998	1.027	0.936	0.968	0.987	1.003	1.048	0.995	3.71
204) T	Cl8-BZ#195	0.682	0.762	0.656	0.674	0.680	0.692	0.710	0.694	4.97
205) T	Cl8-BZ#194	0.808	0.758	0.705	0.714	0.729	0.730	0.754	0.743	4.69
206) T	Cl8-BZ#205-RTW	1.051	0.897	0.853	0.878	0.886	0.888	0.919	0.910	7.15
207) A1	Cl9-BZ#206-Cal...	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
208) A2	Nonachlorobiph...	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
209) A2	Cl9-Conf Ion	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
210) A1	Cl10-BZ#209-Ca...	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29
211) A2	Decachlorobiph...	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29
212) A2	Cl10-Conf Ion	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29

(#) = Out of Range

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241801.D
Acq On : 24 Feb 2018 9:10 am
Operator : BNA2:JT
Sample : T202241801
Misc : wg1092764,MSAS13 10X
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Mon Feb 26 16:06:47 2018



AutoFind: Scans 2692, 2693, 2694; Background Corrected with Scan 2672

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	0.00	100	30.3	270208	PASS
68	69	0.00	100	0.0	0	PASS
69	198	0.00	100	34.6	308608	PASS
70	69	0.00	100	0.6	1774	PASS
127	198	30	80	46.6	415637	PASS
197	198	0.00	3	0.0	0	PASS
198	442	40	100	42.2	891456	PASS
199	198	5	15	6.6	58949	PASS
275	198	15	50	32.7	291499	PASS
365	198	3	100	4.3	38419	PASS
441	443	0.01	100	76.7	306475	PASS
442	442	100	100	100.0	2113195	PASS
443	442	18	30	18.9	399701	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	564701	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.943	406	297378	200.000	ng/mL	0.02
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	516M4	0.366	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.37%#			
93) Cl5-BZ#101-C13 (surr)	33.258	338	674	0.325	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.33%#			
151) Cl6-BZ#153-C13 (surr)	38.769	372	715	0.335	ng/mL	-0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.34%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	796	0.428	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.43%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.584	188	1343	0.352	ng/mL	92
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.666	188	1431	0.384	ng/mL	98
7) Cl1-BZ#3-RTW	17.133	188	1349M4	0.364	ng/mL	
8) Cl2-BZ#4/#10-RTW	17.551	222	1559	0.656	ng/mL	98
9) Cl2-BZ#9	19.119	222	1001	0.357	ng/mL	97
10) Cl2-BZ#7	19.216	222	954M4	0.353	ng/mL	
11) Cl2-BZ#6	19.642	222	1120	0.377	ng/mL	89
12) Cl2-BZ#5	20.084	222	1034	0.361	ng/mL	98
13) Cl2-BZ#8	20.229	222	1101	0.350	ng/mL	94
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.017	256	580M4	0.351	ng/mL	
17) Cl2-BZ#14	21.154	222	1064	0.368	ng/mL	97
18) Cl3-BZ#30	21.572	256	862	0.341	ng/mL	96
19) Cl3-BZ#18	22.376	256	656	0.376	ng/mL	95
20) Cl2-BZ#11	22.513	222	1137	0.359	ng/mL	98
21) Cl3-BZ#17	22.585	256	613M4	0.372	ng/mL	
22) Cl2-BZ#12	22.915	222	1005	0.364	ng/mL	97
23) Cl3-BZ#27	22.955	256	776M4	0.341	ng/mL	
24) Cl2-BZ#13	23.196	222	1130	0.355	ng/mL	96
25) Cl3-BZ#24	23.220	256	802	0.357	ng/mL	99
26) Cl3-BZ#16	23.566	256	521	0.363	ng/mL	99
27) Cl3-BZ#32	23.767	256	920	0.374	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Cl2-BZ#15-RTW	23.928	222	1233	0.376	ng/mL	91
29) Cl3-BZ#34	24.161	256	809M4	0.356	ng/mL	
30) Cl3-BZ#23	24.338	256	803	0.357	ng/mL	98
31) Cl4-BZ#54-RTW	24.338	292	742M4	0.331	ng/mL	
32) Cl3-BZ#29-Cal	24.571	256	781	0.352	ng/mL	90
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	647	0.356	ng/mL	91
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.102	256	953	0.397	ng/mL	100
39) Cl3-BZ#25	25.303	256	851M4	0.351	ng/mL	
40) Cl4-BZ#53	25.794	292	705	0.358	ng/mL	98
41) Cl3-BZ#-31	25.876	256	1211	0.395	ng/mL	94
42) Cl3-BZ#28	26.075	256	1227	0.393	ng/mL	95
43) Cl3-BZ#33	26.158	256	765M3	0.272	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	1999M3	0.715	ng/mL	
45) Cl4-BZ#51	26.207	292	760	0.353	ng/mL	95
46) Cl4-BZ#45	26.770	292	592M4	0.365	ng/mL	
47) Cl3-BZ#22	27.018	256	1008	0.358	ng/mL	98
48) Cl4-BZ#73/#46	27.151	292	1451	0.656	ng/mL	95
49) Cl4-BZ#69	27.432	292	891	0.346	ng/mL	91
50) Cl4-BZ#43	27.531	292	634	0.347	ng/mL	98
51) Cl3-BZ#36	27.564	256	1055	0.326	ng/mL	95
52) Cl4-BZ#52	27.664	292	849	0.389	ng/mL	91
53) Cl4-BZ#48	27.829	292	651	0.356	ng/mL	96
54) Cl4-BZ#49	27.978	292	780	0.391	ng/mL#	78
55) Cl5-BZ#104-RTW	28.193	326	723	0.334	ng/mL	93
56) Cl4-BZ#47	28.276	292	896M3	0.420	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	2573M3	0.988	ng/mL	
58) Cl3-BZ#39	28.425	256	1016	0.350	ng/mL	93
59) Cl3-BZ#38	28.558	256	919	0.321	ng/mL	94
60) Cl4-BZ#44	28.938	292	589	0.336	ng/mL	91
61) Cl4-BZ#59	29.170	292	922	0.363	ng/mL	94
62) Cl4-BZ#42	29.253	292	615M4	0.369	ng/mL	
63) Cl4-BZ#71	29.484	292	987	0.363	ng/mL	93
64) Cl3-BZ#35	29.617	256	1005	0.357	ng/mL	99
65) Cl4-BZ#41	29.716	292	587	0.370	ng/mL	99
66) Cl4-BZ#72	29.832	292	927	0.330	ng/mL	96
67) Cl5-BZ#96	29.865	326	740	0.318	ng/mL	87
68) Cl5-BZ#103	29.981	326	600	0.361	ng/mL	98

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
69) Cl4-BZ#68/#64	30.146	292	1772	0.680	ng/mL	95
70) Cl4-BZ#40	30.262	292	467	0.370	ng/mL	98
71) Cl3-BZ#37-RTW	30.477	256	1305	0.353	ng/mL	94
72) Cl5-BZ#100	30.477	326	679	0.361	ng/mL	90
73) Cl5-BZ#94	30.577	326	426	0.296	ng/mL	88
74) Cl4-BZ#57	30.676	292	932	0.332	ng/mL	97
75) Cl4-BZ#67/#58	31.007	292	1858	0.662	ng/mL	98
76) Cl5-BZ#102	31.057	326	677	0.327	ng/mL	97
77) Cl4-BZ#61	31.371	292	979	0.356	ng/mL	100
78) Cl5-BZ#98	31.388	326	615	0.331	ng/mL	93
79) Cl4-BZ#76	31.520	292	976	0.323	ng/mL	93
80) Cl5-BZ#93	31.520	326	515	0.339	ng/mL	93
81) Cl4-BZ#63	31.619	292	899M4	0.340	ng/mL	
82) Cl5-BZ#121/#95/#88	31.686	326	1944	0.976	ng/mL	98
83) Cl4-BZ#74	31.901	292	1004	0.351	ng/mL	96
84) Cl6-BZ#155-RTW	32.033	360	778	0.352	ng/mL	97
85) Cl4-BZ#70	32.066	292	1075	0.322	ng/mL	93
86) Cl4-BZ#66	32.348	292	917	0.341	ng/mL	92
87) Cl5-BZ#91	32.215	326	629	0.359	ng/mL	93
88) Cl4-BZ#80	32.612	292	966	0.359	ng/mL	98
89) Cl4-BZ#55	32.811	292	988	0.355	ng/mL	97
90) Cl5-BZ#92	32.861	326	587	0.349	ng/mL	99
91) Cl5-BZ#89/#84	33.126	326	1129	0.637	ng/mL	100
92) Cl5-BZ#101/#90	33.275	326	1304M4	0.718	ng/mL	
94) Cl4-BZ#56	33.258	292	983	0.344	ng/mL	98
95) Cl5-BZ#113	33.374	326	734	0.333	ng/mL	96
96) Cl5-BZ#99	33.639	326	763	0.374	ng/mL	98
97) Cl6-BZ#150	33.688	360	831	0.355	ng/mL	95
98) Cl4-BZ#60	33.705	292	1097	0.343	ng/mL	95
99) Cl6-BZ#152	34.052	360	845	0.328	ng/mL	93
100) Cl5-BZ#119	34.135	326	895	0.349	ng/mL	93
101) Cl5-BZ#83/#125/#112	34.284	326	2215M4	1.058	ng/mL	
102) Cl5-BZ#86/#109	34.450	326	1466M1	0.712	ng/mL	
103) Cl5-BZ#97	34.565	326	513	0.322	ng/mL	98
104) Cl5-BZ#116	35.029	326	748	0.351	ng/mL	95
105) Cl5-BZ#87/#111	35.327	326	1420M1	0.672	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	948	0.363	ng/mL	95
109) Cl6-BZ#148	34.698	360	636	0.367	ng/mL	93
110) Cl4-BZ#79	34.814	292	993	0.377	ng/mL	91

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) Cl6-BZ#154-Cal	35.227	360	704	0.358	ng/mL	98
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	1130	0.331	ng/mL#	68
115) Cl6-BZ#136	35.360	360	796	0.342	ng/mL	96
116) Cl5-BZ#117	35.410	326	913M4	0.342	ng/mL	
117) Cl5-BZ#115	35.509	326	914M4	0.367	ng/mL	
118) Cl5-BZ#85	35.592	326	601	0.371	ng/mL	97
119) Cl5-BZ#120	35.724	326	875	0.355	ng/mL	100
120) Cl5-BZ#110	35.873	326	972	0.405	ng/mL	93
121) Cl4-BZ#81	36.237	292	973	0.376	ng/mL	98
123) Cl6-BZ#151	36.254	360	626	0.363	ng/mL	93
124) Cl6-BZ#135	36.403	360	655	0.359	ng/mL	96
125) Cl5-BZ#82	36.568	326	528	0.313	ng/mL	93
126) Cl6-BZ#144	36.601	360	661	0.356	ng/mL	93
127) Cl6-BZ#147/#149	36.899	360	1471	0.770	ng/mL	99
128) Cl4-BZ#77-RTW	37.015	292	923M4	0.370	ng/mL	
129) Cl6-BZ#143/#139	37.131	360	1297	0.667	ng/mL	98
130) Cl5-BZ#124	37.296	326	836	0.335	ng/mL	91
131) Cl5-BZ#108	37.578	326	847	0.338	ng/mL	98
132) Cl5-BZ#107/#123	37.660	326	1902M4	0.715	ng/mL	
133) Cl6-BZ#140	37.313	360	644	0.349	ng/mL	95
134) Cl7-BZ#188-Cal/RTW	37.677	394	725	0.321	ng/mL	96
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.776	360	517	0.325	ng/mL	92
138) Cl5-BZ#106	37.809	326	794	0.300	ng/mL	97
139) Cl6-BZ#133	37.876	360	792M3	0.386	ng/mL	
140) Cl6-BZ#142	37.909	360	525M3	0.353	ng/mL	
141) Cl5-BZ#118	38.041	326	849	0.356	ng/mL	99
142) Cl6-BZ#131	38.041	360	593	0.378	ng/mL	94
143) Cl7-BZ#184	38.173	394	758	0.345	ng/mL	96
144) Cl6-BZ#165	38.223	360	802M4	0.354	ng/mL	
145) Cl6-BZ#146	38.339	360	723	0.375	ng/mL	97
146) Cl6-BZ#161	38.521	360	895	0.353	ng/mL	93
147) Cl5-BZ#122	38.505	326	769	0.353	ng/mL	100
148) Cl6-BZ#168	38.736	360	899	0.377	ng/mL	97
149) Cl5-BZ#114	38.786	326	842	0.339	ng/mL	95
150) Cl6-BZ#153	38.802	360	807	0.367	ng/mL	88
152) Cl6-BZ#132	39.067	360	637	0.359	ng/mL	95
153) Cl7-BZ#179	39.332	394	791	0.367	ng/mL	97

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
154) Cl6-BZ#141	39.630	360	645	0.405	ng/mL	95
155) Cl7-BZ#176	39.829	394	767	0.375	ng/mL	92
156) Cl5-BZ#105	39.895	326	1062M4	0.383	ng/mL	
157) Cl6-BZ#137	40.060	360	594	0.341	ng/mL	87
158) Cl5-BZ#127	40.209	326	1146M4	0.371	ng/mL	
159) Cl7-BZ#186	40.160	394	811	0.343	ng/mL	98
160) Cl6-BZ#130/#164	40.391	360	1485	0.740	ng/mL	96
161) Cl7-BZ#178	40.706	394	578	0.383	ng/mL	93
162) Cl6-BZ#138	40.772	360	787	0.374	ng/mL	92
163) Cl6-BZ#163/#160	40.871	360	1591M4	0.688	ng/mL	
164) Cl6-BZ#129/#158	41.053	360	1391M1	0.681	ng/mL	
165) Cl7-BZ#182/#175	41.086	394	1197	0.651	ng/mL	97
166) Cl7-BZ#187	41.285	394	655	0.362	ng/mL	95
167) Cl7-BZ#183	41.666	394	634	0.408	ng/mL	99
168) Cl6-BZ#166	42.030	360	962	0.393	ng/mL	99
169) Cl6-BZ#159	42.278	360	898	0.380	ng/mL	99
170) Cl5-BZ#126-RTW	42.493	326	1042	0.352	ng/mL#	78
171) Cl7-BZ#185	42.526	394	659	0.420	ng/mL	86
172) Cl6-BZ#162	42.609	360	846	0.371	ng/mL	99
173) Cl7-BZ#174	42.758	394	585	0.359	ng/mL	95
174) Cl6-BZ#128	42.758	360	661	0.368	ng/mL	93
175) Cl6-BZ#167	43.056	360	1106M4	0.368	ng/mL	
176) Cl8-BZ#202-RTW	43.006	428	686	0.379	ng/mL	98
178) Cl7-BZ#181	43.155	394	626	0.353	ng/mL	92
179) Cl7-BZ#177	43.470	394	571	0.377	ng/mL	96
180) Cl8-BZ#204/#200-Cal	43.569	428	1325	0.732	ng/mL	98
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	539	0.393	ng/mL	100
184) Cl7-BZ#173	43.999	394	535	0.368	ng/mL	97
185) Cl7-BZ#172	44.446	394	614	0.396	ng/mL	97
186) Cl7-BZ#192	44.661	394	770	0.362	ng/mL	99
187) Cl6-BZ#156	44.678	360	959M4	0.411	ng/mL	
188) Cl6-BZ#157	44.910	360	993	0.411	ng/mL	94
189) Cl7-BZ#180	44.959	394	721	0.351	ng/mL	85
190) Cl7-BZ#193	45.042	394	761	0.324	ng/mL	88
191) Cl8-BZ#197	44.099	428	682	0.376	ng/mL	98
192) Cl7-BZ#191	45.390	394	796	0.408	ng/mL	93
193) Cl8-BZ#199	45.208	428	680	0.387	ng/mL	83
194) Cl8-BZ#198	46.747	428	602	0.454	ng/mL	95
195) Cl8-BZ#201	46.846	428	528M4	0.403	ng/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
196)	Cl7-BZ#170	46.962	394	573	0.443	ng/mL	90
197)	Cl7-BZ#190	47.293	394	771	0.364	ng/mL	93
198)	Cl8-BZ#196	47.309	428	563	0.407	ng/mL	80
199)	Cl8-BZ#203	47.376	428	541	0.375	ng/mL	90
200)	Cl6-BZ#169-RTW	47.657	360	979	0.417	ng/mL	96
201)	Cl9-BZ#208-RTW	48.816	464	849	0.484	ng/mL	87
202)	Cl9-BZ#207	49.494	464	705	0.393	ng/mL	96
203)	Cl7-BZ#189-RTW	49.643	394	742	0.421	ng/mL#	2
204)	Cl8-BZ#195	49.809	428	507	0.395	ng/mL	90
205)	Cl8-BZ#194	51.480	428	601	0.455	ng/mL	95
206)	Cl8-BZ#205-RTW	52.093	428	781	0.509	ng/mL	89
207)	Cl9-BZ#206-Cal/RTW	54.095	464	612	0.455	ng/mL#	12
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
210)	Cl10-BZ#209-Cal/RTW	56.396	498	575M4	0.408	ng/mL	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

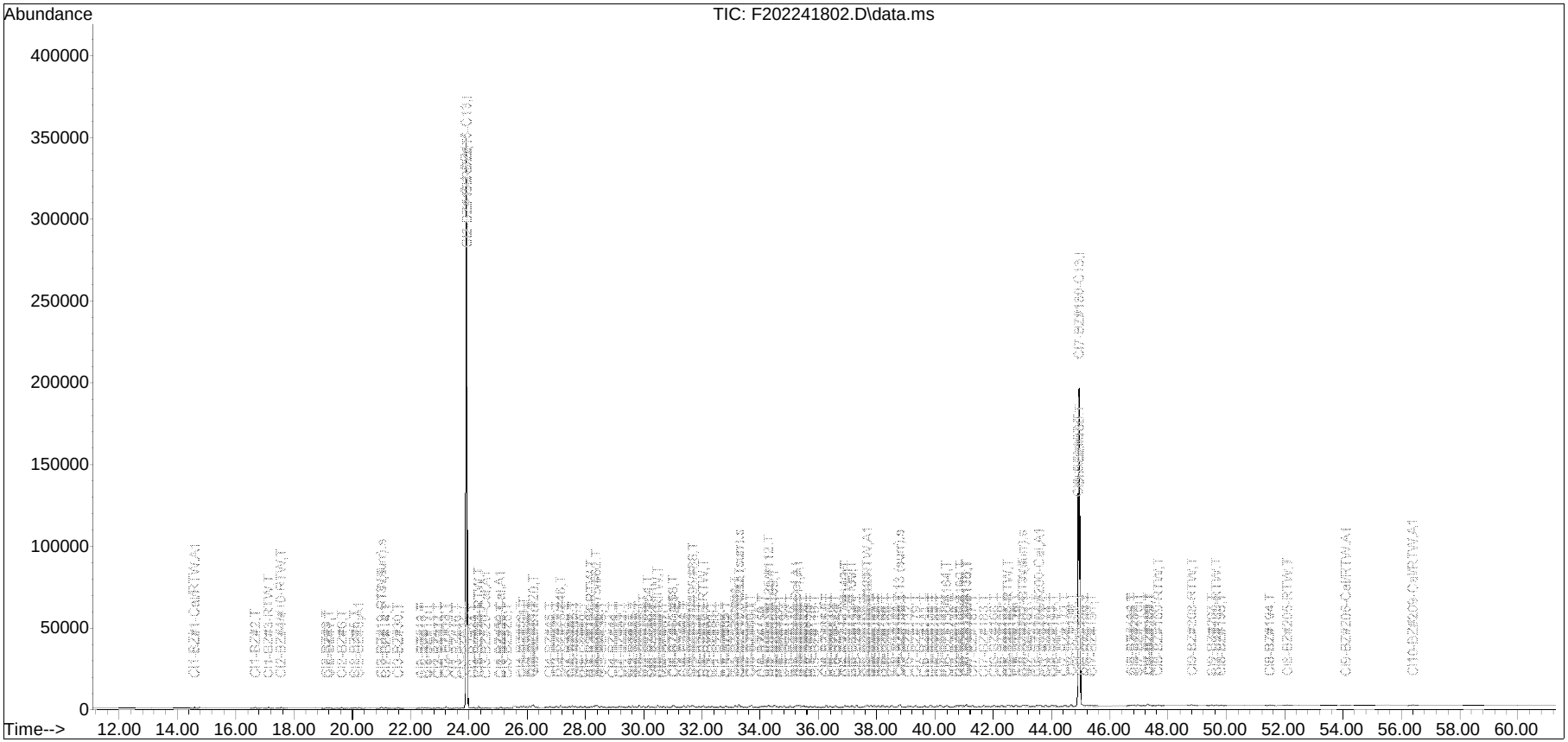
(#) = qualifier out of range (m) = manual integration (+) = signals summed

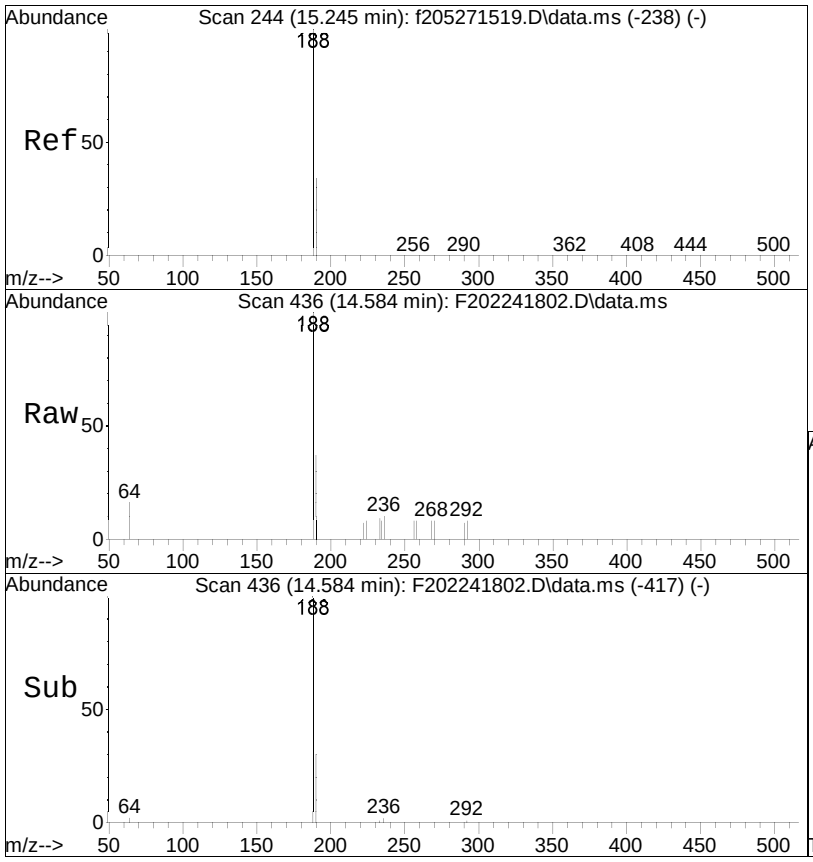
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241802.D
Acq On : 24 Feb 2018 10:14 am
Operator : BNA2:JT
Sample : I202241801
Misc : wg1092764,MSAT61,.5ug/l
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 15:36:51 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

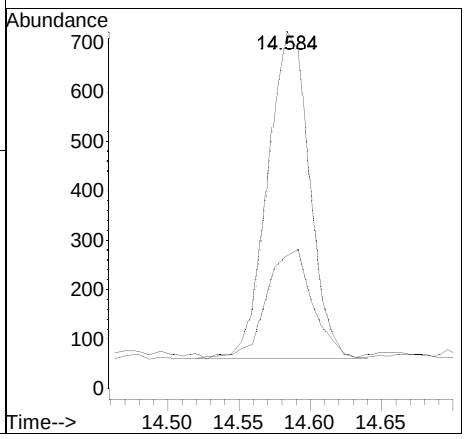


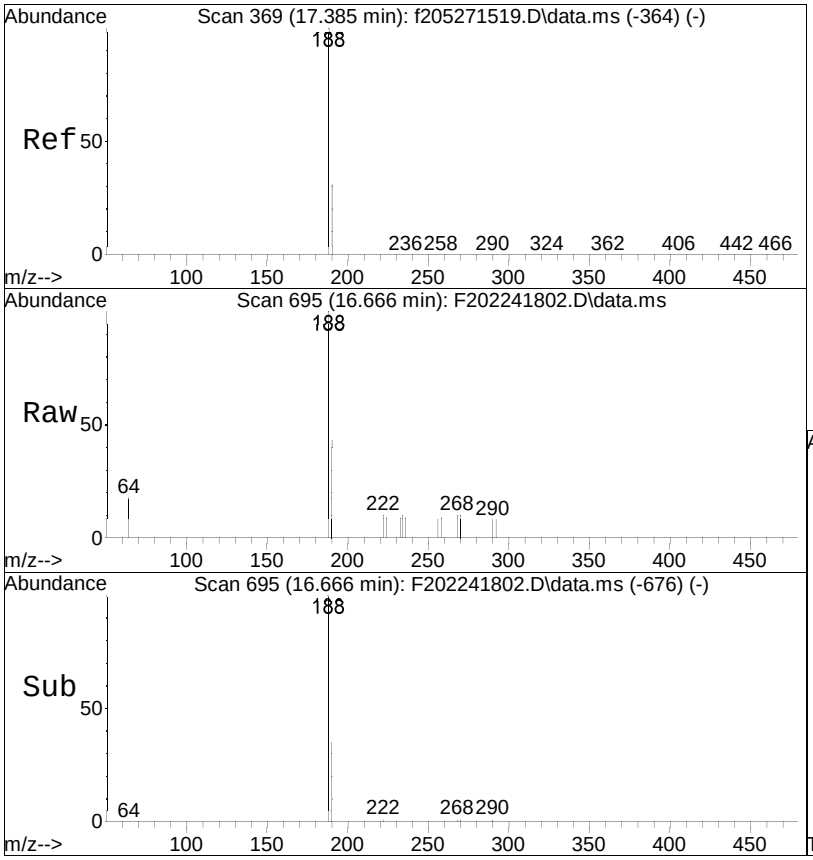


#3
Cl1-BZ#1-Cal/RTW
Concen: 0.35 ng/mL
RT: 14.584 min Scan# 436
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:188 Resp: 1343

Ion	Ratio	Lower	Upper
188	100		
190	37.2	26.2	39.4

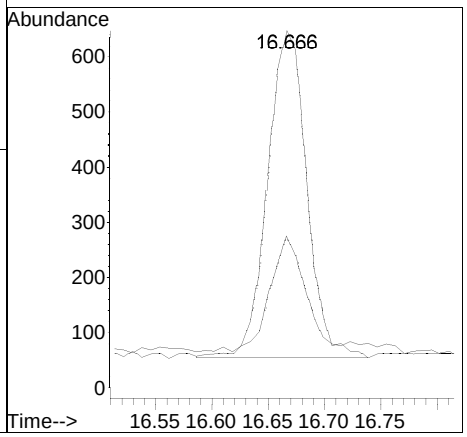


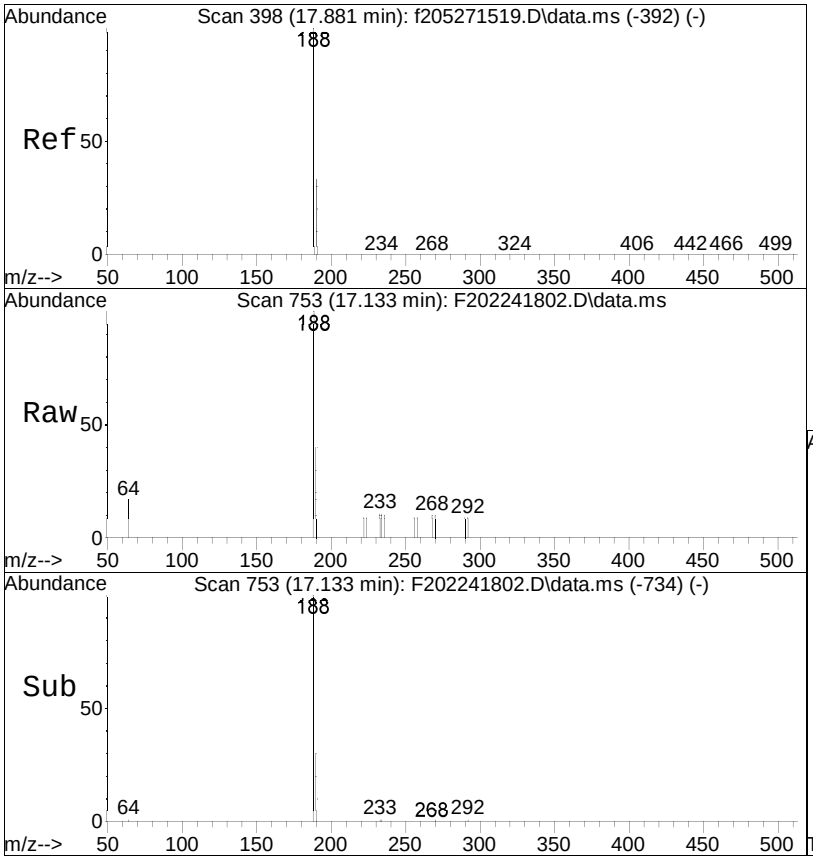


#6
Cl1-BZ#2
Concen: 0.38 ng/mL
RT: 16.666 min Scan# 695
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:188 Resp: 1431

Ion	Ratio	Lower	Upper
188	100		
190	31.5	26.1	39.1

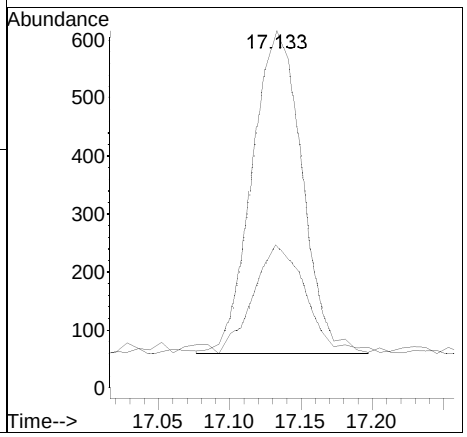


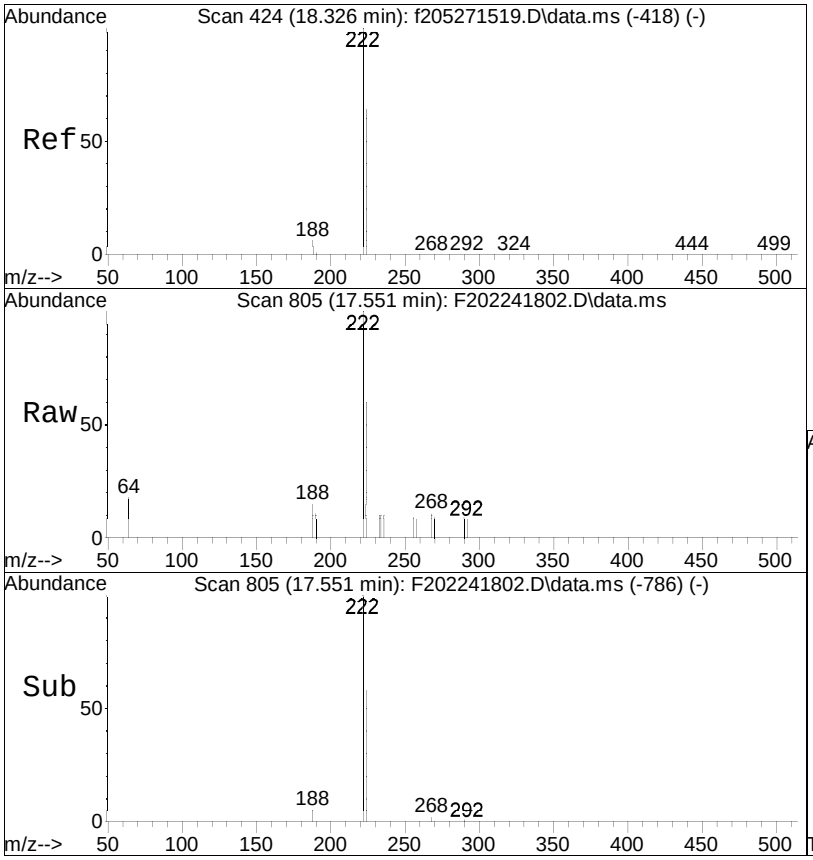


#7
Cl1-BZ#3-RTW
Concen: 0.36 ng/mL M4
RT: 17.133 min Scan# 753
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:188 Resp: 1349

Ion	Ratio	Lower	Upper
188	100		
190	39.8	26.7	40.1

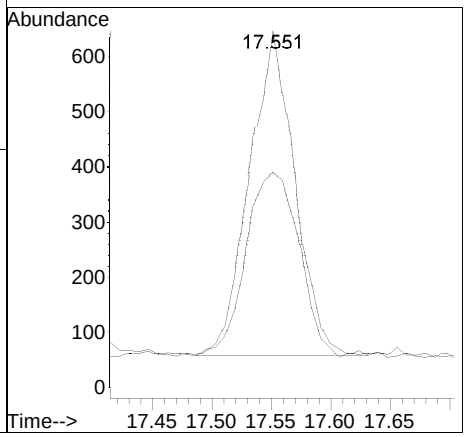


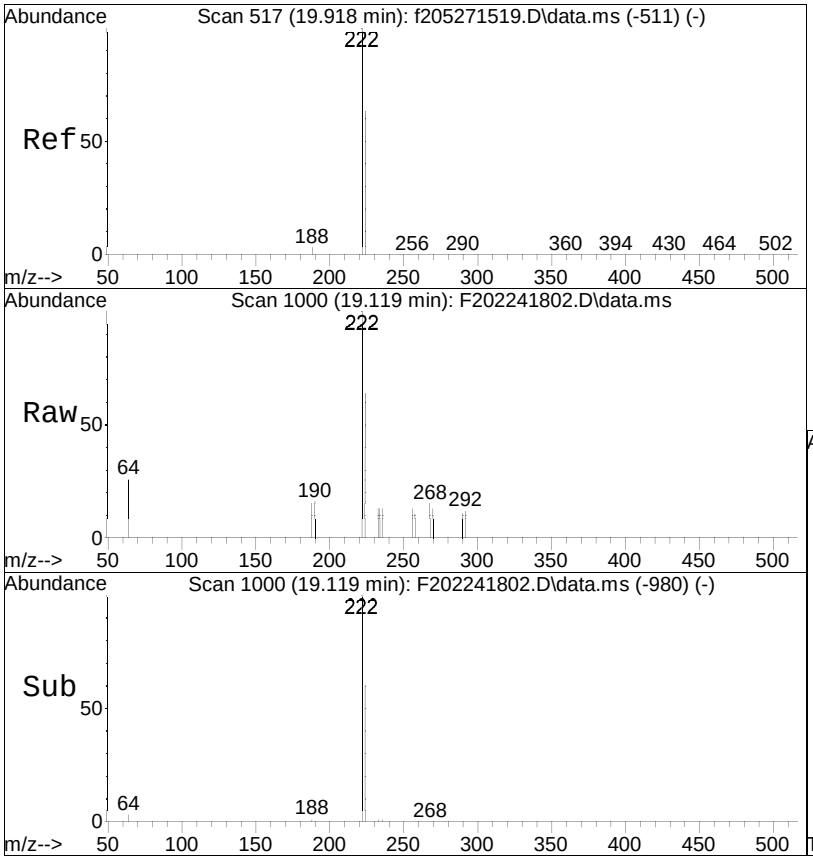


#8
Cl2-BZ#4/#10-RTW
Concen: 0.66 ng/mL
RT: 17.551 min Scan# 805
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1559

Ion	Ratio	Lower	Upper
222	100		
224	66.7	52.4	78.6

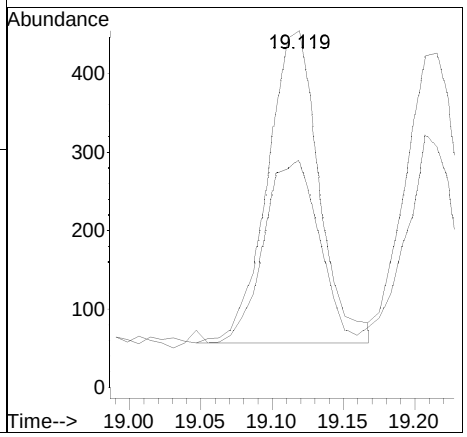


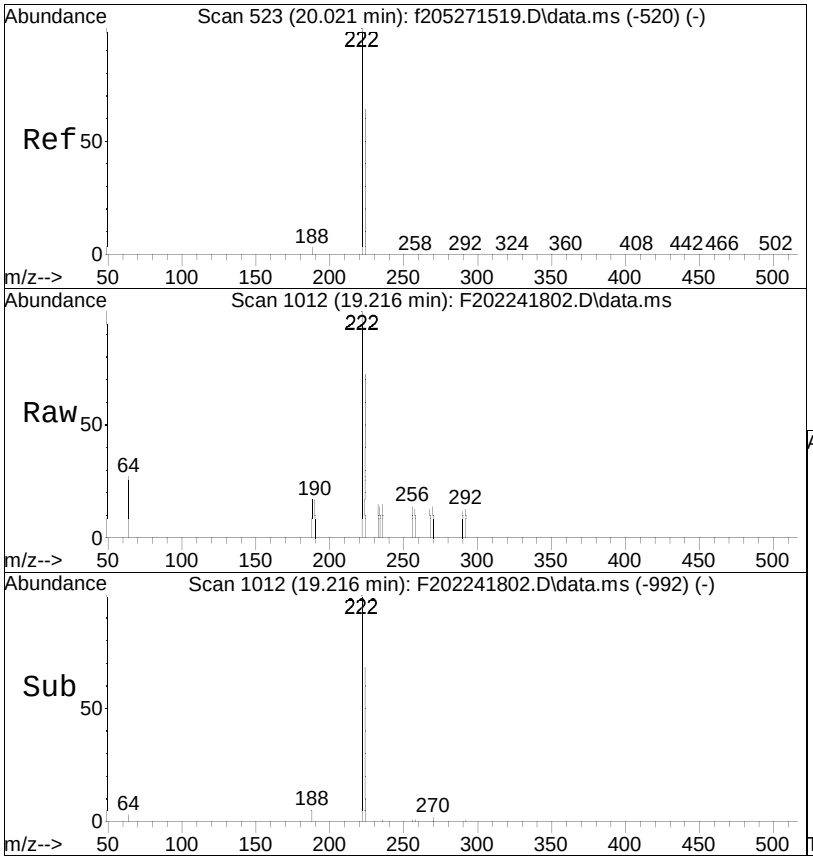


#9
Cl2-BZ#9
Concen: 0.36 ng/mL
RT: 19.119 min Scan# 1000
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1001

Ion	Ratio	Lower	Upper
222	100		
224	62.5	52.1	78.1

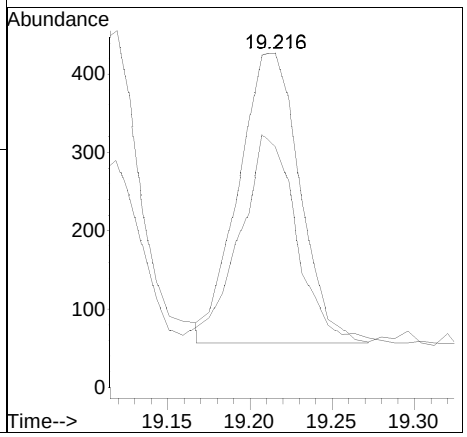


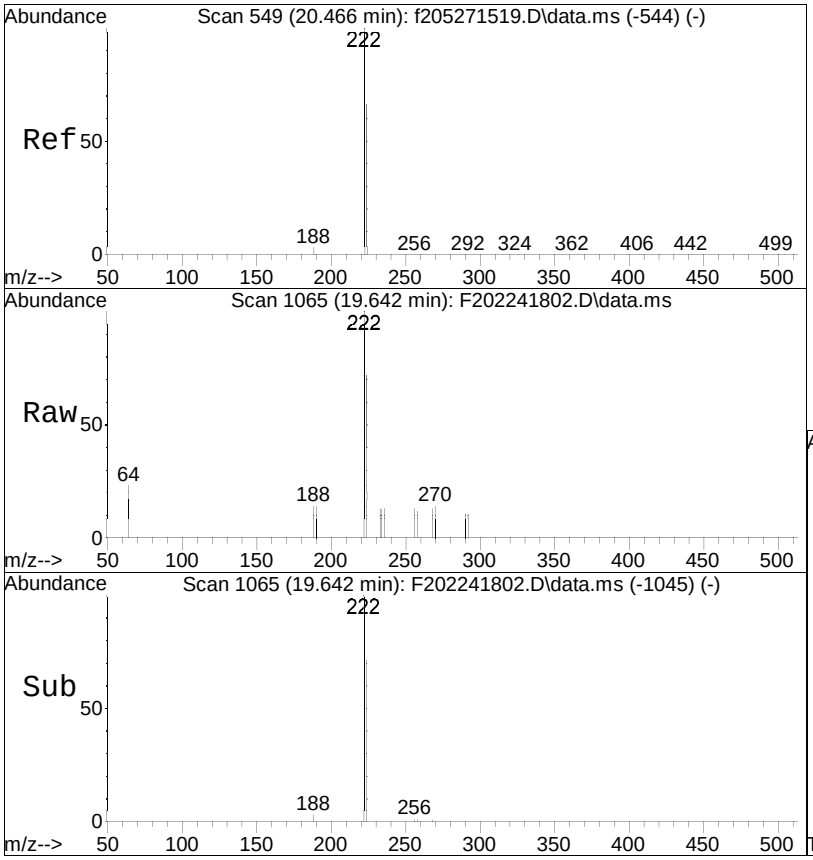


#10
Cl2-BZ#7
Concen: 0.35 ng/mL M4
RT: 19.216 min Scan# 1012
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 954

Ion	Ratio	Lower	Upper
222	100		
224	71.7	52.3	78.5

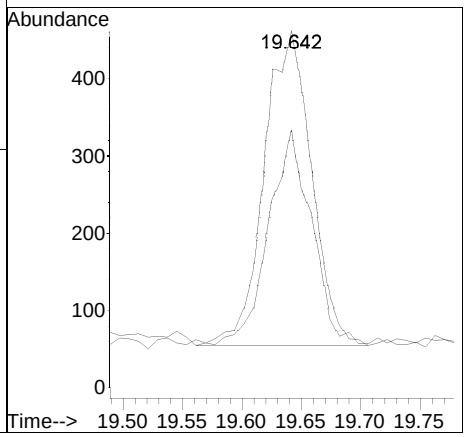


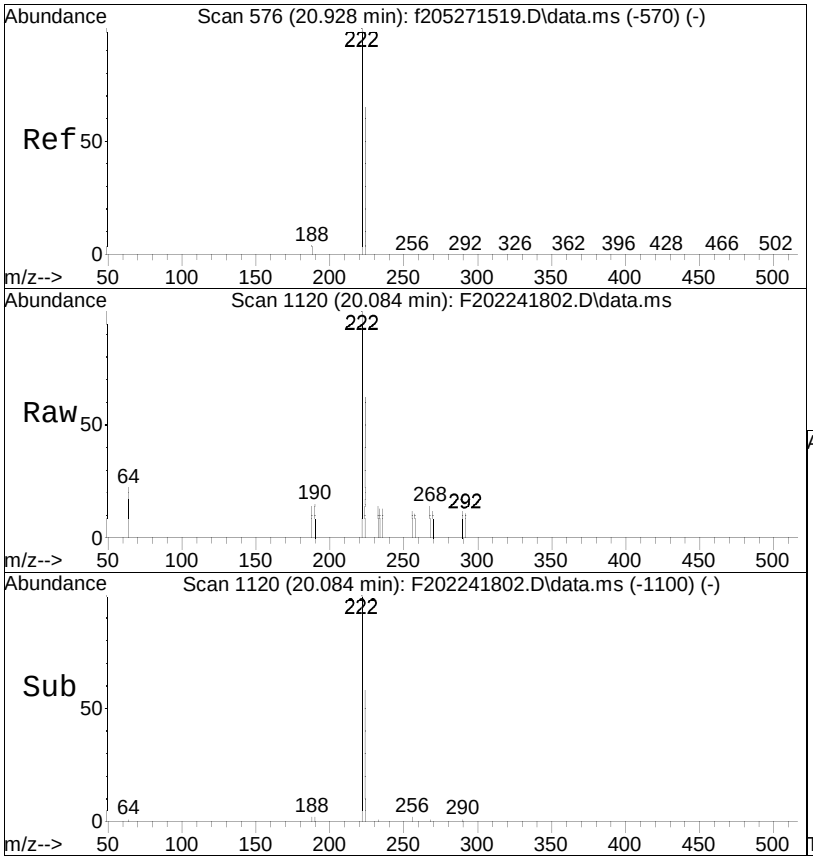


#11
Cl2-BZ#6
Concen: 0.38 ng/mL
RT: 19.642 min Scan# 1065
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1120

Ion	Ratio	Lower	Upper
222	100		
224	72.3	51.1	76.7

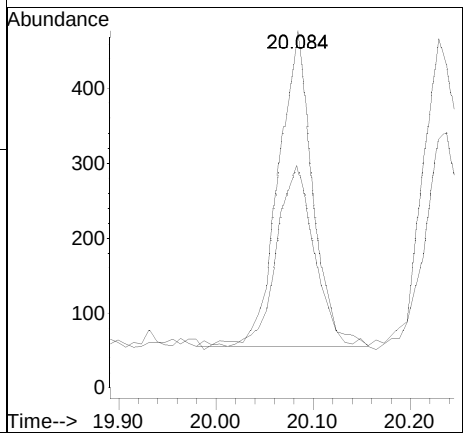


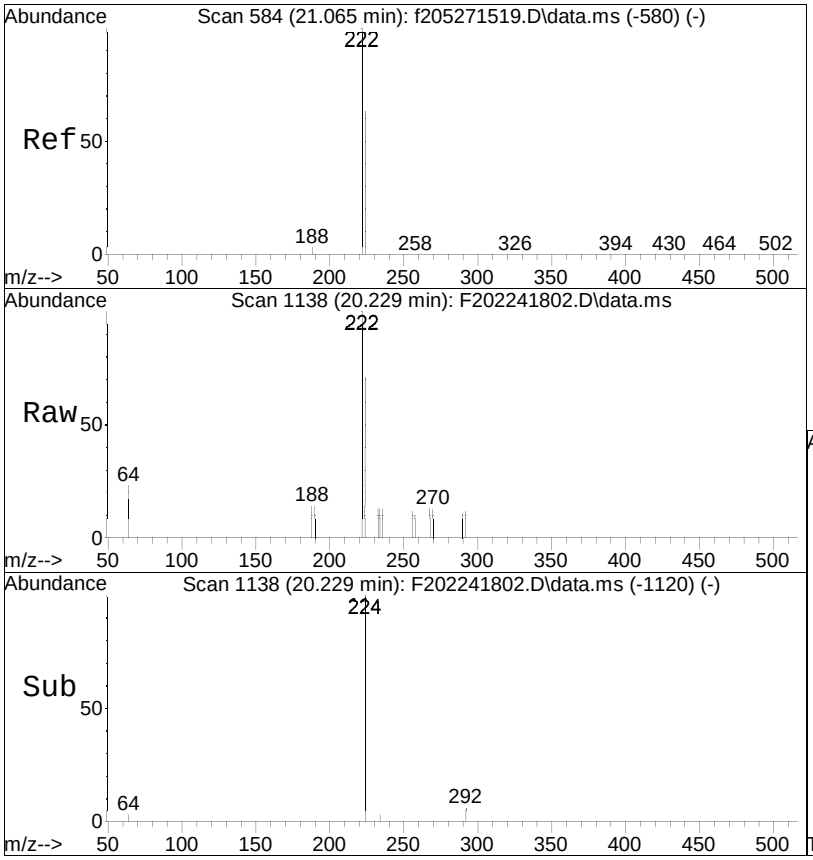


#12
Cl2-BZ#5
Concen: 0.36 ng/mL
RT: 20.084 min Scan# 1120
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1034

Ion	Ratio	Lower	Upper
222	100		
224	66.2	51.8	77.6

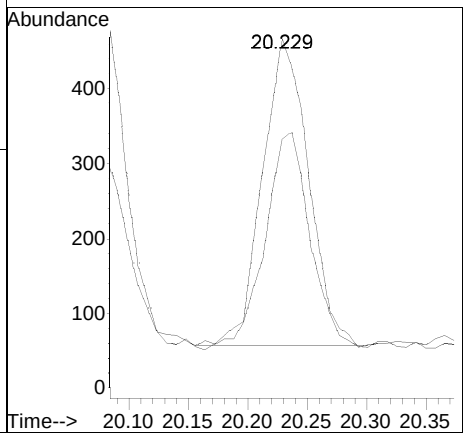


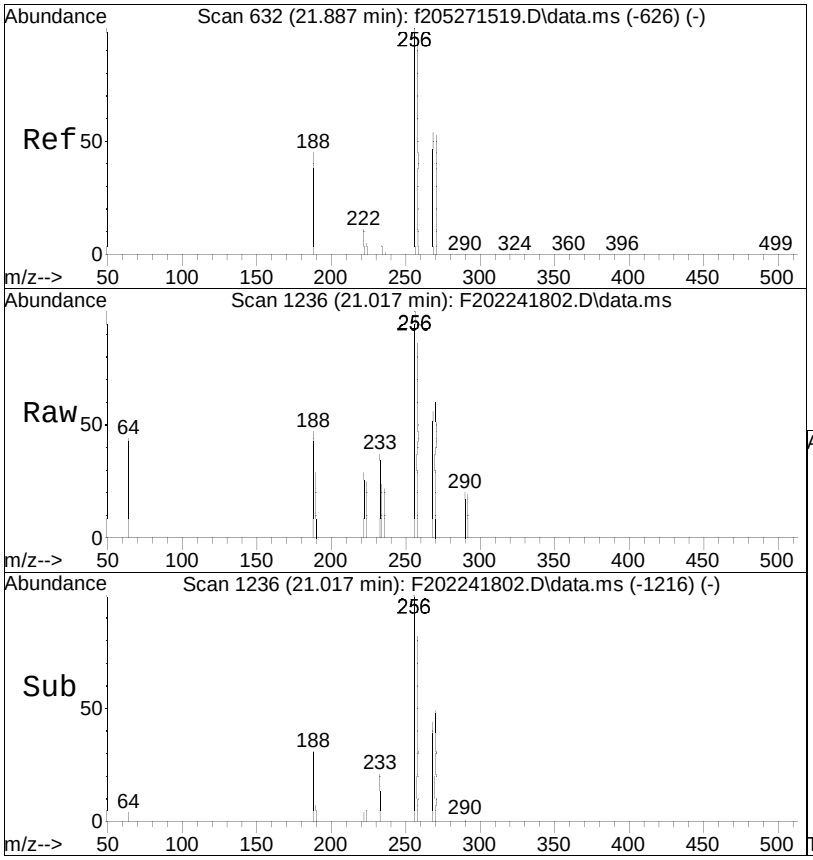


#13
Cl2-BZ#8
Concen: 0.35 ng/mL
RT: 20.229 min Scan# 1138
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1101

Ion	Ratio	Lower	Upper
222	100		
224	70.0	52.2	78.4

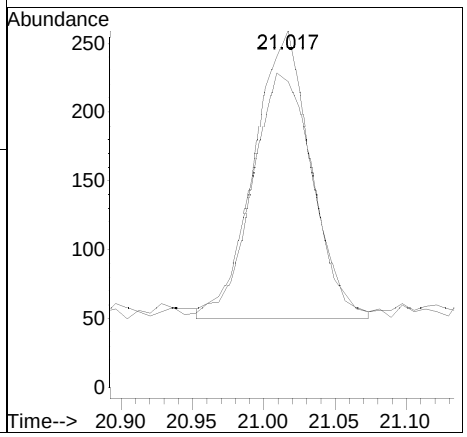


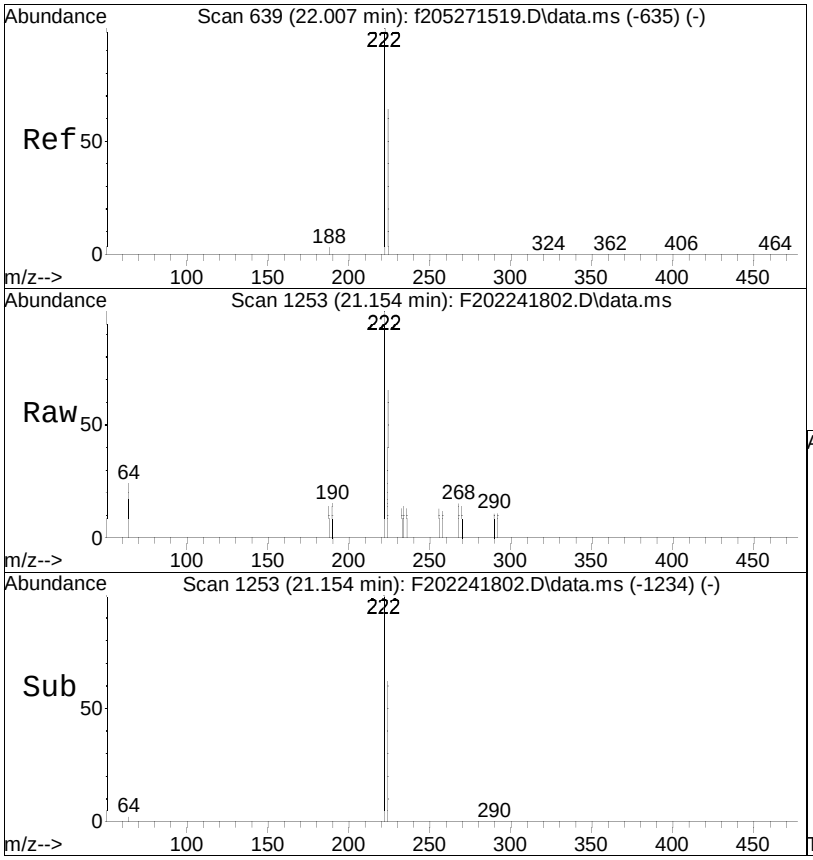


#16
Cl3-BZ#19-RTW
Concen: 0.35 ng/mL M4
RT: 21.017 min Scan# 1236
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 580

Ion	Ratio	Lower	Upper
256	100		
258	82.5	76.5	114.7

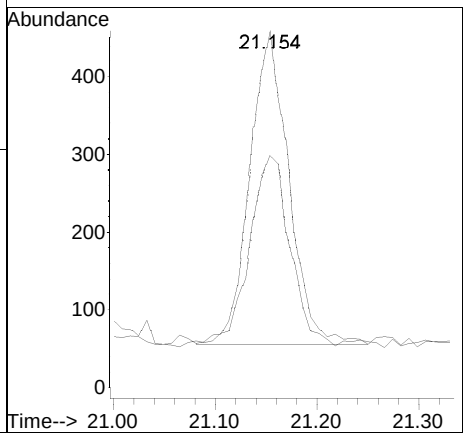


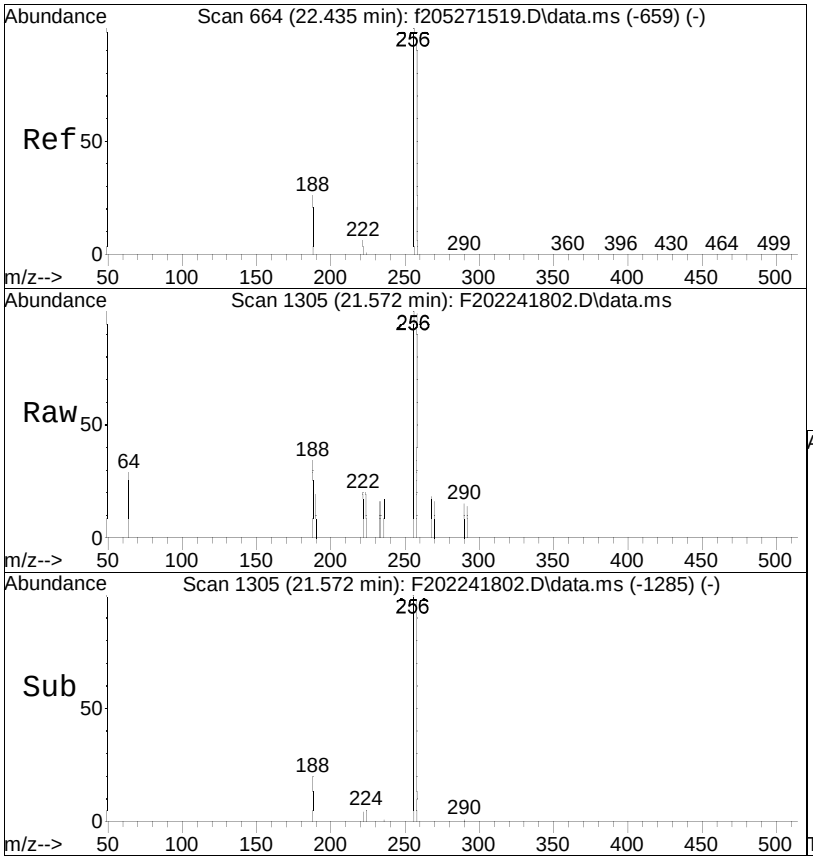


#17
Cl2-BZ#14
Concen: 0.37 ng/mL
RT: 21.154 min Scan# 1253
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1064

Ion	Ratio	Lower	Upper
222	100		
224	64.5	53.3	79.9

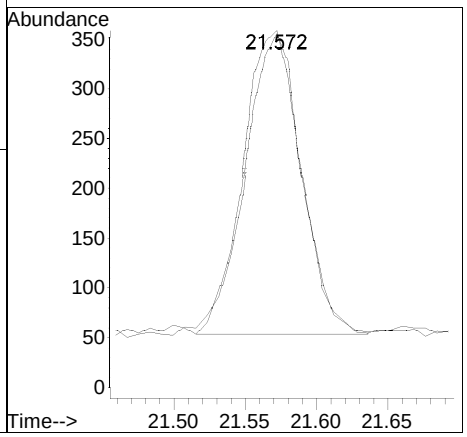


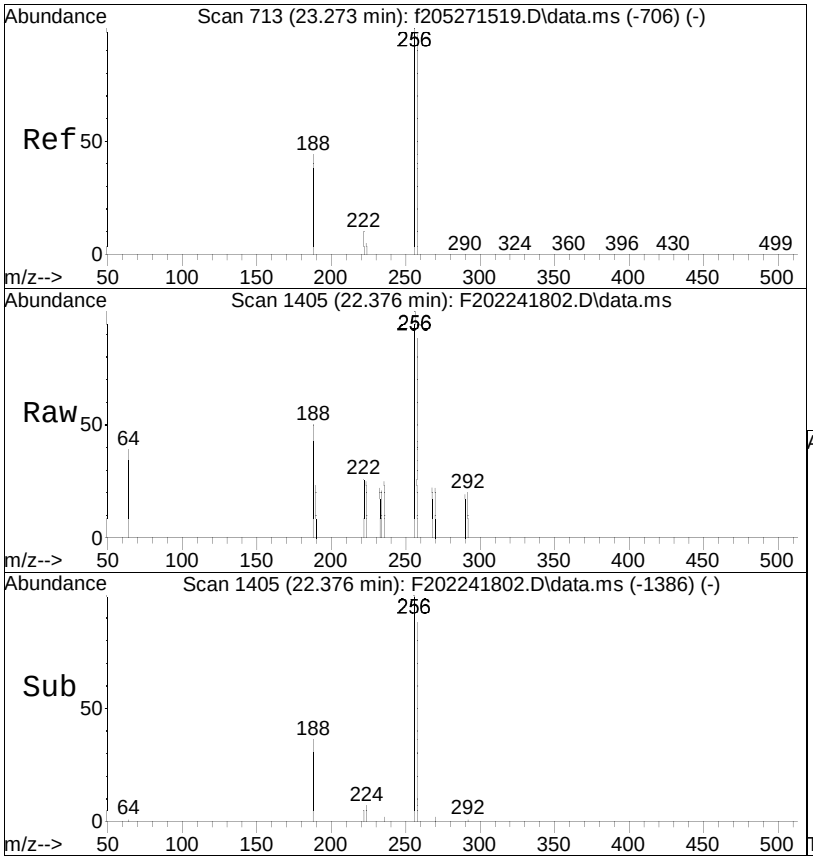


#18
Cl3-BZ#30
Concen: 0.34 ng/mL
RT: 21.572 min Scan# 1305
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 862

Ion	Ratio	Lower	Upper
256	100		
258	99.8	76.4	114.6

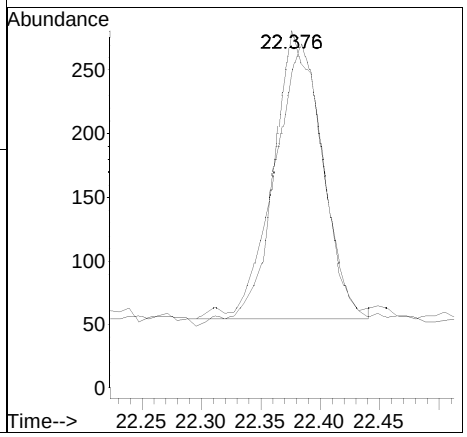


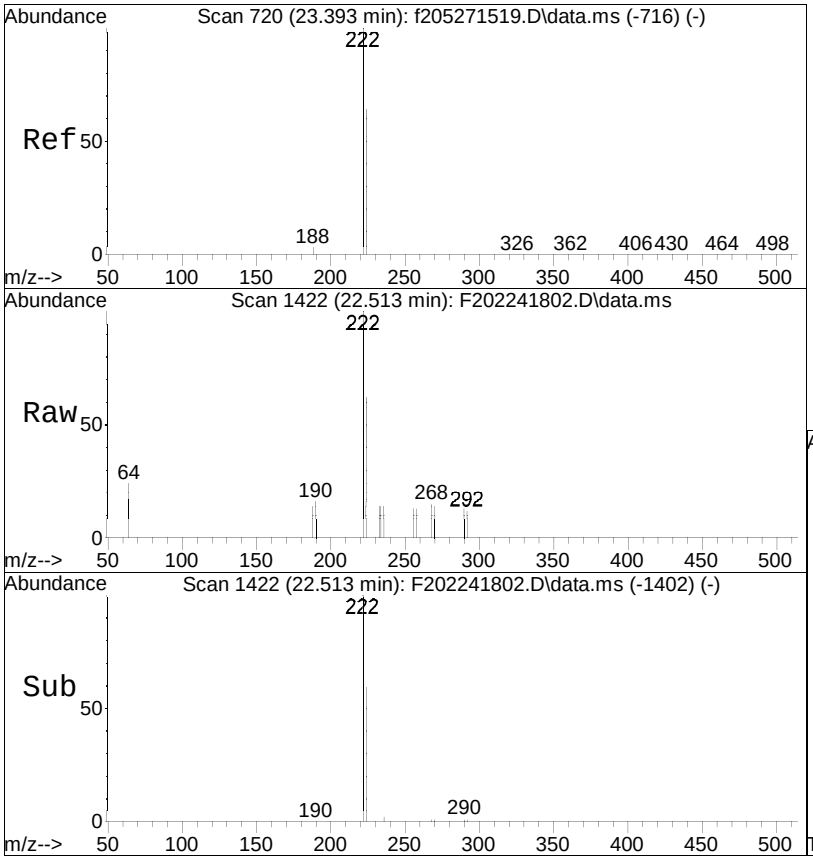


#19
Cl3-BZ#18
Concen: 0.38 ng/mL
RT: 22.376 min Scan# 1405
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 656

Ion	Ratio	Lower	Upper
256	100		
258	88.3	74.7	112.1

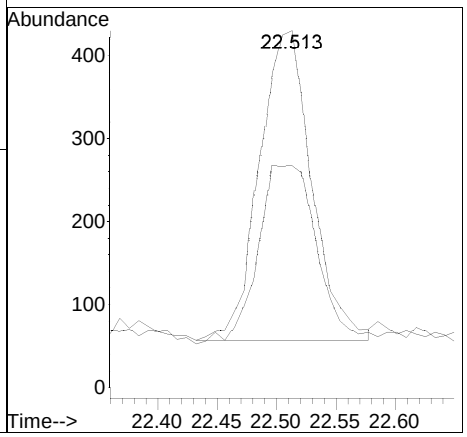


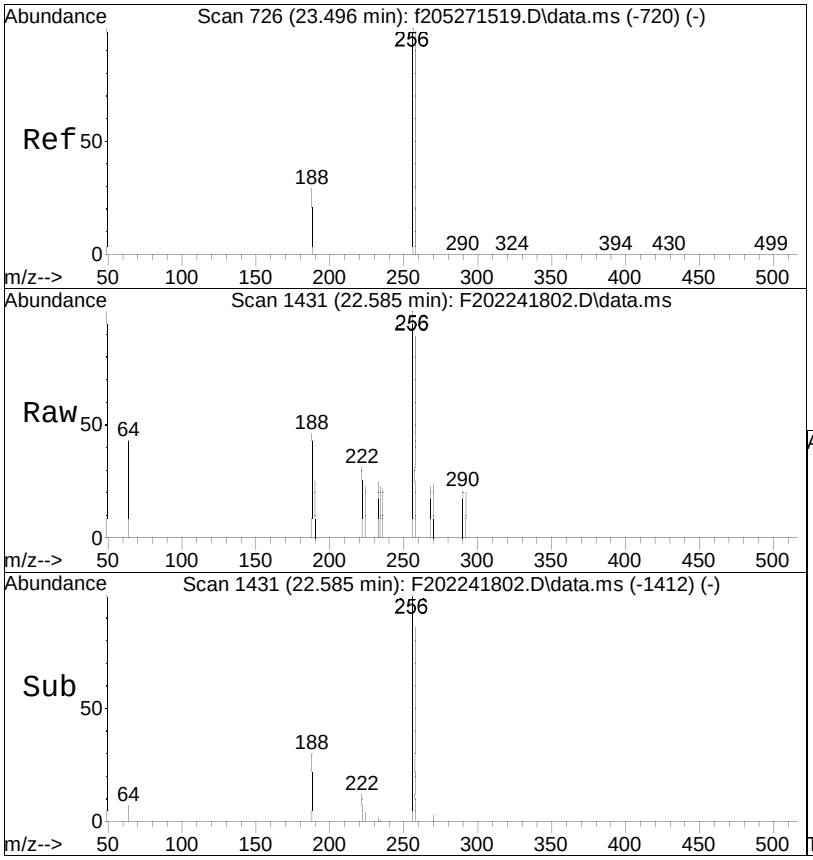


#20
Cl2-BZ#11
Concen: 0.36 ng/mL
RT: 22.513 min Scan# 1422
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1137

Ion	Ratio	Lower	Upper
222	100		
224	65.3	50.9	76.3

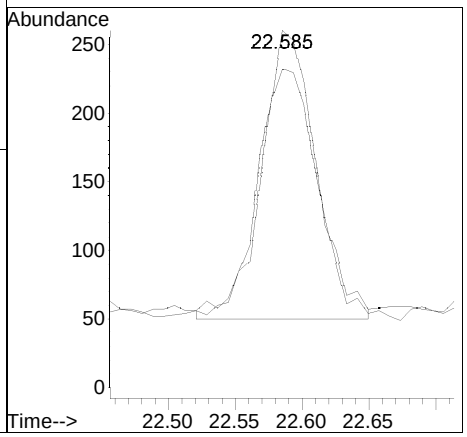


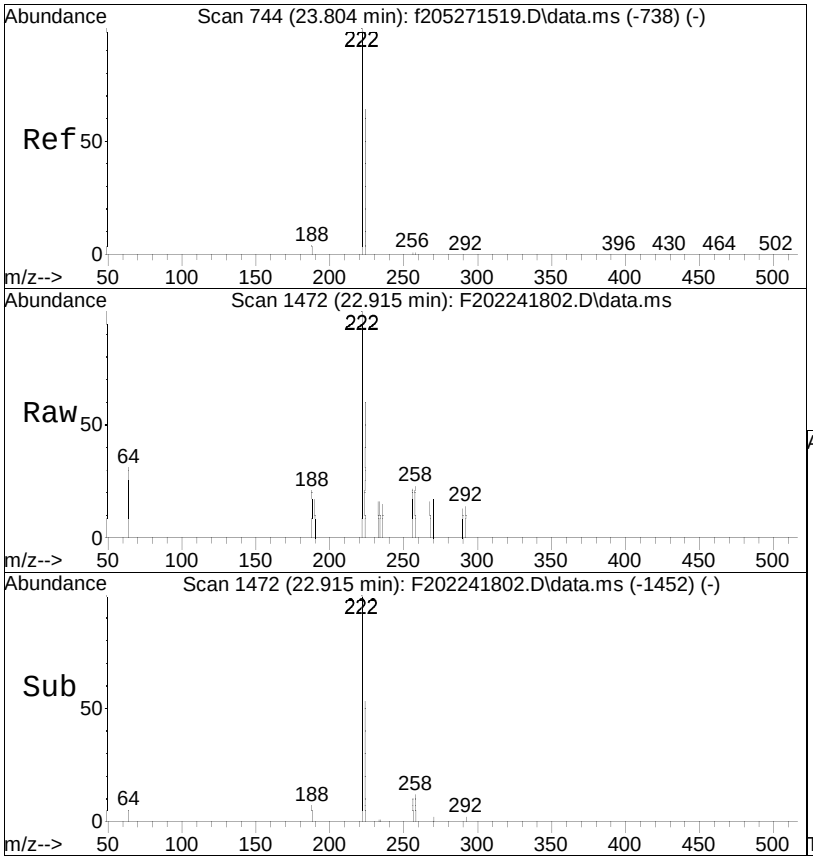


#21
Cl3-BZ#17
Concen: 0.37 ng/mL M4
RT: 22.585 min Scan# 1431
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 613

Ion	Ratio	Lower	Upper
256	100		
258	84.4	76.3	114.5

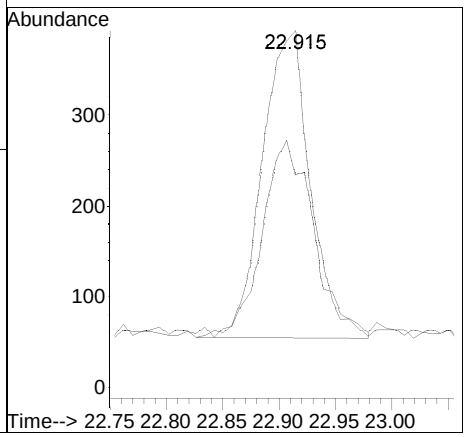


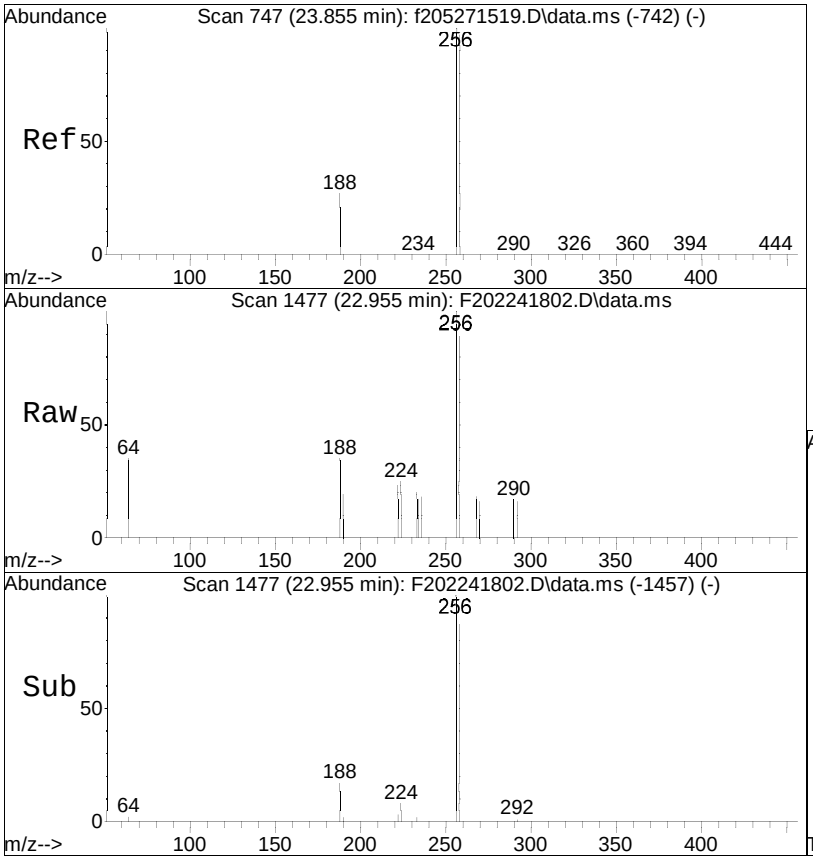


#22
Cl2-BZ#12
Concen: 0.36 ng/mL
RT: 22.915 min Scan# 1472
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1005

Ion	Ratio	Lower	Upper
222	100		
224	67.9	52.2	78.4

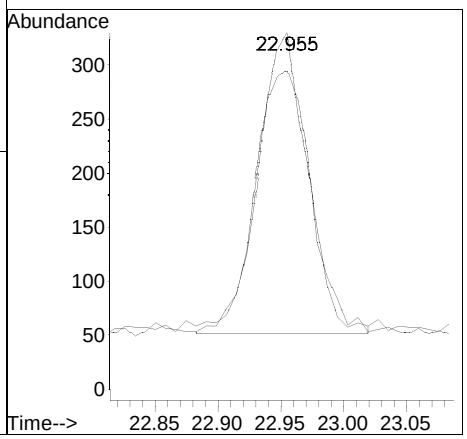


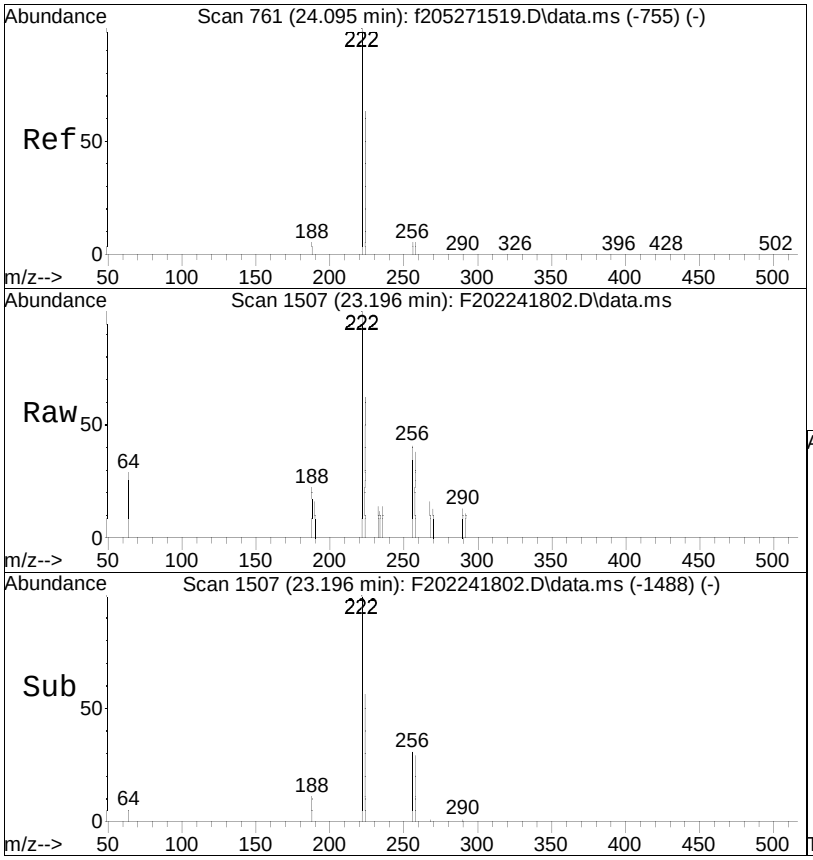


#23
Cl3-BZ#27
Concen: 0.34 ng/mL M4
RT: 22.955 min Scan# 1477
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 776

Ion	Ratio	Lower	Upper
256	100		
258	99.0	75.5	113.3

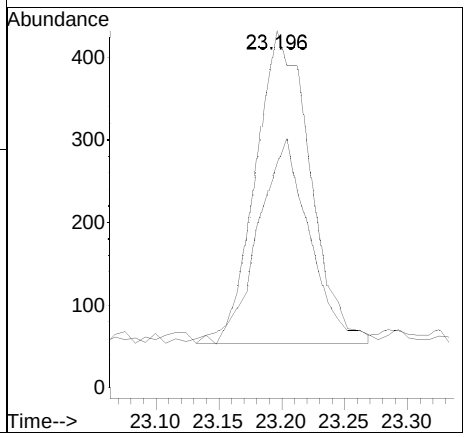


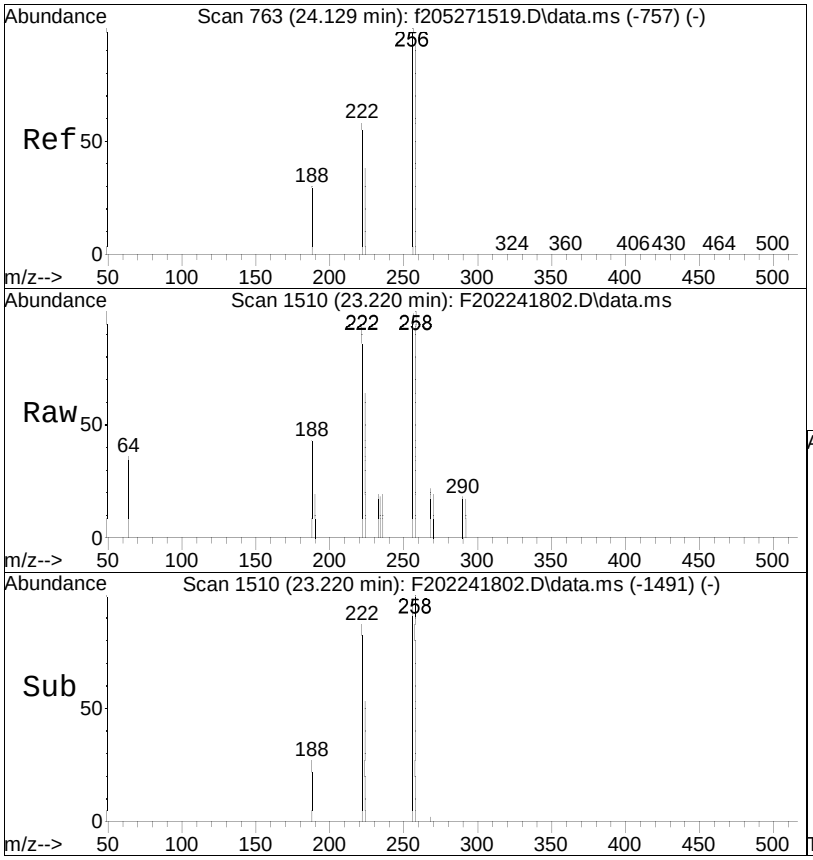


#24
Cl2-BZ#13
Concen: 0.36 ng/mL
RT: 23.196 min Scan# 1507
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1130

Ion	Ratio	Lower	Upper
222	100		
224	61.1	51.4	77.2

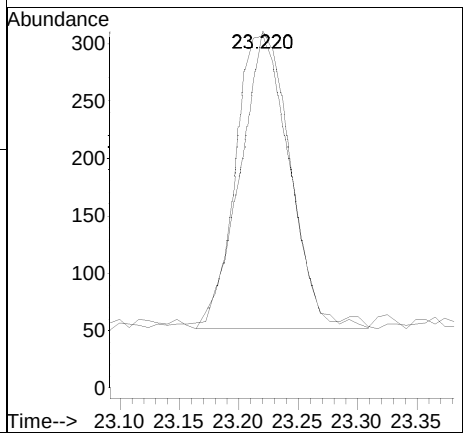


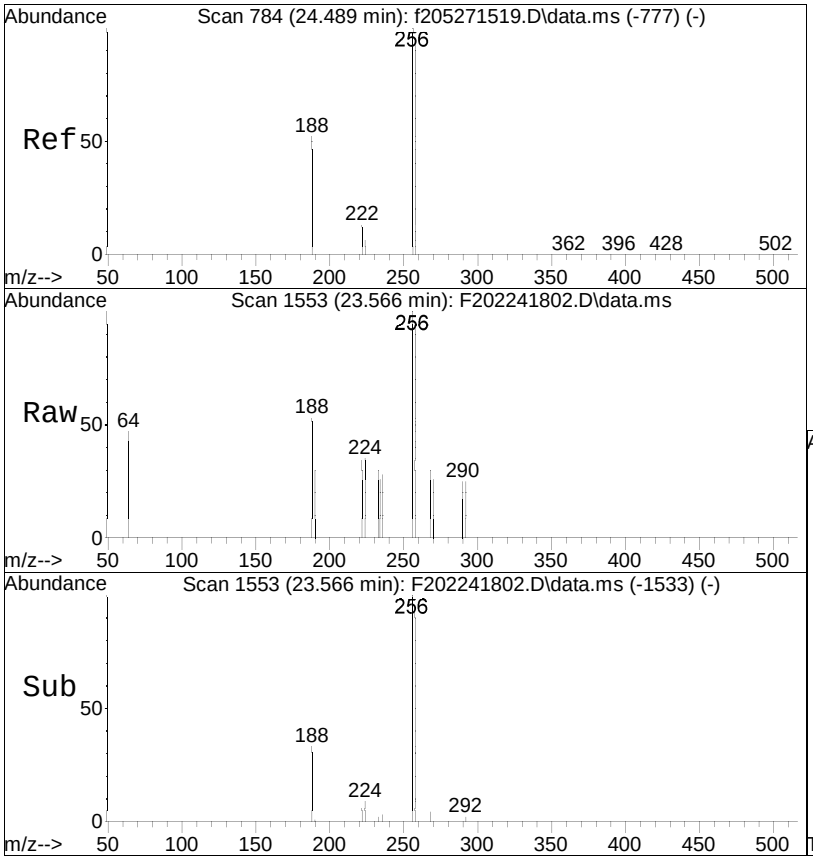


#25
Cl3-BZ#24
Concen: 0.36 ng/mL
RT: 23.220 min Scan# 1510
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 802

Ion	Ratio	Lower	Upper
256	100		
258	94.1	75.8	113.6

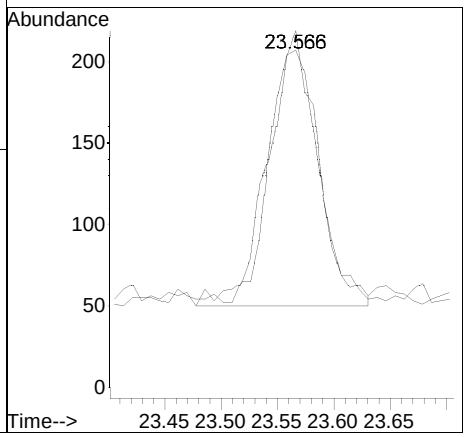


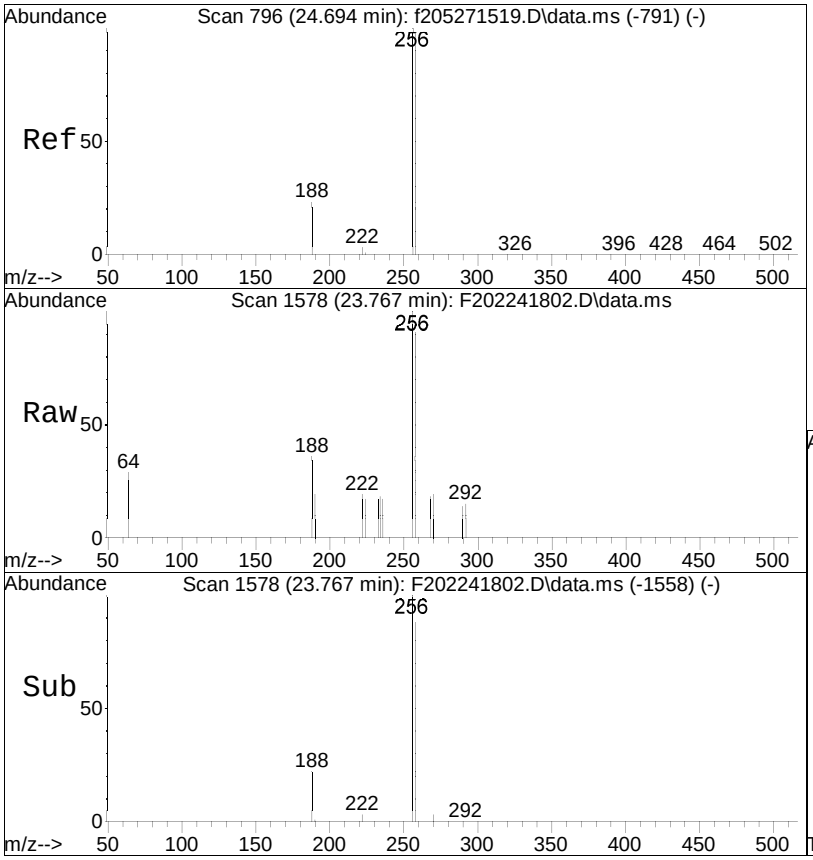


#26
Cl3-BZ#16
Concen: 0.36 ng/mL
RT: 23.566 min Scan# 1553
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 521

Ion	Ratio	Lower	Upper
256	100		
258	91.4	74.2	111.4

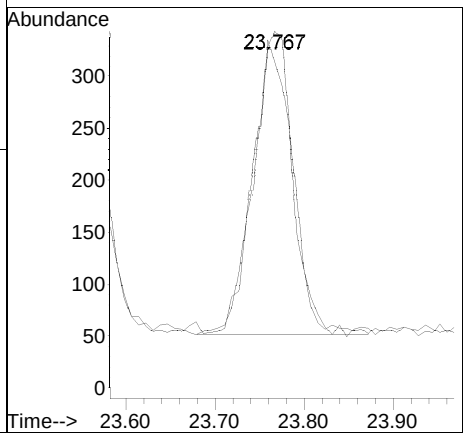


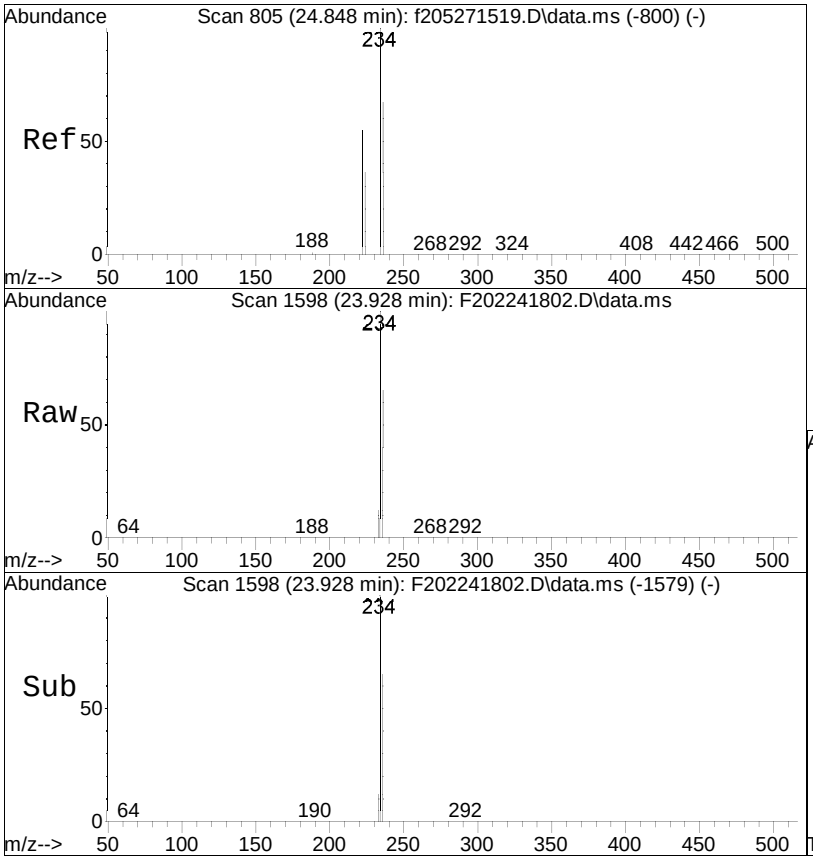


#27
Cl3-BZ#32
Concen: 0.37 ng/mL
RT: 23.767 min Scan# 1578
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 920

Ion	Ratio	Lower	Upper
256	100		
258	93.5	75.0	112.4

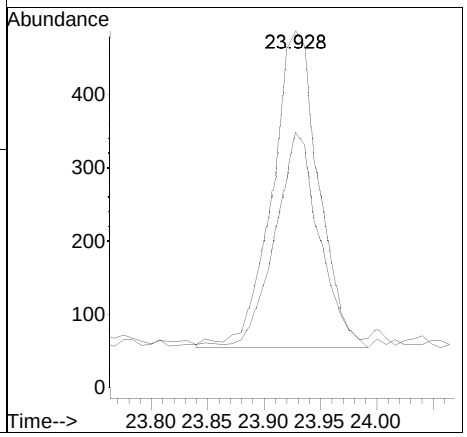


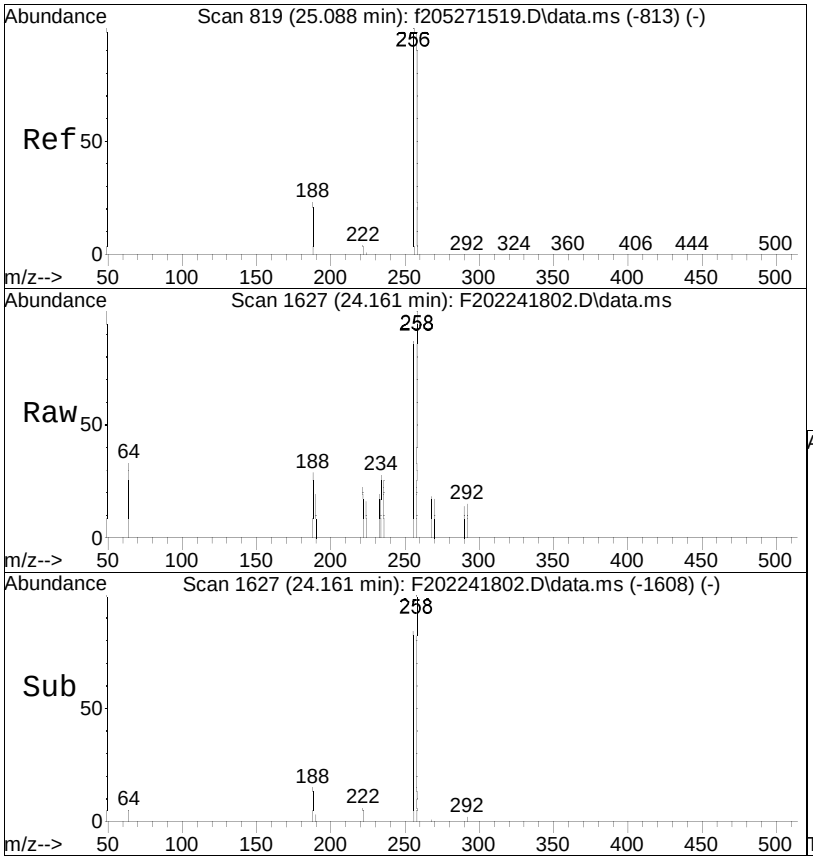


#28
Cl2-BZ#15-RTW
Concen: 0.38 ng/mL
RT: 23.928 min Scan# 1598
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:222 Resp: 1233

Ion	Ratio	Lower	Upper
222	100		
224	71.7	51.7	77.5

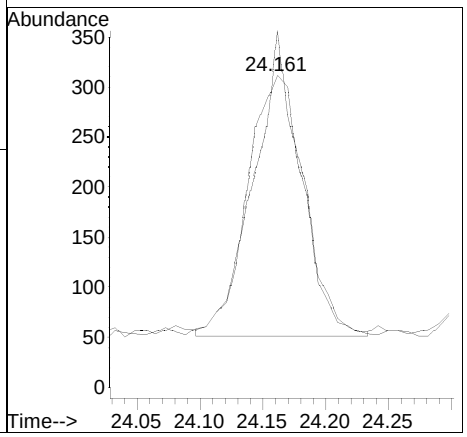


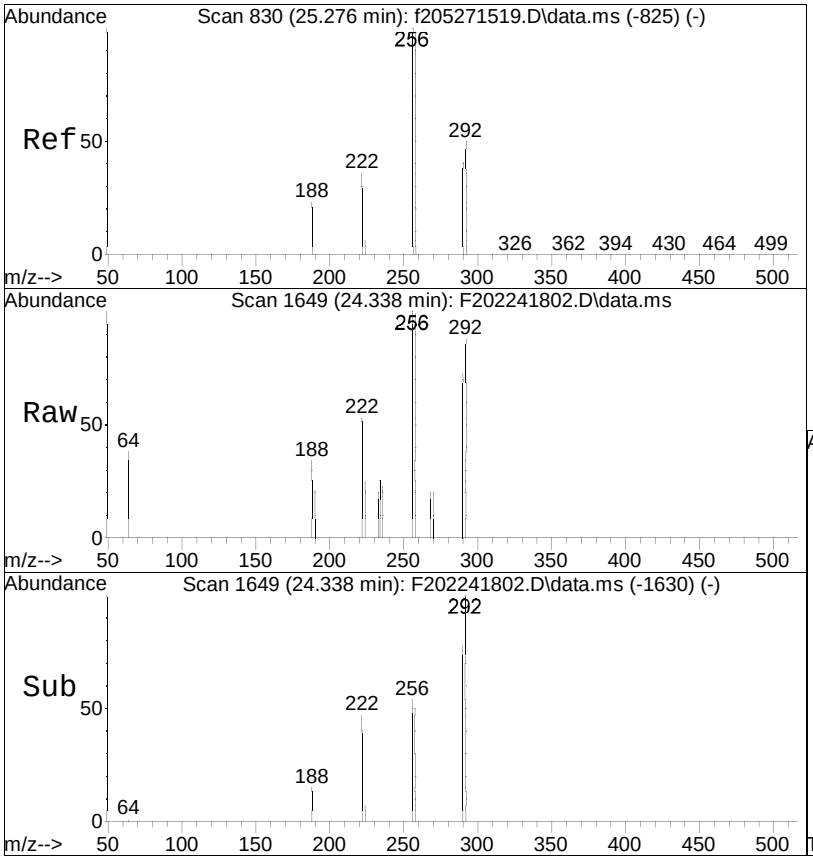


#29
Cl3-BZ#34
Concen: 0.36 ng/mL M4
RT: 24.161 min Scan# 1627
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 809

Ion	Ratio	Lower	Upper
256	100		
258	98.1	77.1	115.7

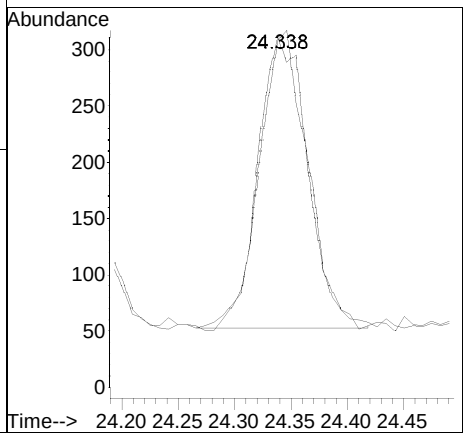


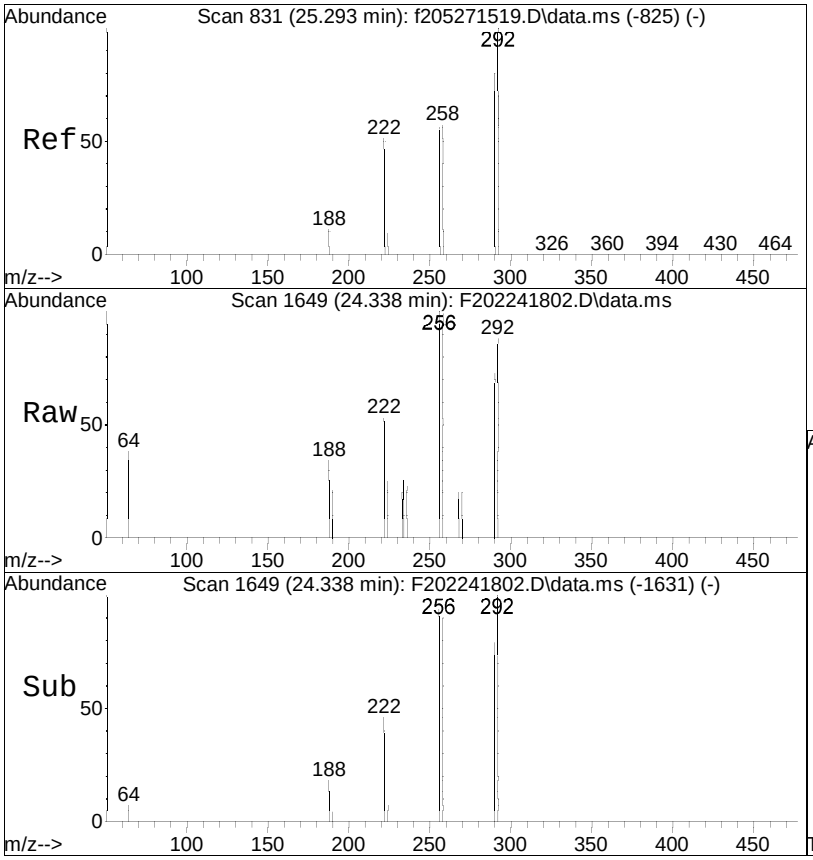


#30
Cl3-BZ#23
Concen: 0.36 ng/mL
RT: 24.338 min Scan# 1649
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 803

Ion	Ratio	Lower	Upper
256	100		
258	98.0	76.7	115.1

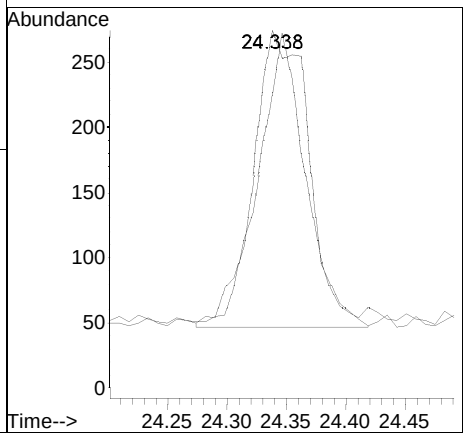


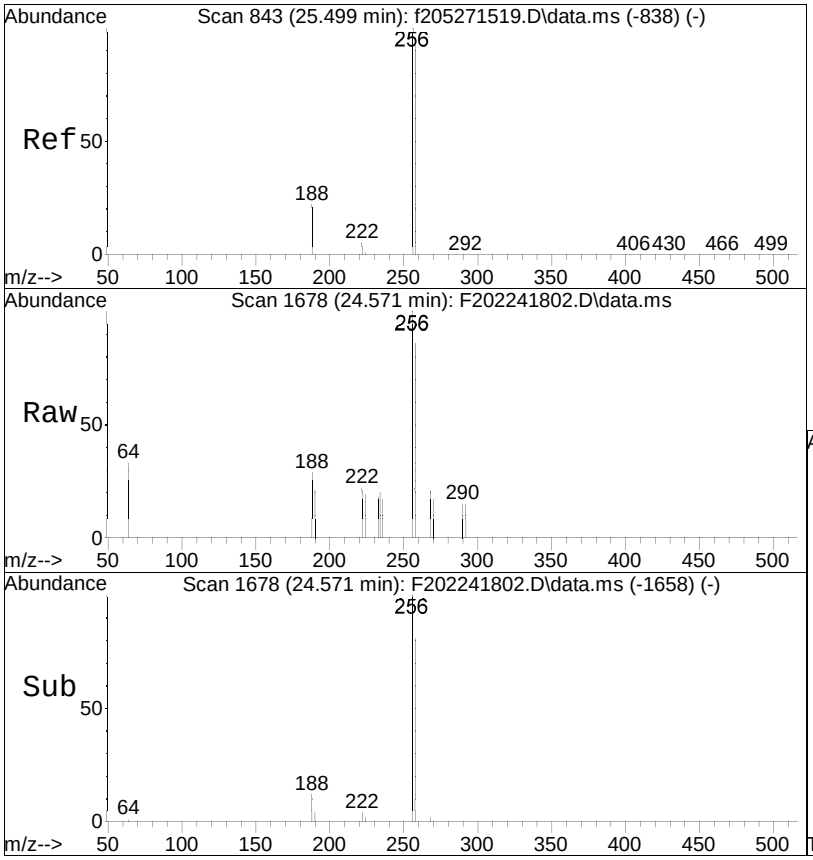


#31
Cl4-BZ#54-RTW
Concen: 0.33 ng/mL M4
RT: 24.338 min Scan# 1649
Delta R.T. -0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 742

Ion	Ratio	Lower	Upper
292	100		
290	79.4	63.5	95.3

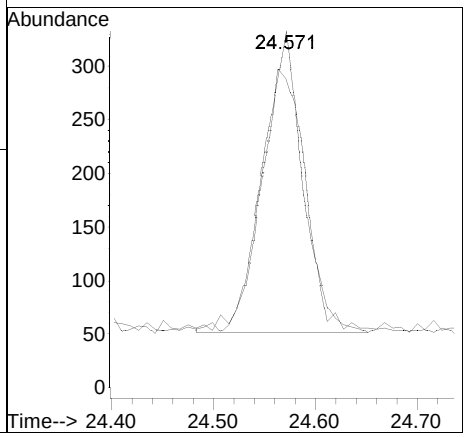


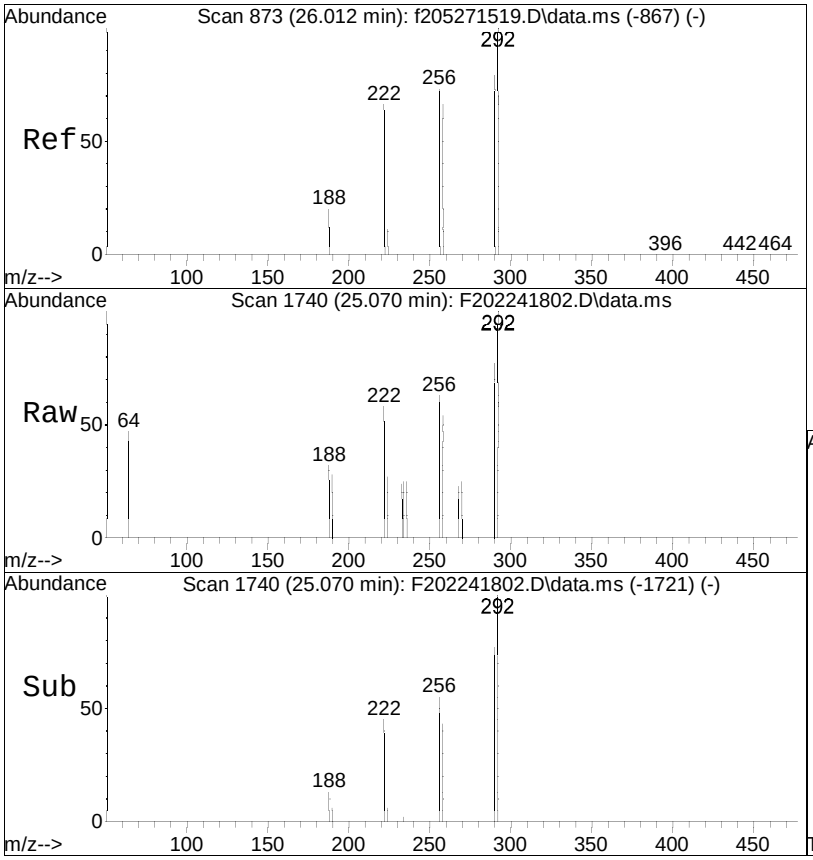


#32
Cl3-BZ#29-Cal
Concen: 0.35 ng/mL
RT: 24.571 min Scan# 1678
Delta R.T. 0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 781

Ion	Ratio	Lower	Upper
256	100		
258	86.5	76.6	115.0

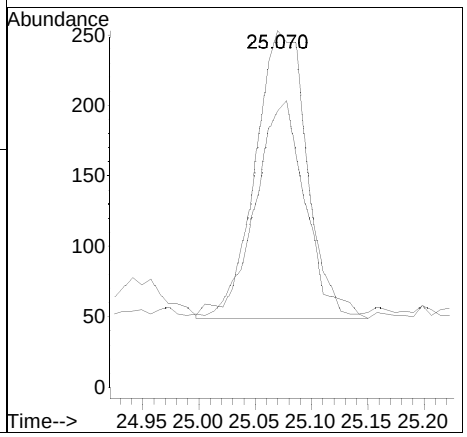


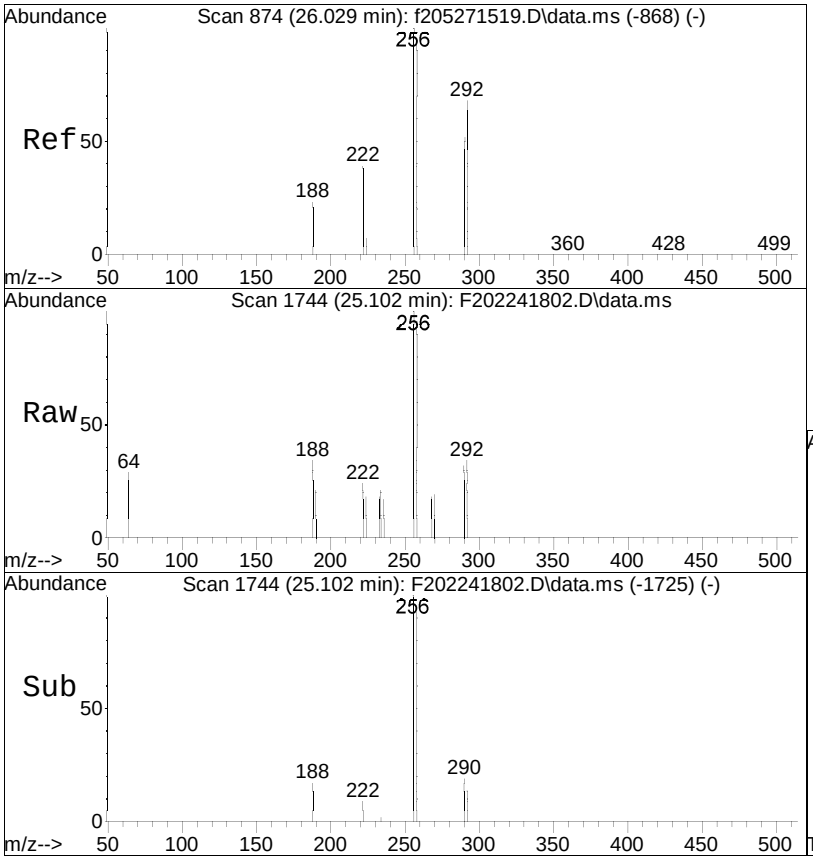


#35
Cl4-BZ#50-Cal
Concen: 0.36 ng/mL
RT: 25.070 min Scan# 1740
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 647

Ion	Ratio	Lower	Upper
292	100		
290	71.4	63.6	95.4

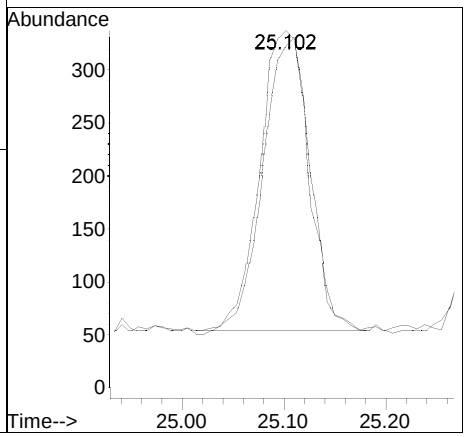


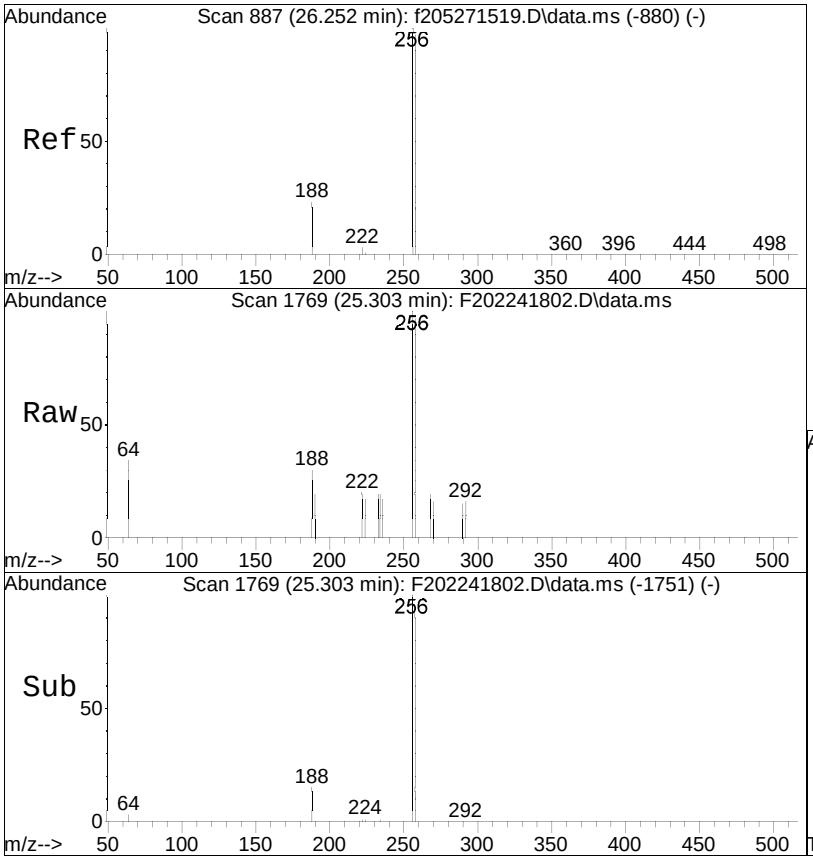


#38
Cl3-BZ#26
Concen: 0.40 ng/mL
RT: 25.102 min Scan# 1744
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 953

Ion	Ratio	Lower	Upper
256	100		
258	95.8	76.6	115.0

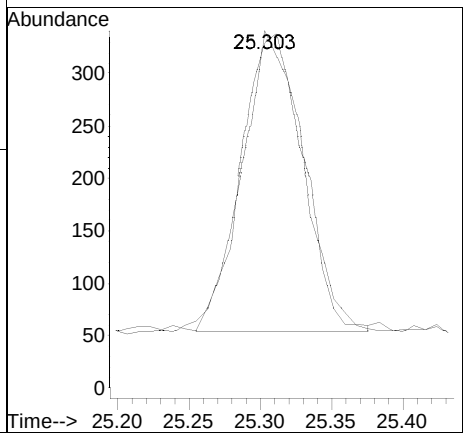


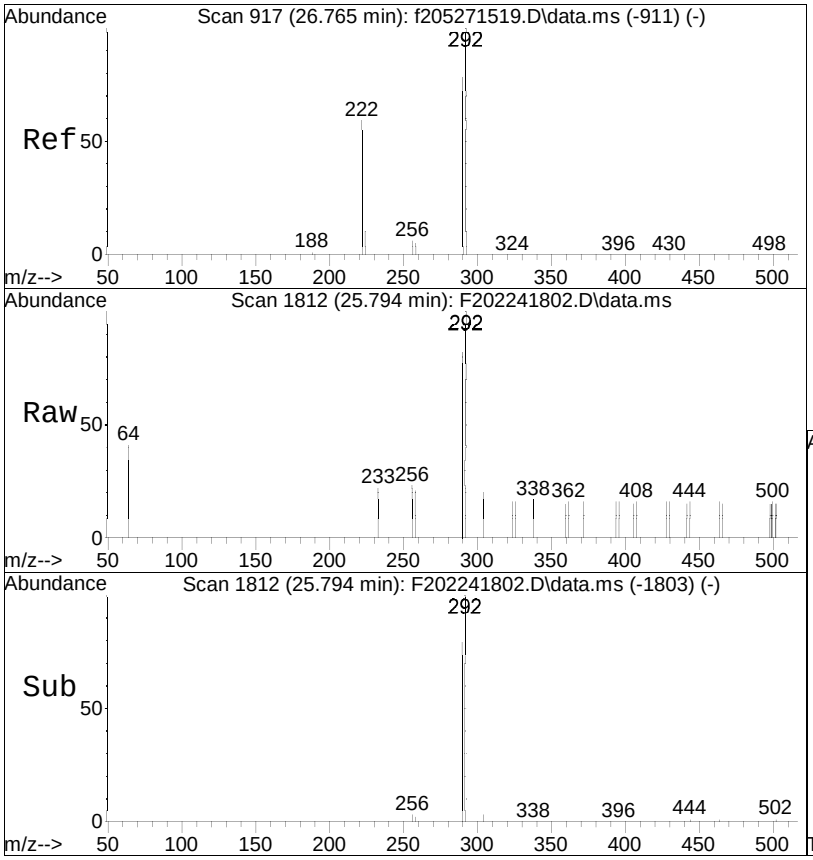


#39
Cl3-BZ#25
Concen: 0.35 ng/mL M4
RT: 25.303 min Scan# 1769
Delta R.T. -0.008 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 851

Ion	Ratio	Lower	Upper
256	100		
258	98.1	77.5	116.3

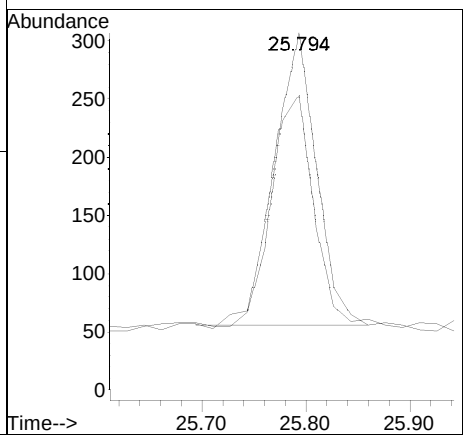


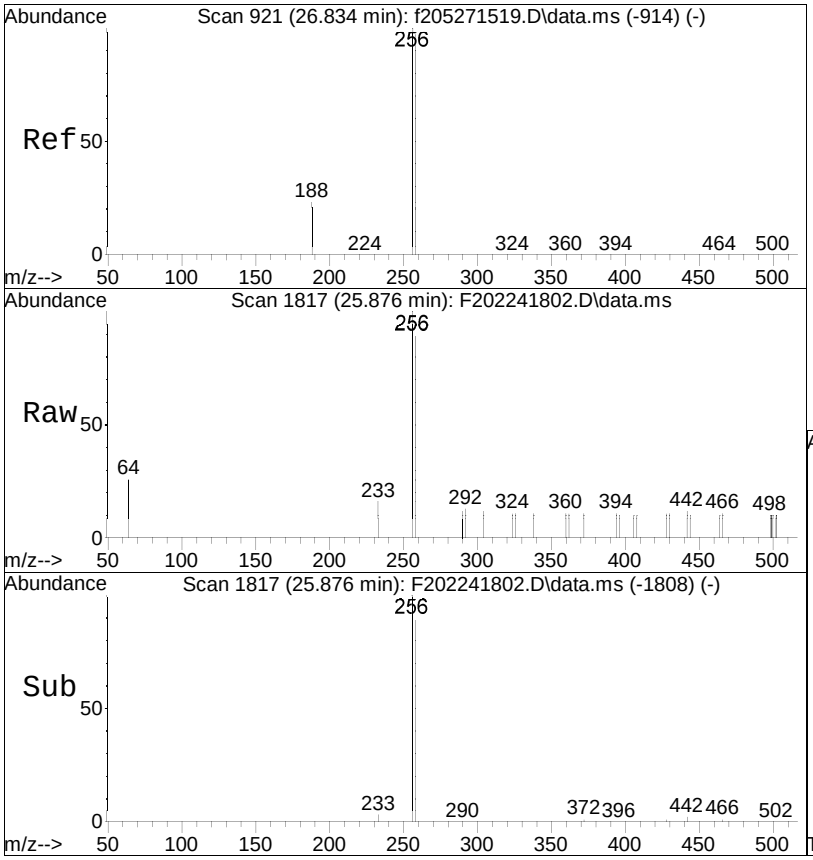


#40
Cl4-BZ#53
Concen: 0.36 ng/mL
RT: 25.794 min Scan# 1812
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 705

Ion	Ratio	Lower	Upper
292	100		
290	79.6	62.4	93.6

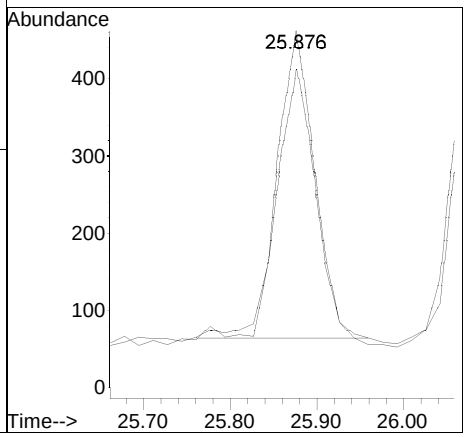


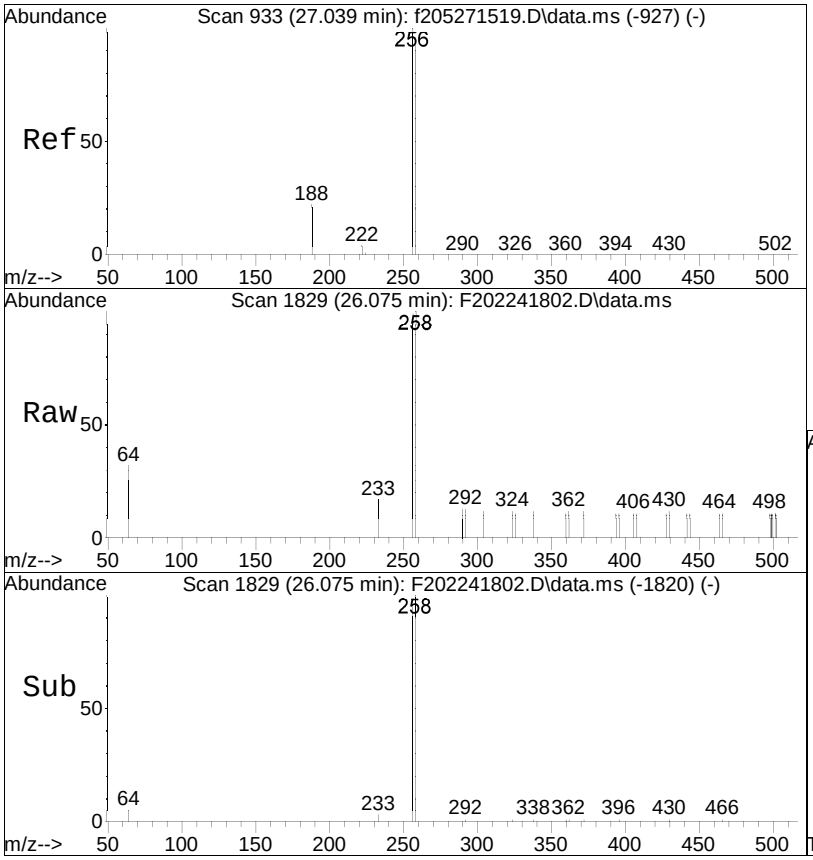


#41
Cl3-BZ#-31
Concen: 0.40 ng/mL
RT: 25.876 min Scan# 1817
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1211

Ion	Ratio	Lower	Upper
256	100		
258	92.4	78.6	117.8

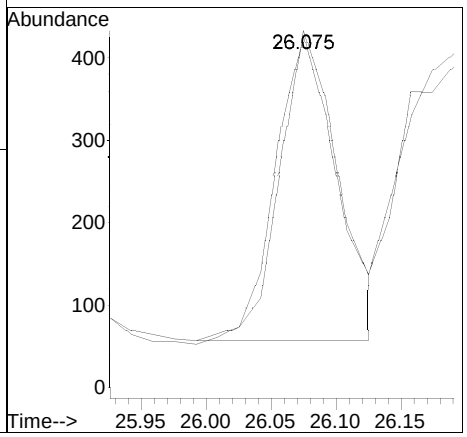


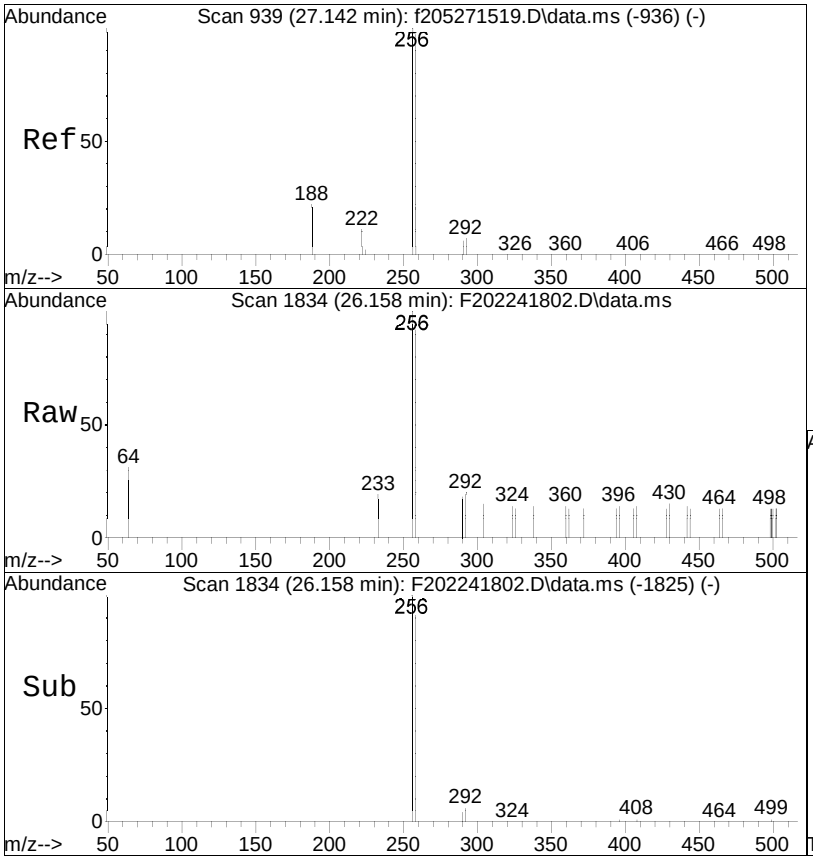


#42
Cl3-BZ#28
Concen: 0.39 ng/mL
RT: 26.075 min Scan# 1829
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1227

Ion	Ratio	Lower	Upper
256	100		
258	101.4	77.5	116.3

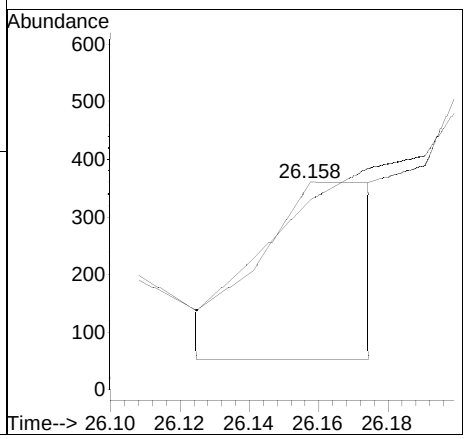


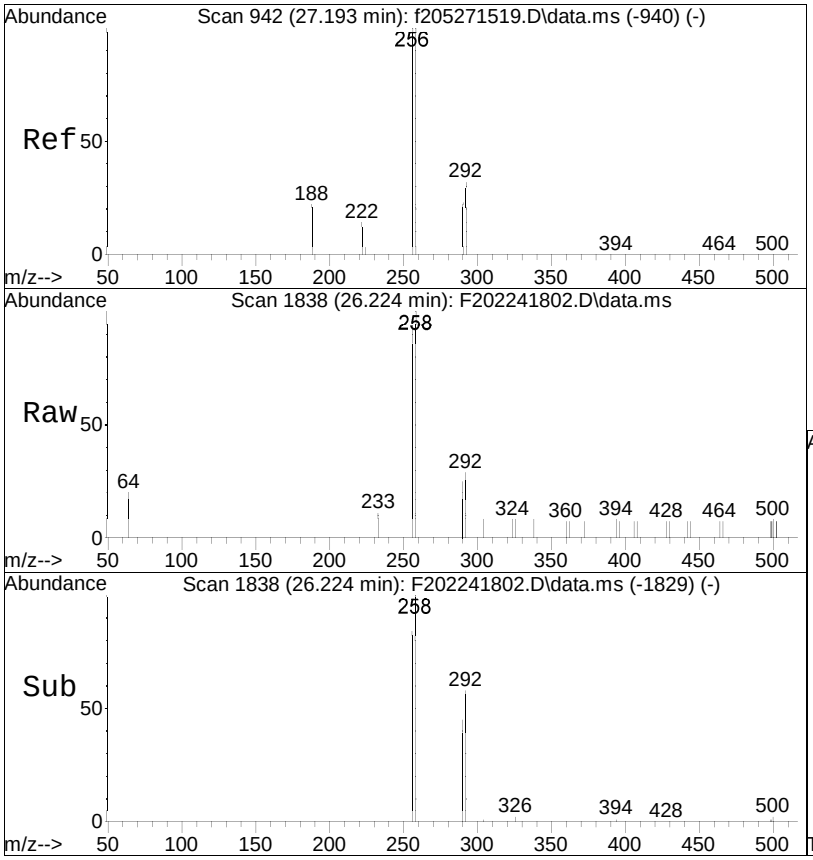


#43
Cl3-BZ#33
Concen: 0.27 ng/mL M3
RT: 26.158 min Scan# 1834
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 765

Ion	Ratio	Lower	Upper
256	100		
258	278.6	76.2	114.4#

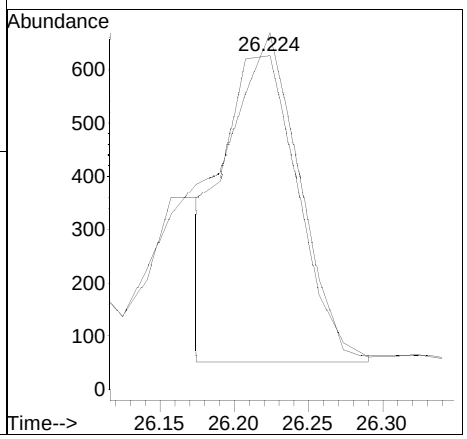


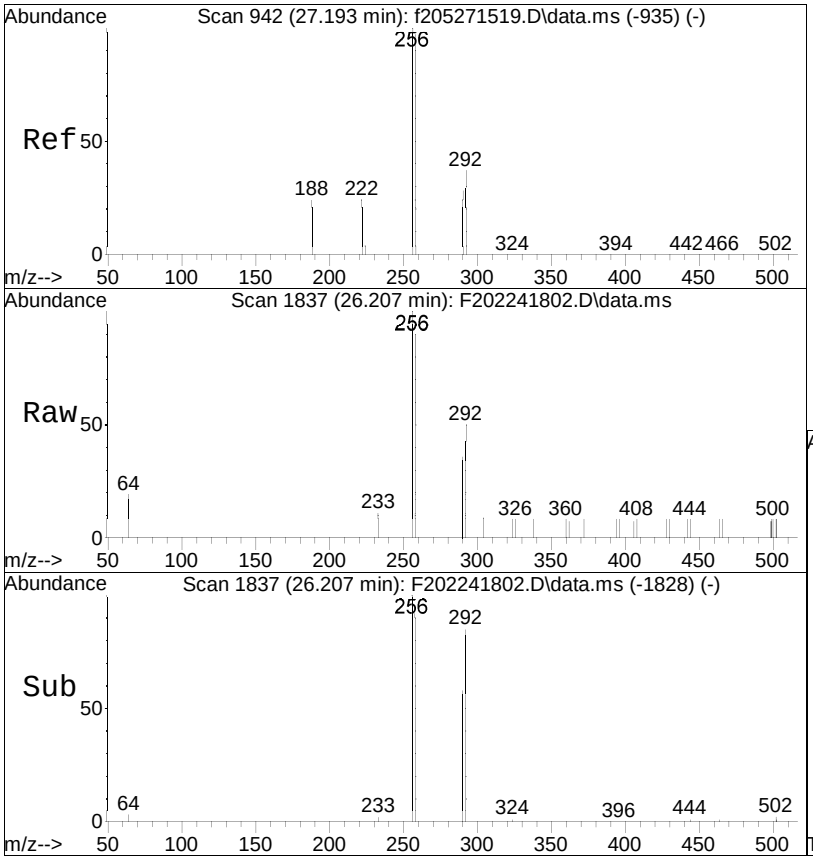


#44
Cl3-BZ#21/#20
Concen: 0.71 ng/mL M3
RT: 26.224 min Scan# 1838
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1999

Ion	Ratio	Lower	Upper
256	100		
258	137.0	77.8	116.8#

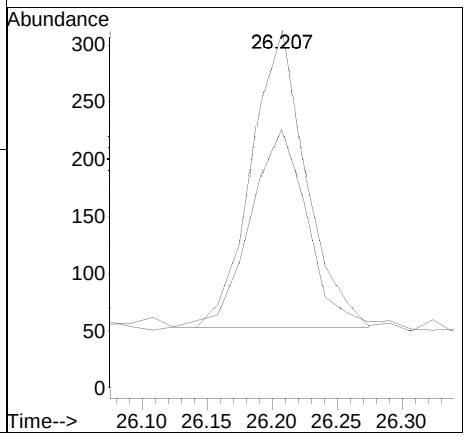


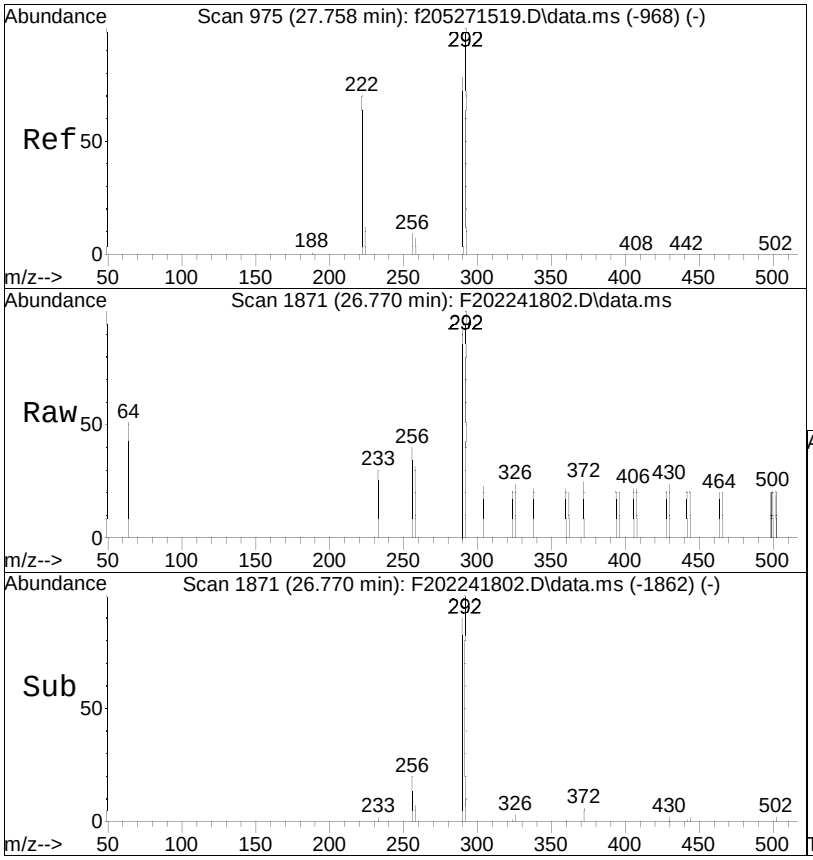


#45
Cl4-BZ#51
Concen: 0.35 ng/mL
RT: 26.207 min Scan# 1837
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 760

Ion	Ratio	Lower	Upper
292	100		
290	72.4	61.4	92.2

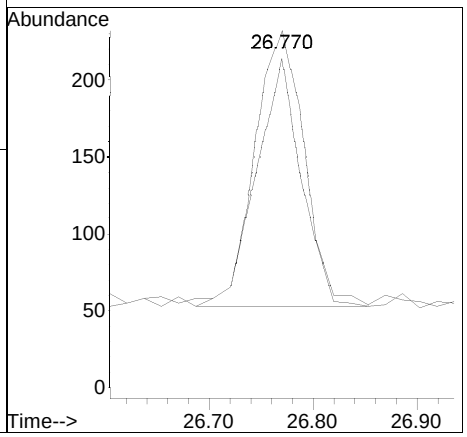


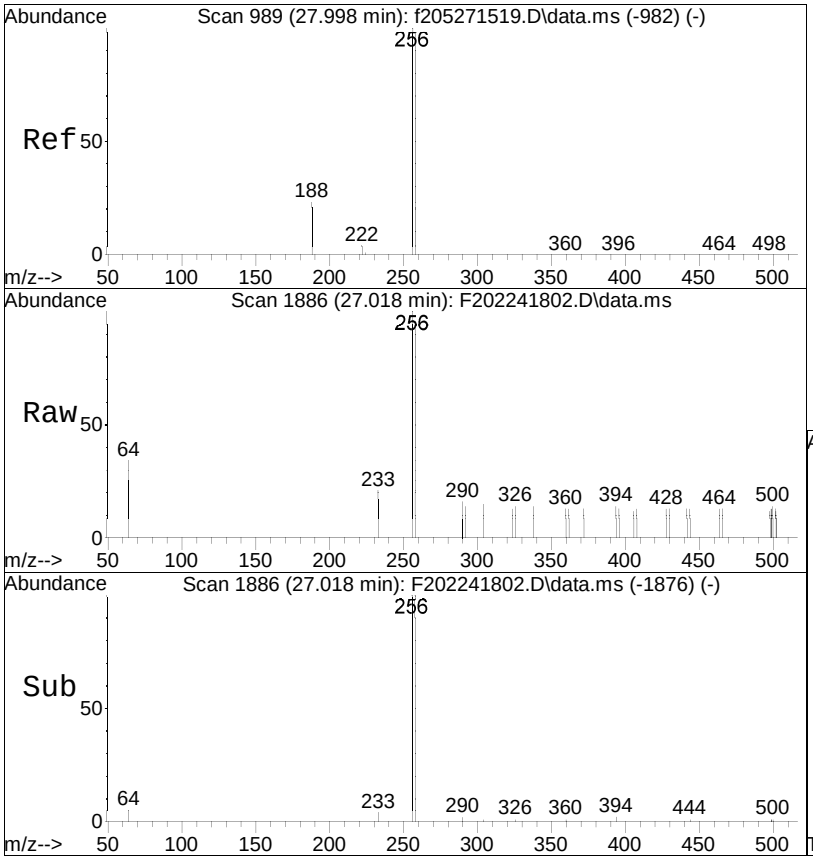


#46
Cl4-BZ#45
Concen: 0.36 ng/mL M4
RT: 26.770 min Scan# 1871
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 592

Ion	Ratio	Lower	Upper
292	100		
290	82.1	62.6	93.8

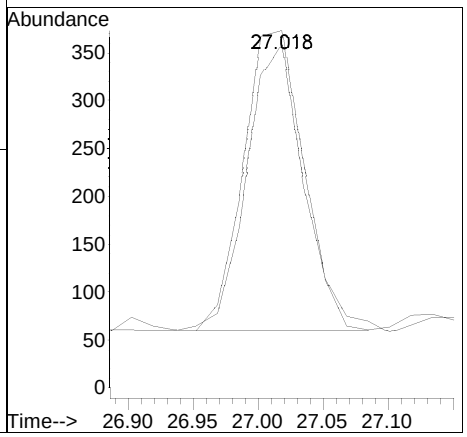


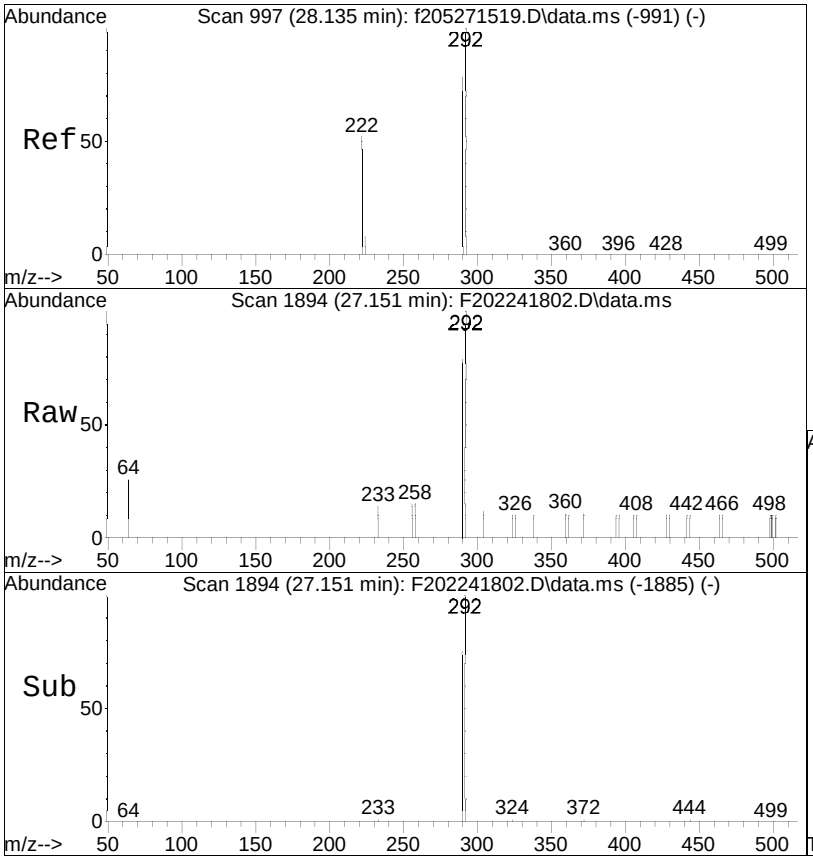


#47
Cl3-BZ#22
Concen: 0.36 ng/mL
RT: 27.018 min Scan# 1886
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1008

Ion	Ratio	Lower	Upper
256	100		
258	96.2	75.4	113.0

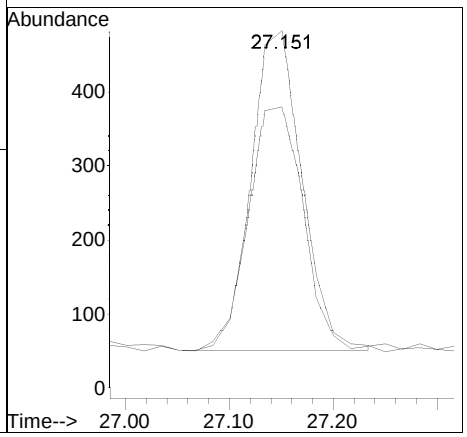


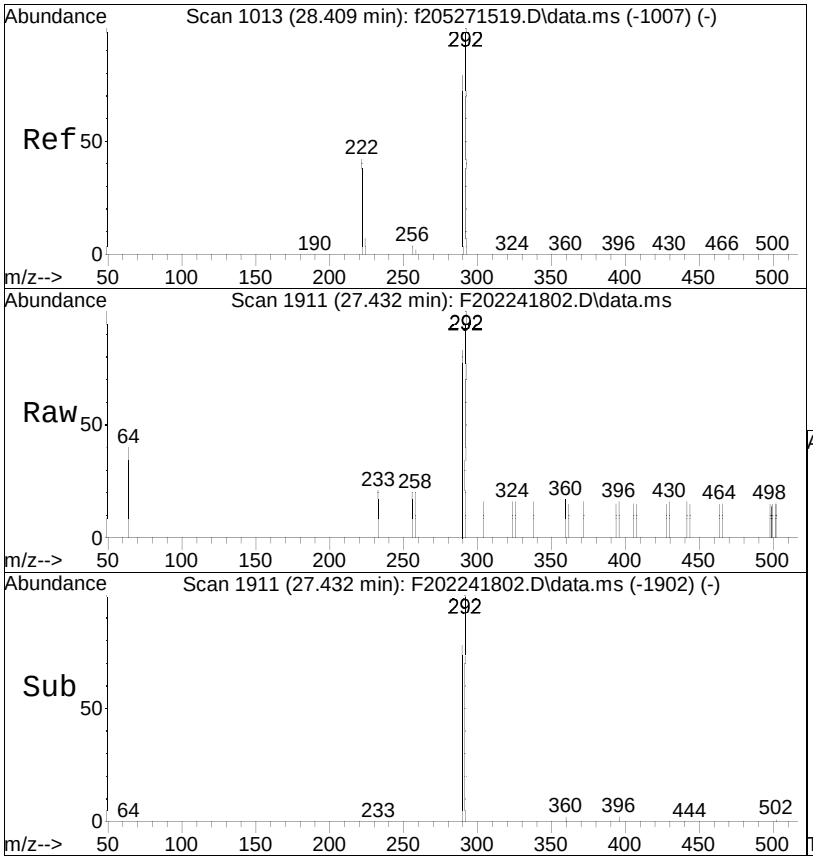


#48
Cl4-BZ#73/#46
Concen: 0.66 ng/mL
RT: 27.151 min Scan# 1894
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1451

Ion	Ratio	Lower	Upper
292	100		
290	82.4	62.4	93.6

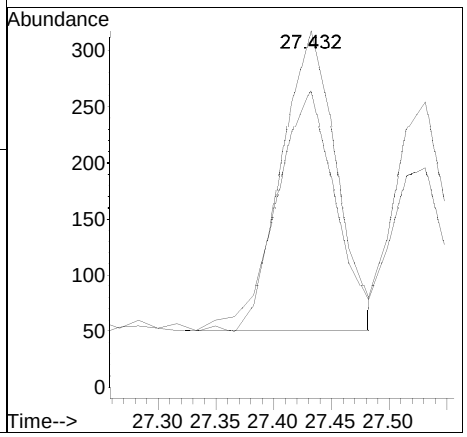


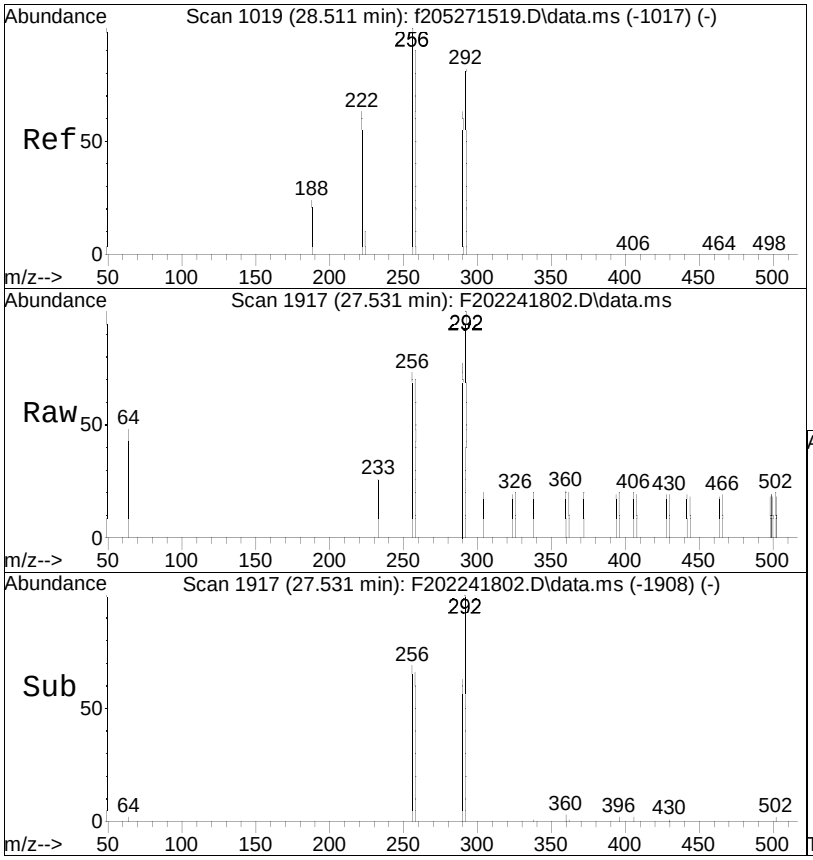


#49
Cl4-BZ#69
Concen: 0.35 ng/mL
RT: 27.432 min Scan# 1911
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 891

Ion	Ratio	Lower	Upper
292	100		
290	85.6	62.0	93.0

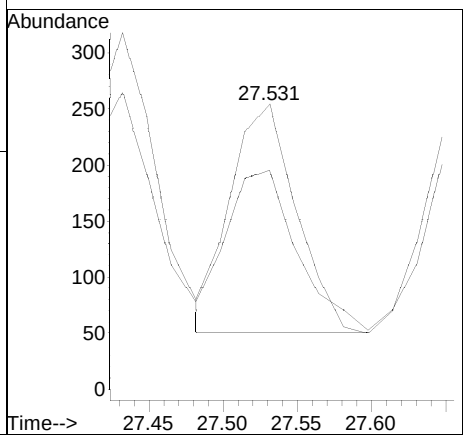


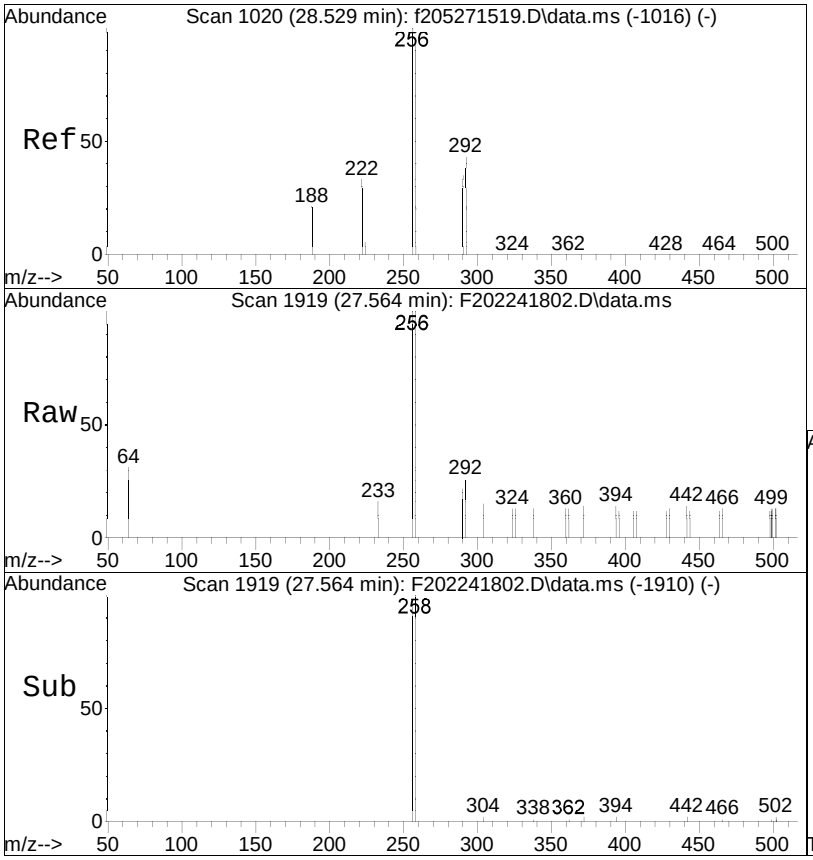


#50
Cl4-BZ#43
Concen: 0.35 ng/mL
RT: 27.531 min Scan# 1917
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 634

Ion	Ratio	Lower	Upper
292	100		
290	74.0	60.5	90.7

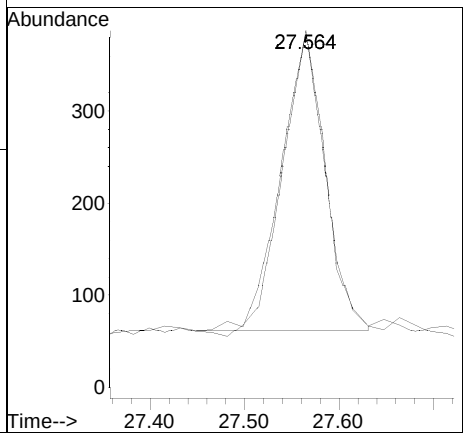


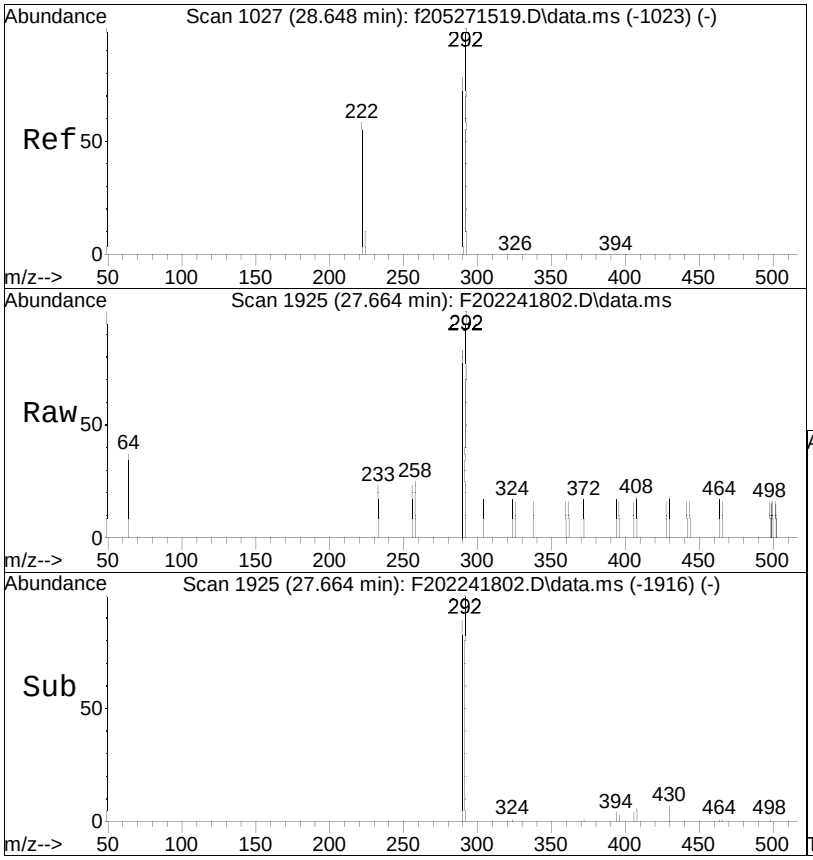


#51
Cl3-BZ#36
Concen: 0.33 ng/mL
RT: 27.564 min Scan# 1919
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1055

Ion	Ratio	Lower	Upper
256	100		
258	101.5	77.4	116.0

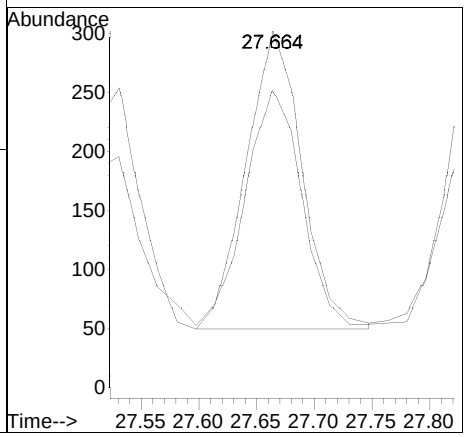


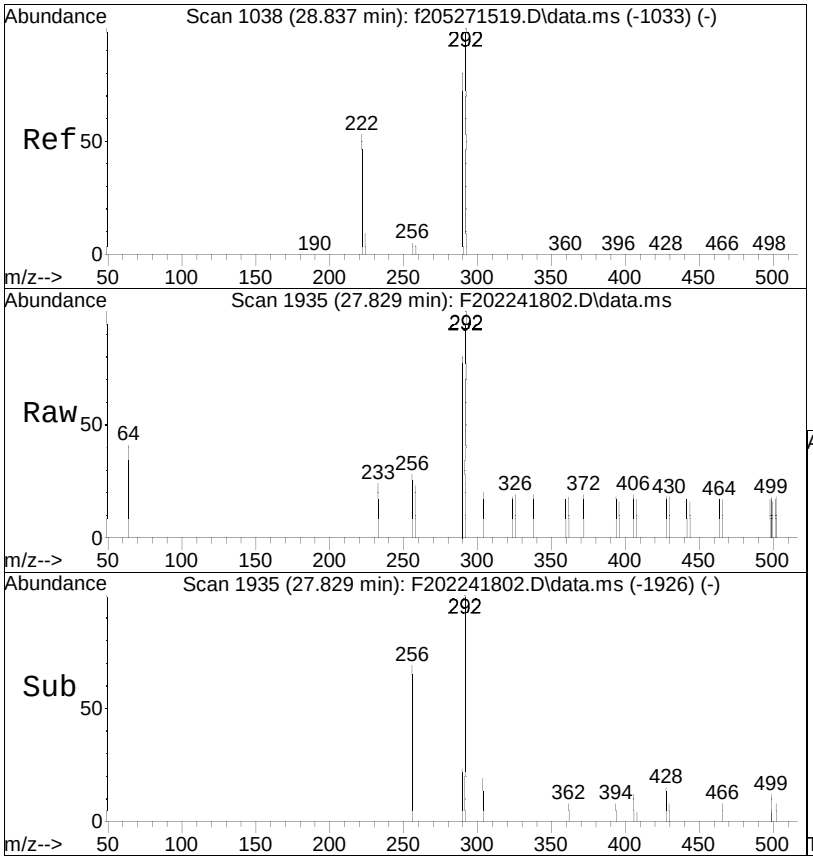


#52
Cl4-BZ#52
Concen: 0.39 ng/mL
RT: 27.664 min Scan# 1925
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 849

Ion	Ratio	Lower	Upper
292	100		
290	83.4	60.8	91.2

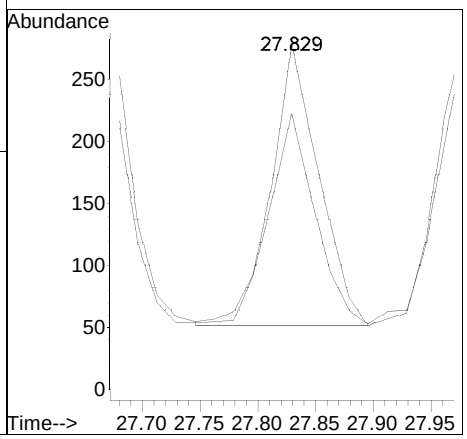


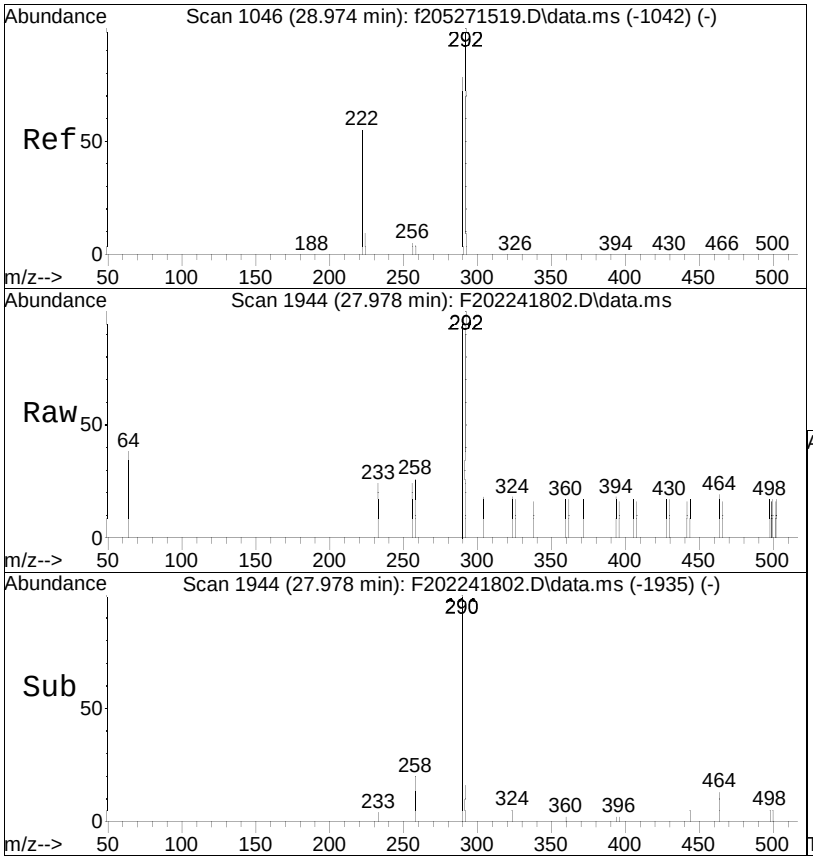


#53
Cl4-BZ#48
Concen: 0.36 ng/mL
RT: 27.829 min Scan# 1935
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 651

Ion	Ratio	Lower	Upper
292	100		
290	79.9	61.0	91.6

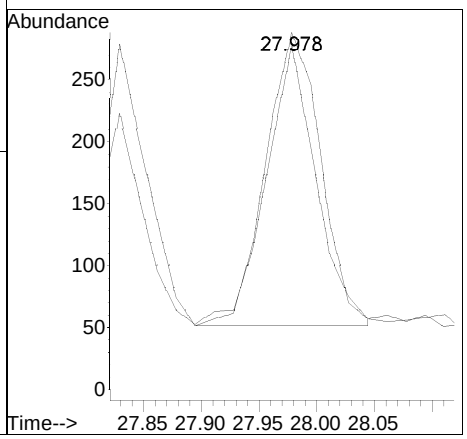


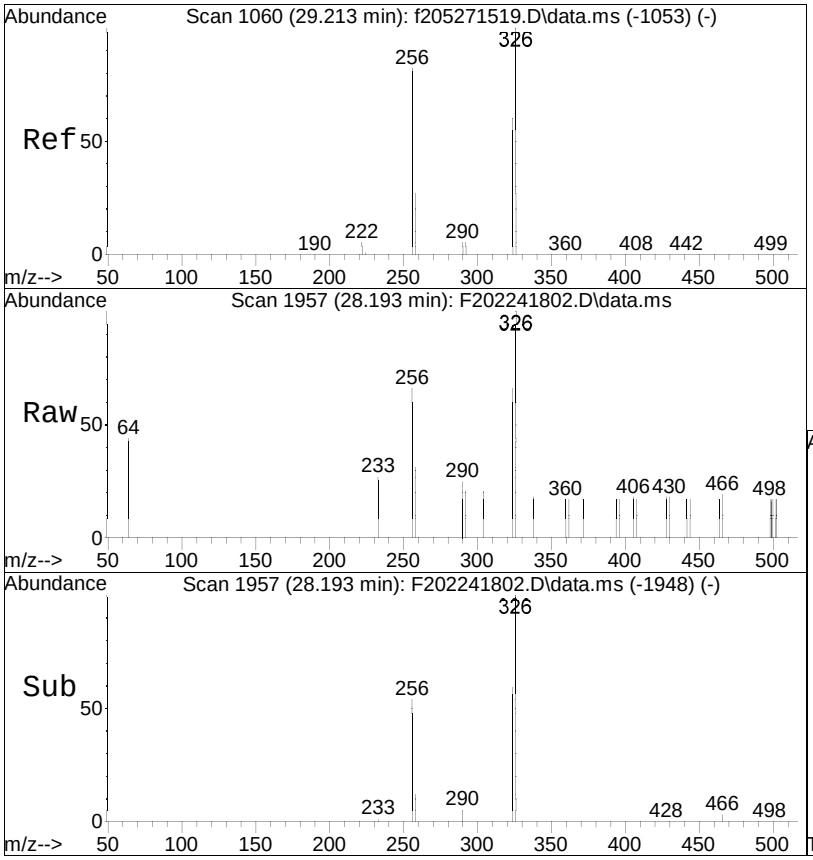


#54
Cl4-BZ#49
Concen: 0.39 ng/mL
RT: 27.978 min Scan# 1944
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 780

Ion	Ratio	Lower	Upper
292	100		
290	96.5	62.1	93.1#

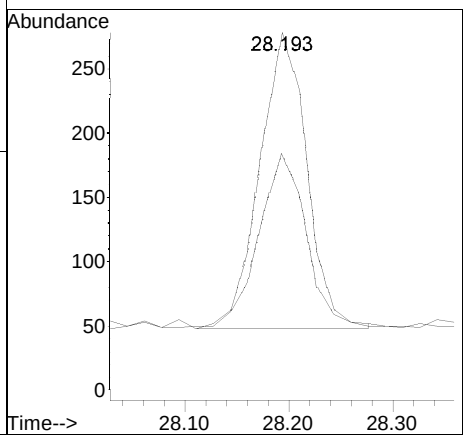


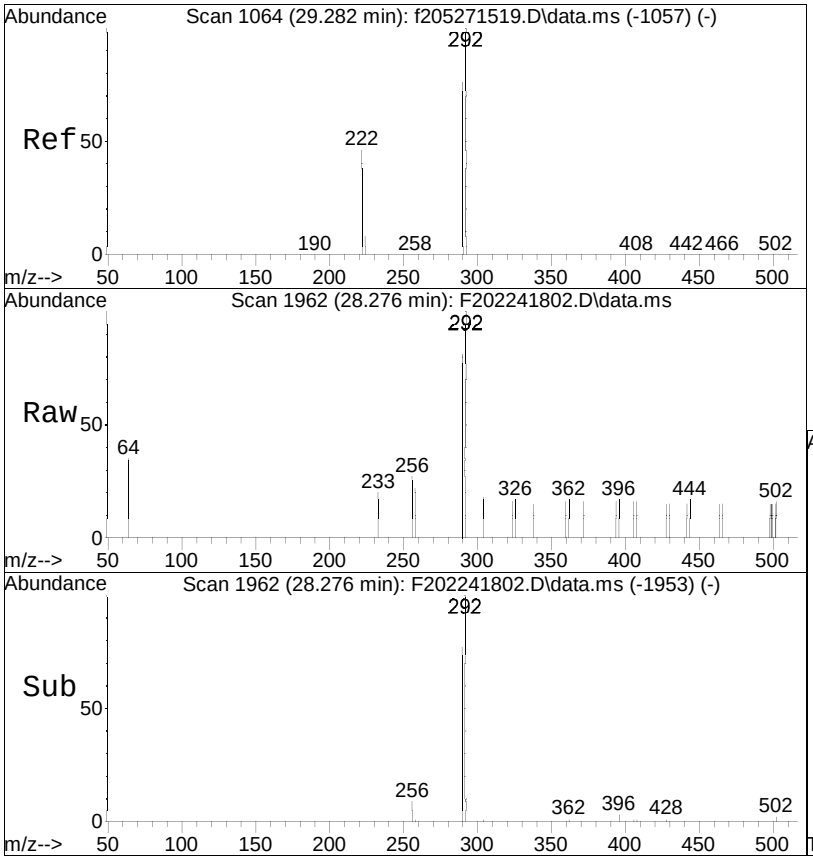


#55
Cl5-BZ#104-RTW
Concen: 0.33 ng/mL
RT: 28.193 min Scan# 1957
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 723

Ion	Ratio	Lower	Upper
326	100		
324	66.2	48.4	72.6

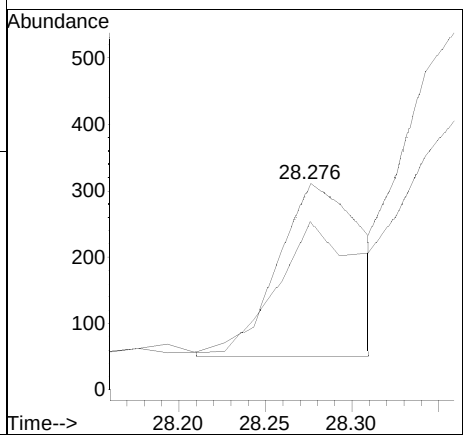


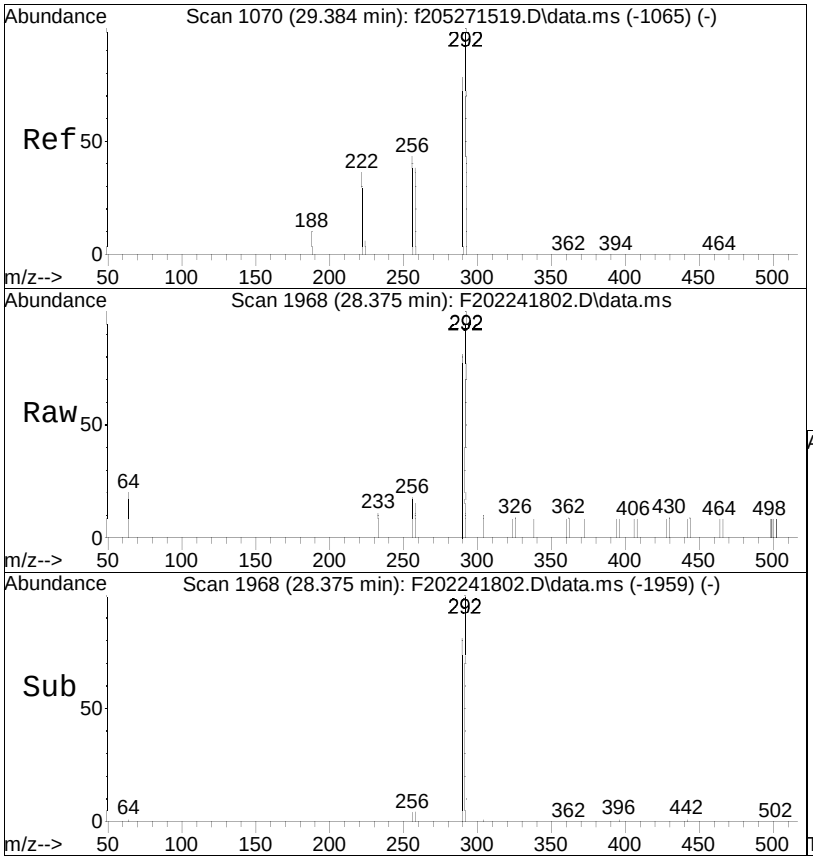


#56
Cl4-BZ#47
Concen: 0.42 ng/mL M3
RT: 28.276 min Scan# 1962
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 896

Ion	Ratio	Lower	Upper
292	100		
290	0.0	63.0	94.4#

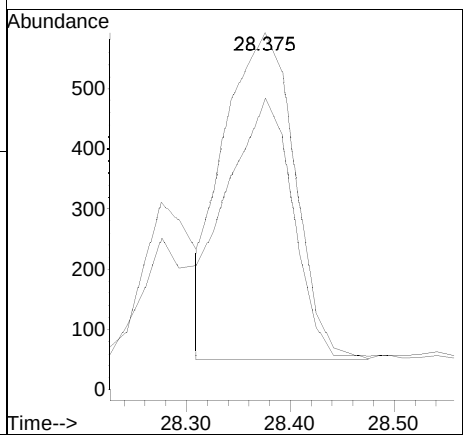


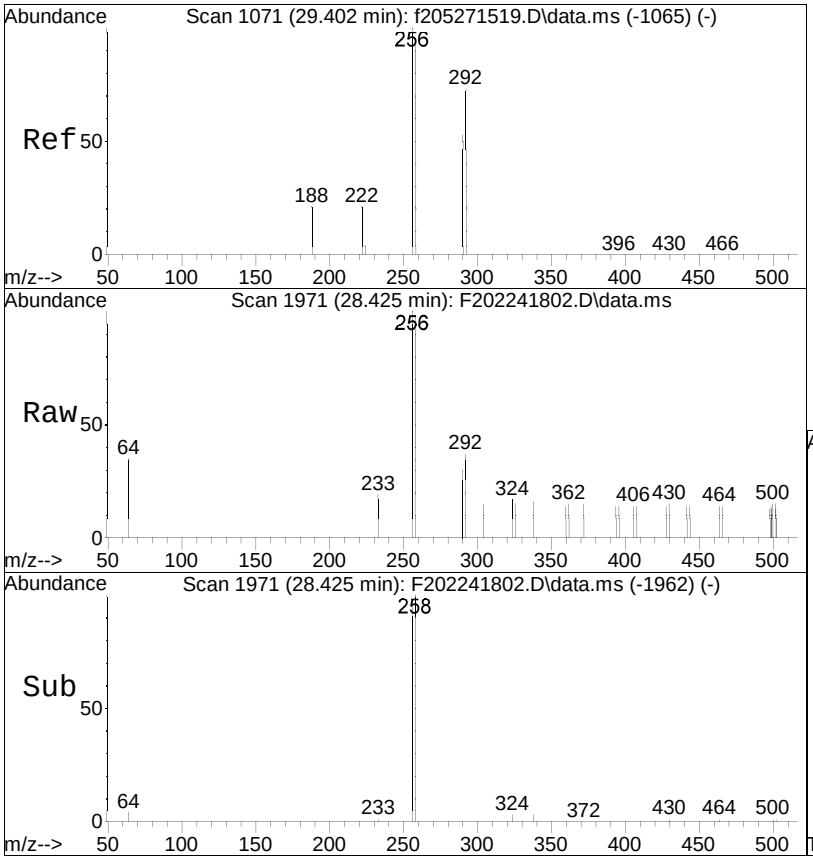


#57
Cl4-BZ#65/#75/#62
Concen: 0.99 ng/mL M3
RT: 28.375 min Scan# 1968
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 2573

Ion	Ratio	Lower	Upper
292	100		
290	90.4	63.0	94.6

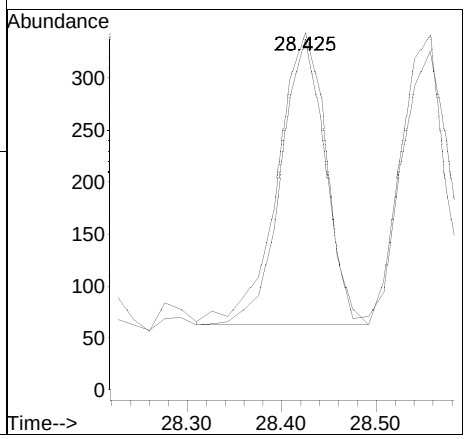


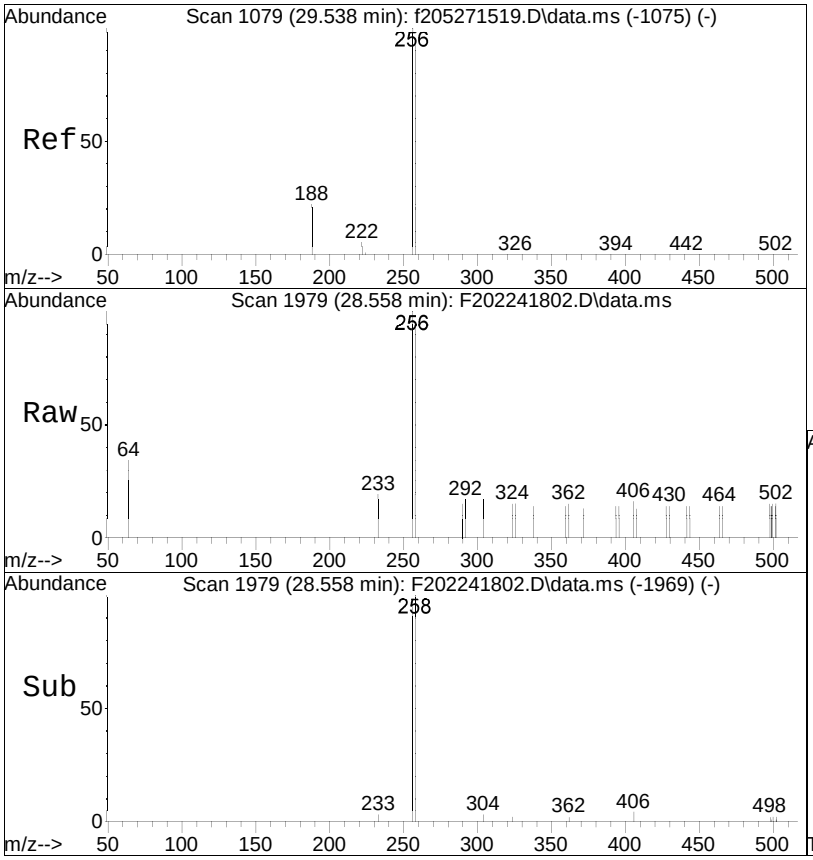


#58
Cl3-BZ#39
Concen: 0.35 ng/mL
RT: 28.425 min Scan# 1971
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1016

Ion	Ratio	Lower	Upper
256	100		
258	88.2	76.2	114.2

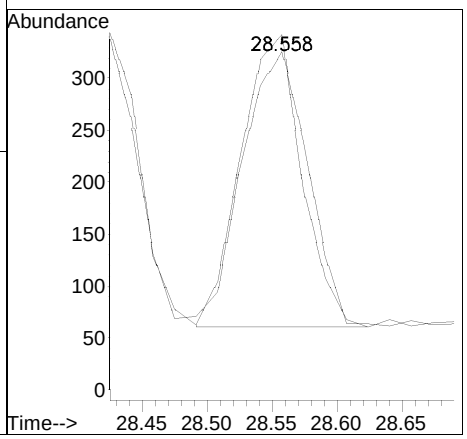


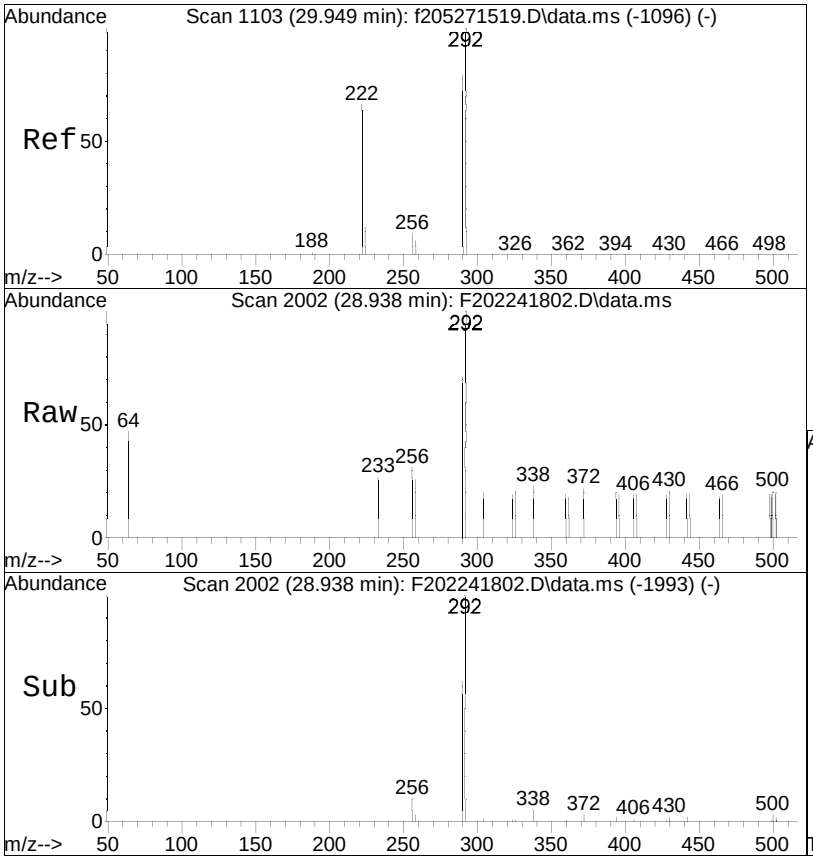


#59
Cl3-BZ#38
Concen: 0.32 ng/mL
RT: 28.558 min Scan# 1979
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 919

Ion	Ratio	Lower	Upper
256	100		
258	98.9	74.9	112.3

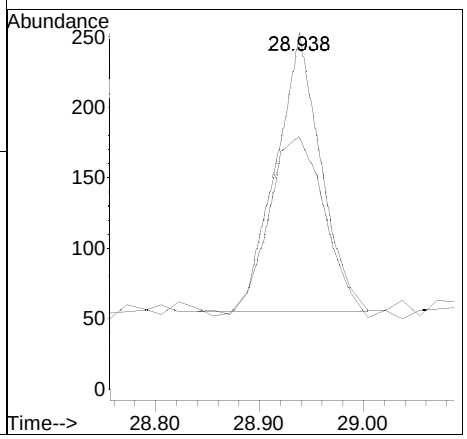


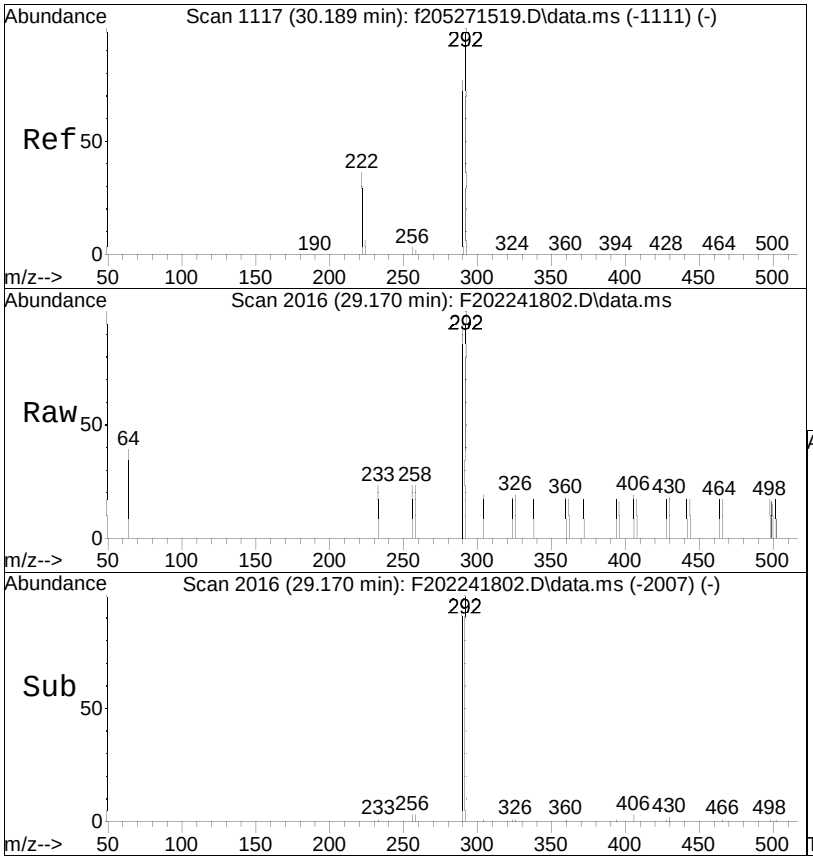


#60
Cl4-BZ#44
Concen: 0.34 ng/mL
RT: 28.938 min Scan# 2002
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 589

Ion	Ratio	Lower	Upper
292	100		
290	70.8	63.1	94.7

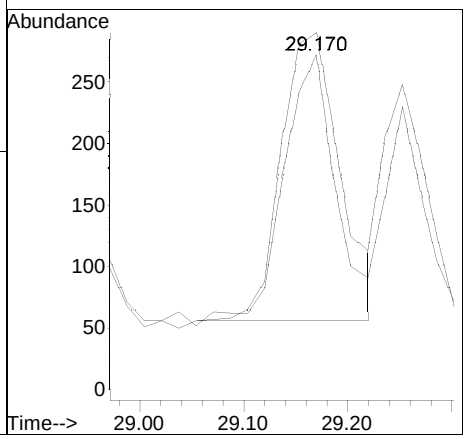


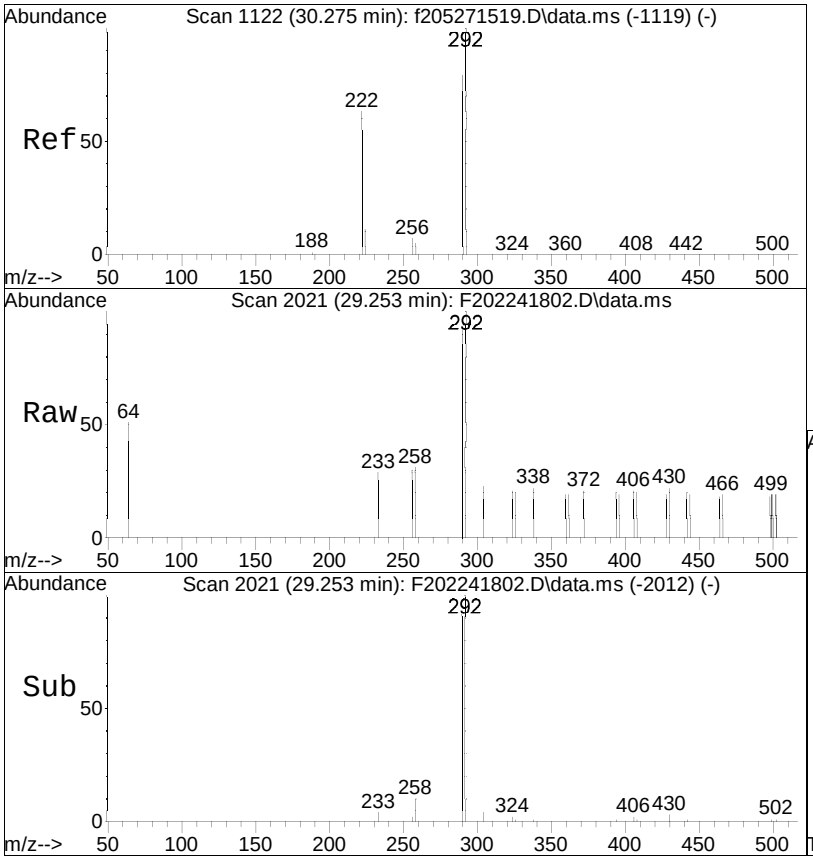


#61
Cl4-BZ#59
Concen: 0.36 ng/mL
RT: 29.170 min Scan# 2016
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 922

Ion	Ratio	Lower	Upper
292	100		
290	85.7	64.0	96.0

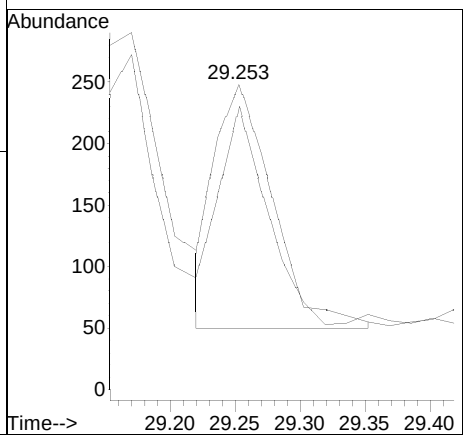


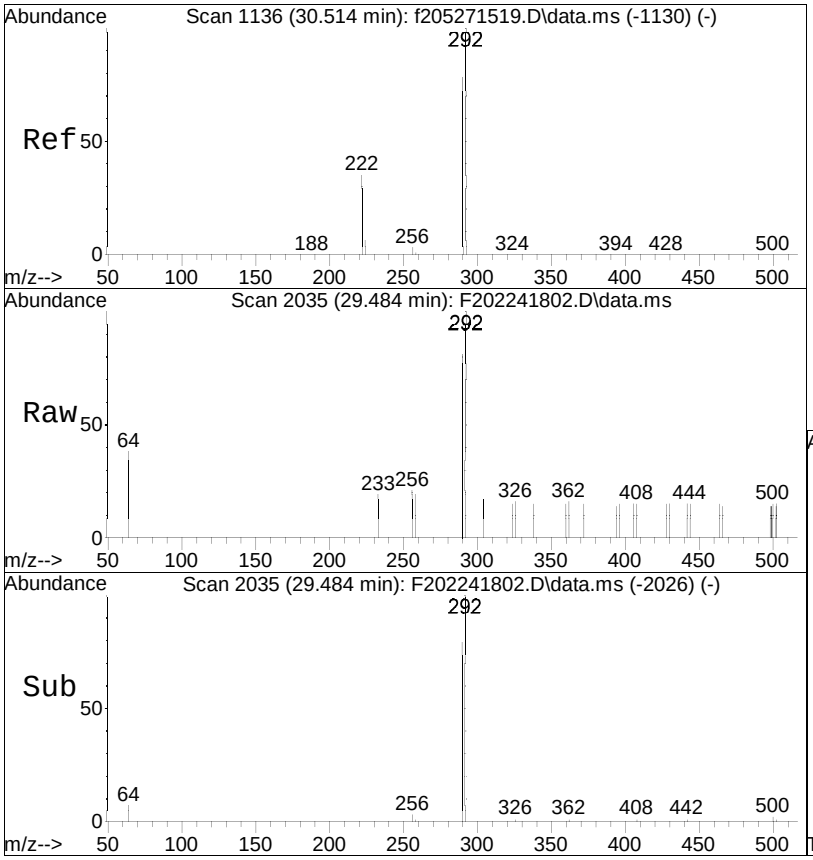


#62
Cl4-BZ#42
Concen: 0.37 ng/mL M4
RT: 29.253 min Scan# 2021
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 615

Ion	Ratio	Lower	Upper
292	100		
290	81.4	64.3	96.5

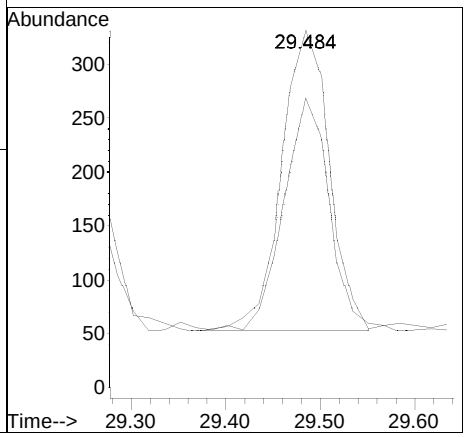


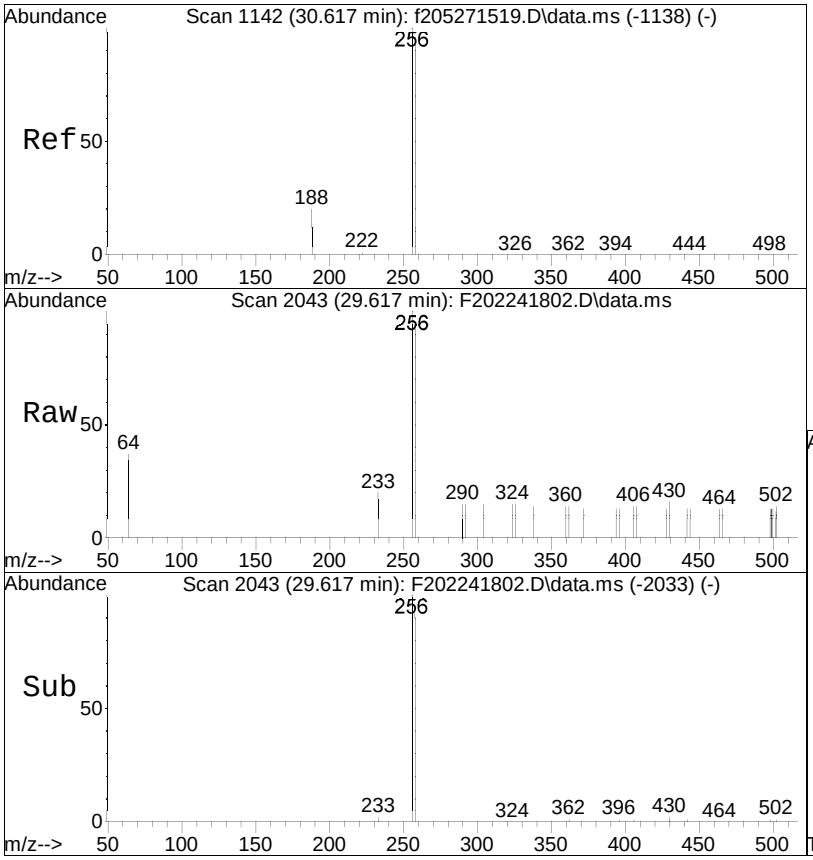


#63
Cl4-BZ#71
Concen: 0.36 ng/mL
RT: 29.484 min Scan# 2035
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 987

Ion	Ratio	Lower	Upper
292	100		
290	72.3	62.8	94.2

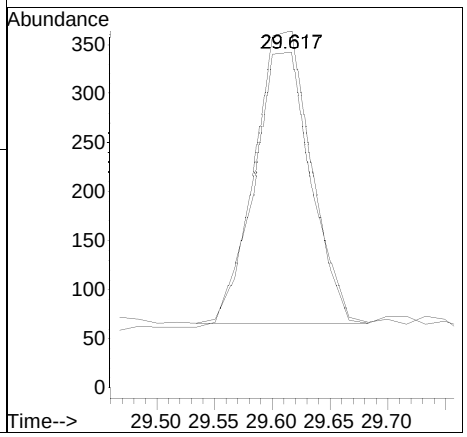


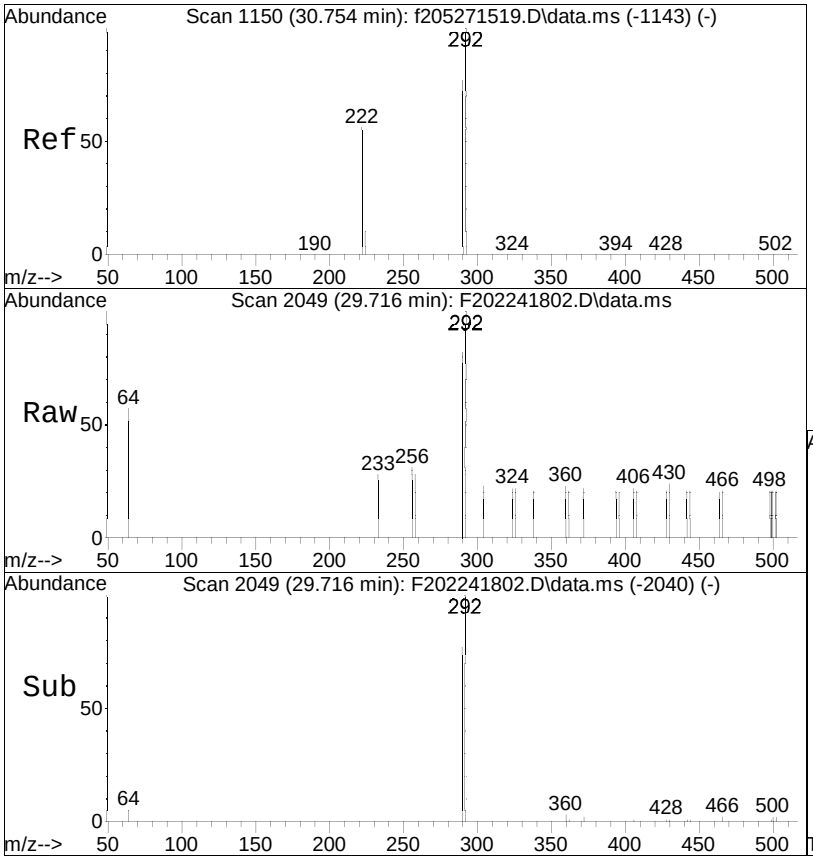


#64
Cl3-BZ#35
Concen: 0.36 ng/mL
RT: 29.617 min Scan# 2043
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1005

Ion	Ratio	Lower	Upper
256	100		
258	97.4	77.2	115.8

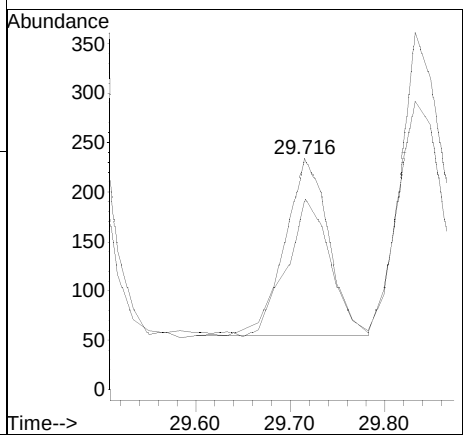


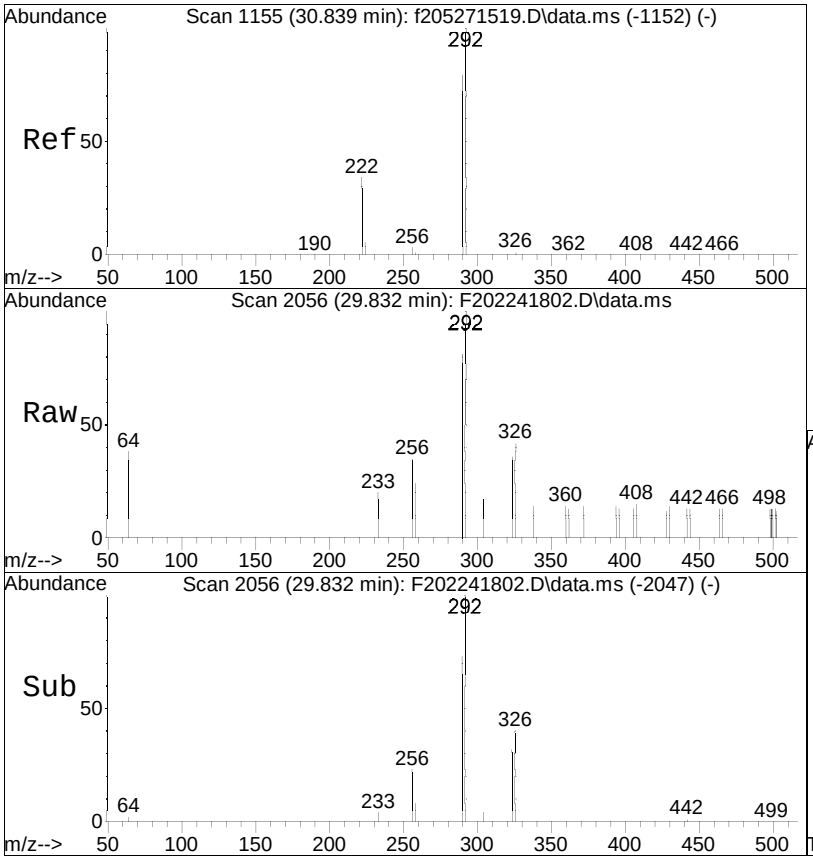


#65
Cl4-BZ#41
Concen: 0.37 ng/mL
RT: 29.716 min Scan# 2049
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 587

Ion	Ratio	Lower	Upper
292	100		
290	78.2	63.0	94.4

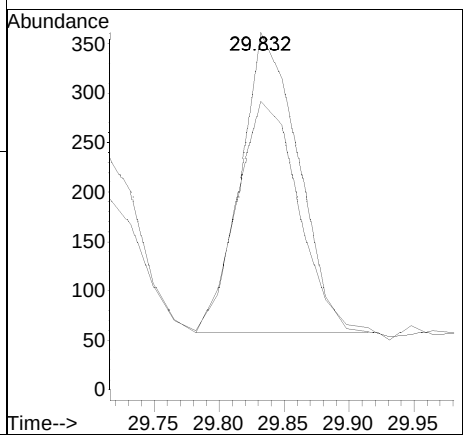


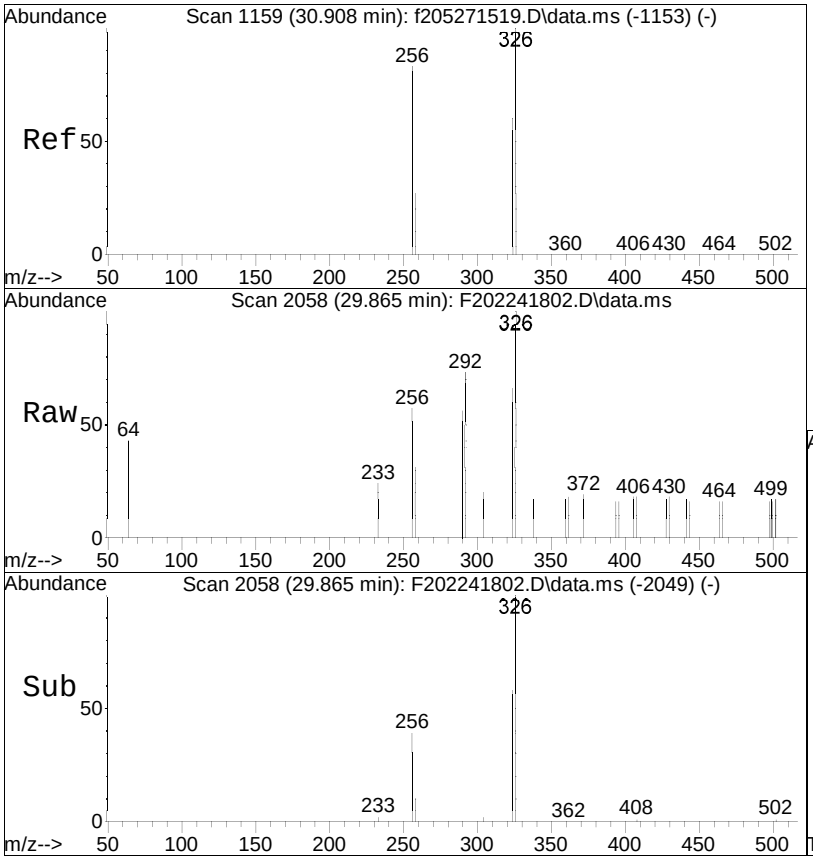


#66
Cl4-BZ#72
Concen: 0.33 ng/mL
RT: 29.832 min Scan# 2056
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 927

Ion	Ratio	Lower	Upper
292	100		
290	81.3	62.6	93.8

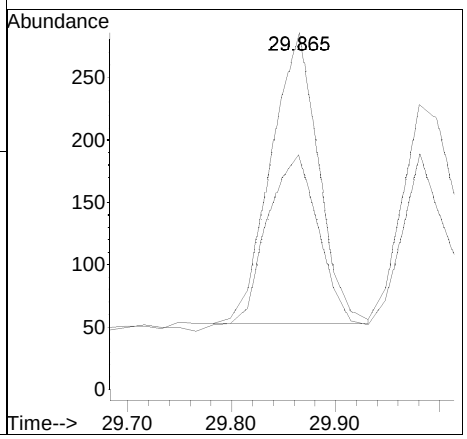


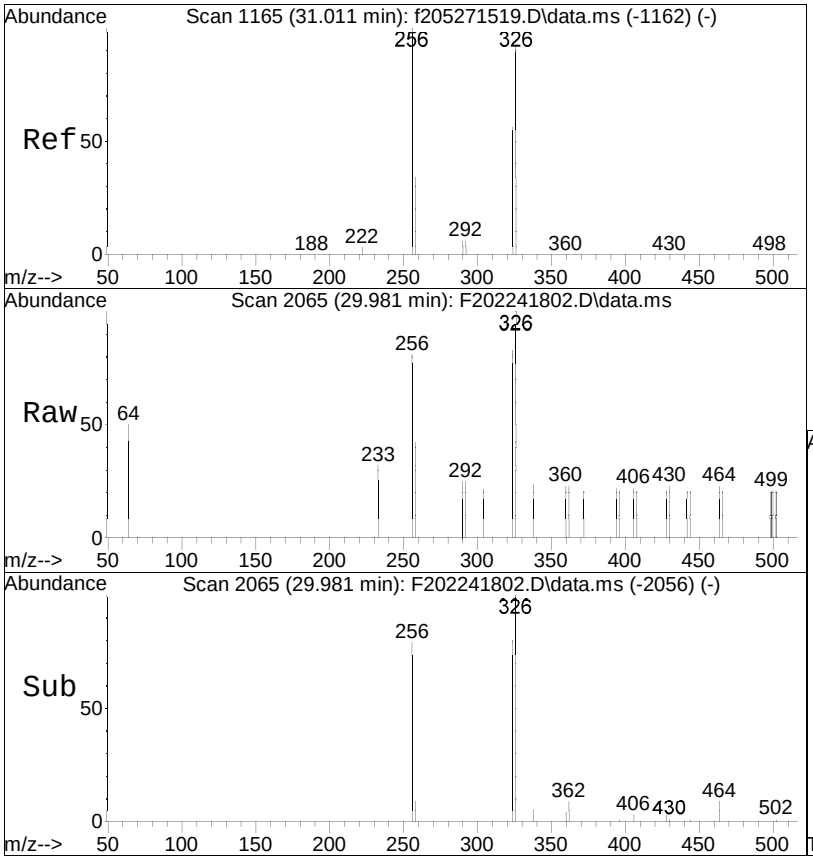


#67
Cl5-BZ#96
Concen: 0.32 ng/mL
RT: 29.865 min Scan# 2058
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 740

Ion	Ratio	Lower	Upper
326	100		
324	68.6	47.2	70.8

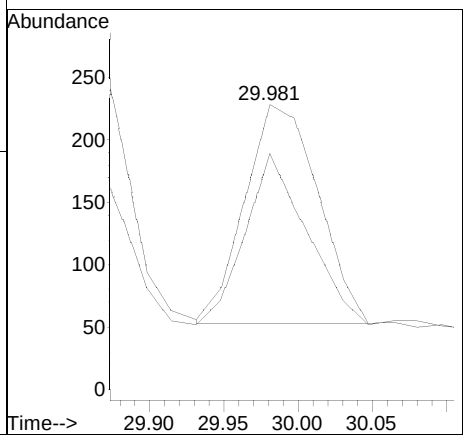


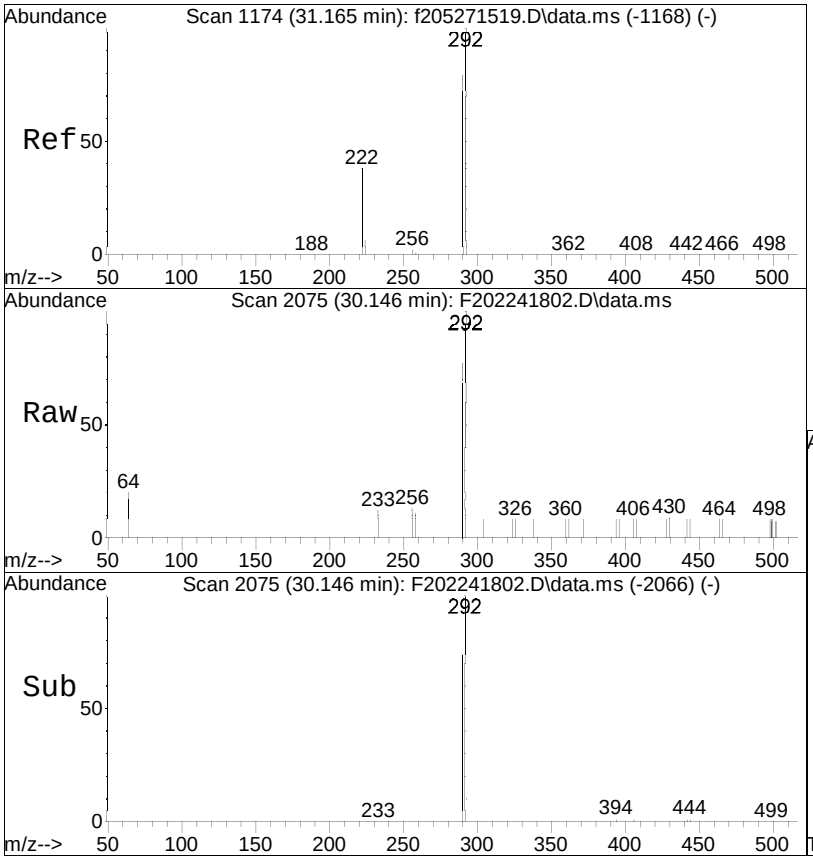


#68
Cl5-BZ#103
Concen: 0.36 ng/mL
RT: 29.981 min Scan# 2065
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 600

Ion	Ratio	Lower	Upper
326	100		
324	65.8	51.6	77.4

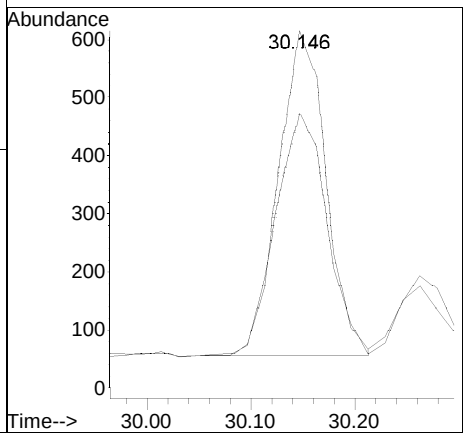


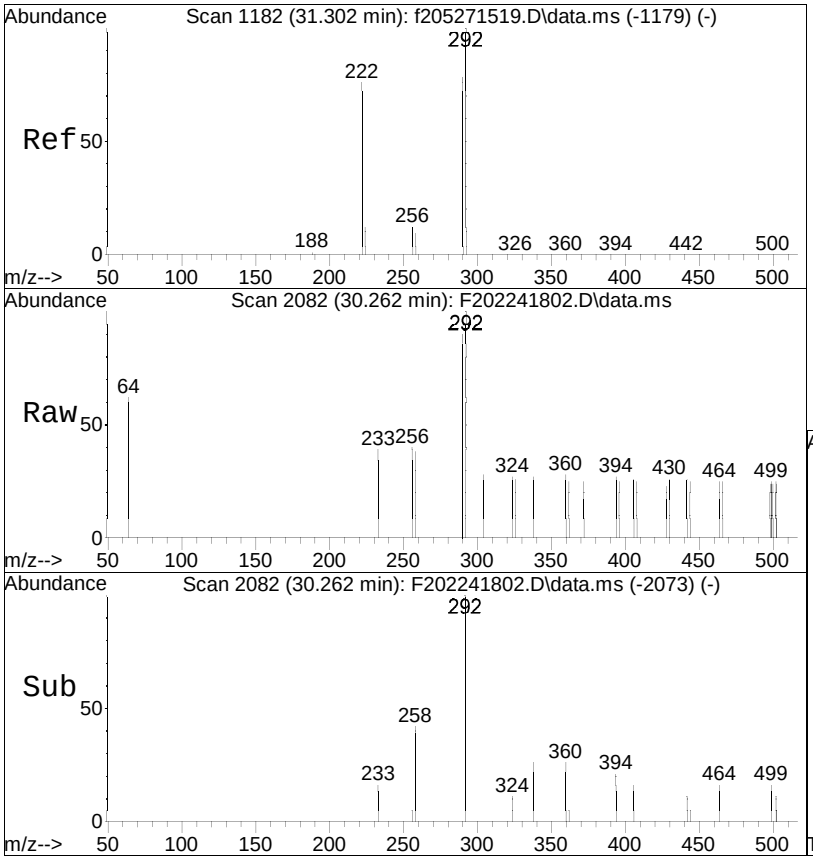


#69
Cl4-BZ#68/#64
Concen: 0.68 ng/mL
RT: 30.146 min Scan# 2075
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1772

Ion	Ratio	Lower	Upper
292	100		
290	81.2	61.7	92.5

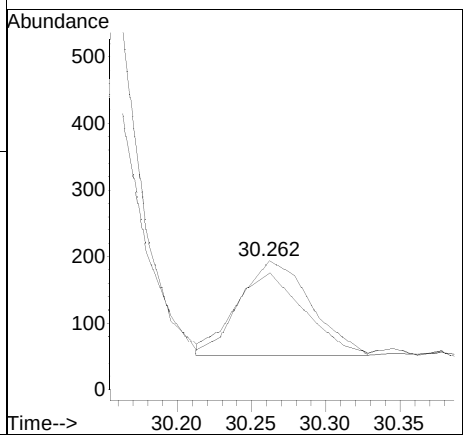


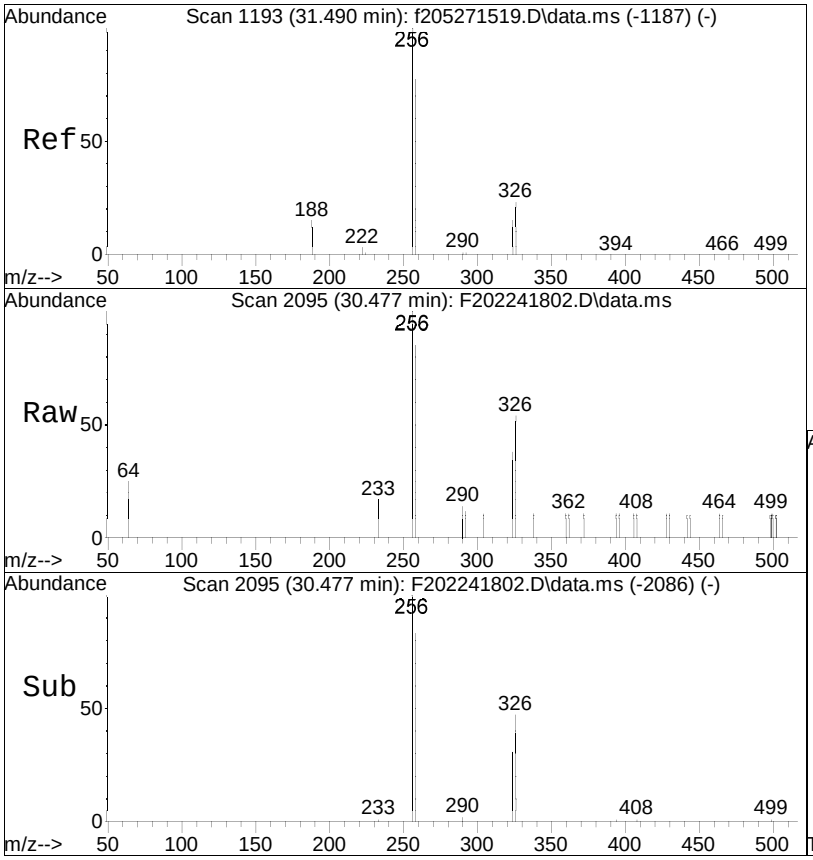


#70
Cl4-BZ#40
Concen: 0.37 ng/mL
RT: 30.262 min Scan# 2082
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 467

Ion	Ratio	Lower	Upper
292	100		
290	77.7	63.8	95.6

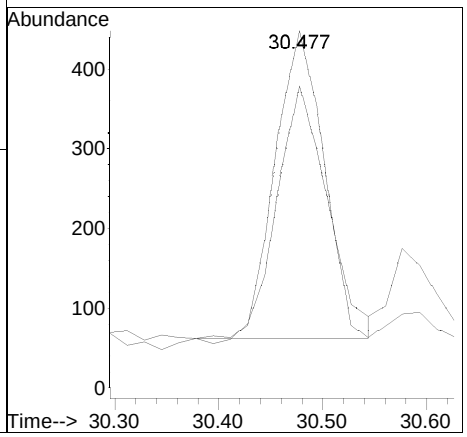


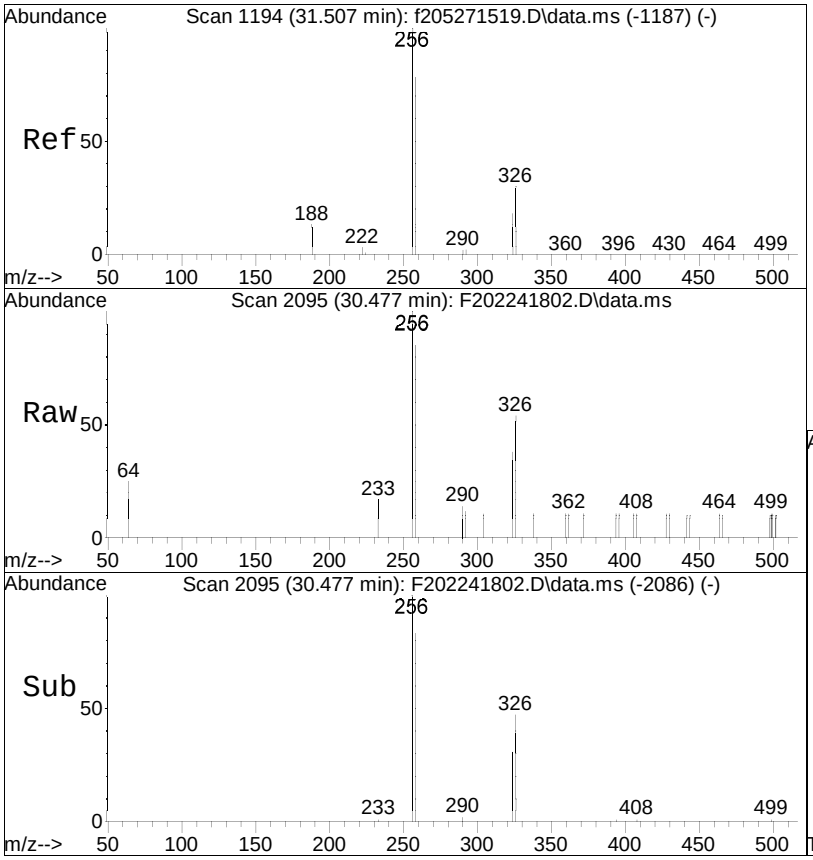


#71
Cl3-BZ#37-RTW
Concen: 0.35 ng/mL
RT: 30.477 min Scan# 2095
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:256 Resp: 1305

Ion	Ratio	Lower	Upper
256	100		
258	84.6	63.5	95.3

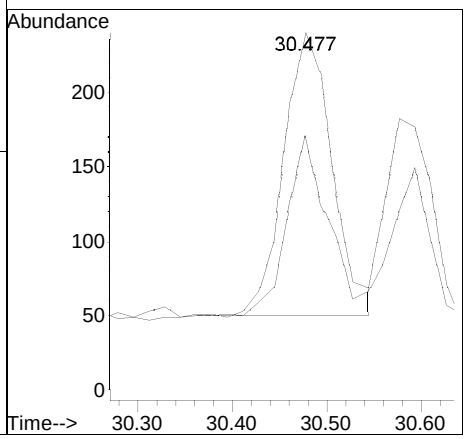


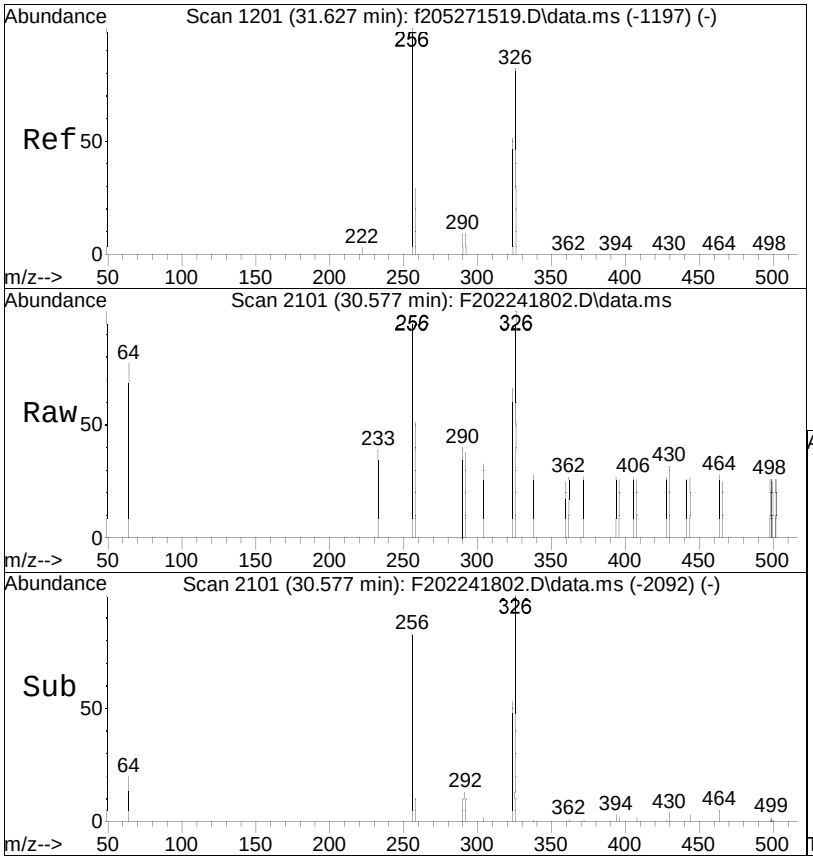


#72
Cl5-BZ#100
Concen: 0.36 ng/mL
RT: 30.477 min Scan# 2095
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 679

Ion	Ratio	Lower	Upper
326	100		
324	53.0	48.6	73.0

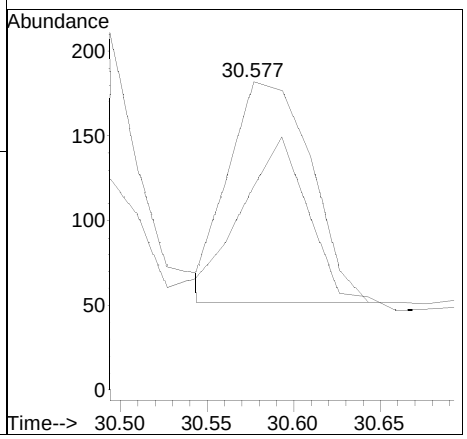


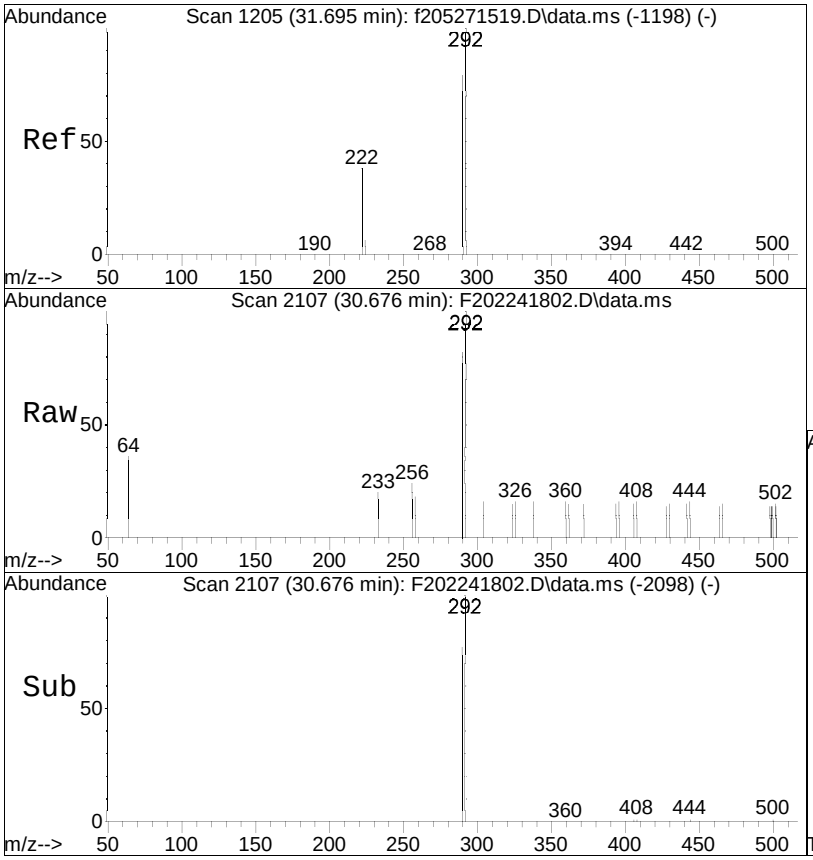


#73
Cl5-BZ#94
Concen: 0.30 ng/mL
RT: 30.577 min Scan# 2101
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 426

Ion	Ratio	Lower	Upper
326	100		
324	71.4	49.7	74.5

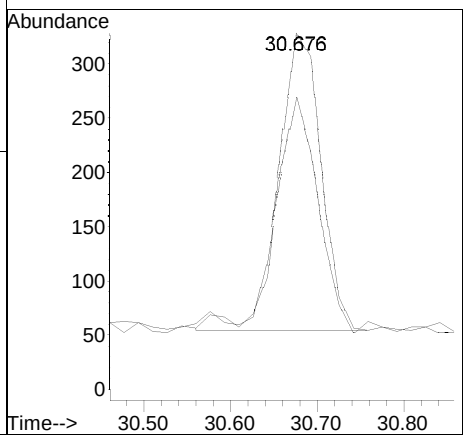


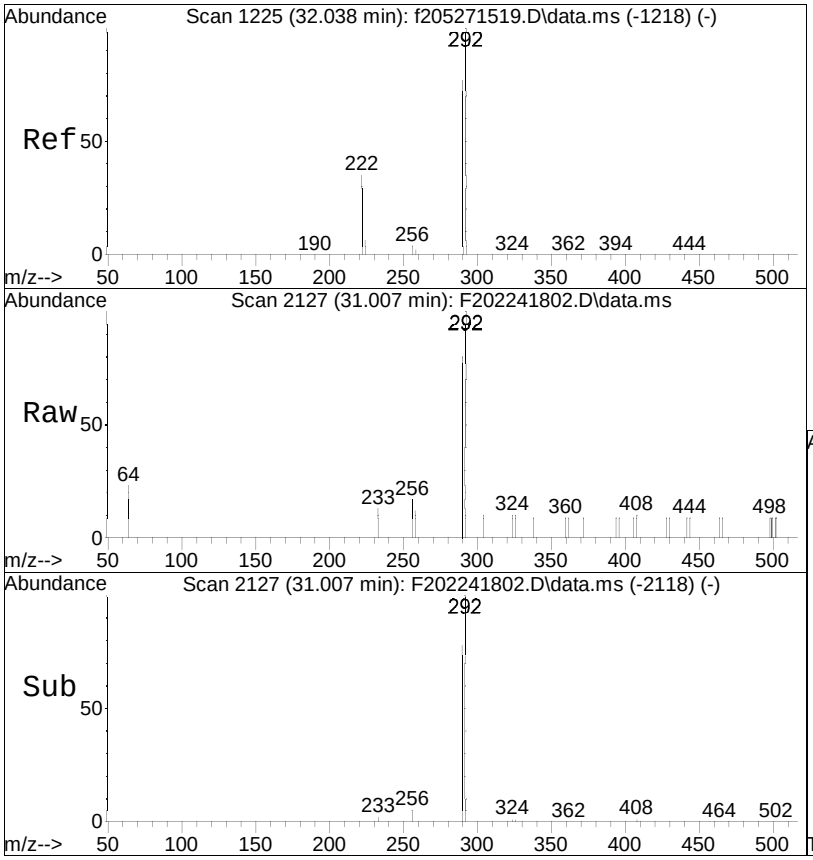


#74
Cl4-BZ#57
Concen: 0.33 ng/mL
RT: 30.676 min Scan# 2107
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 932

Ion	Ratio	Lower	Upper
292	100		
290	77.6	63.9	95.9

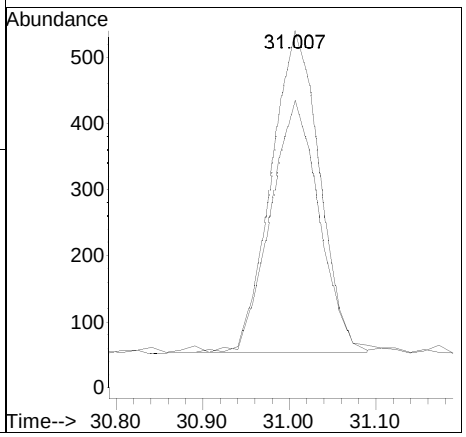


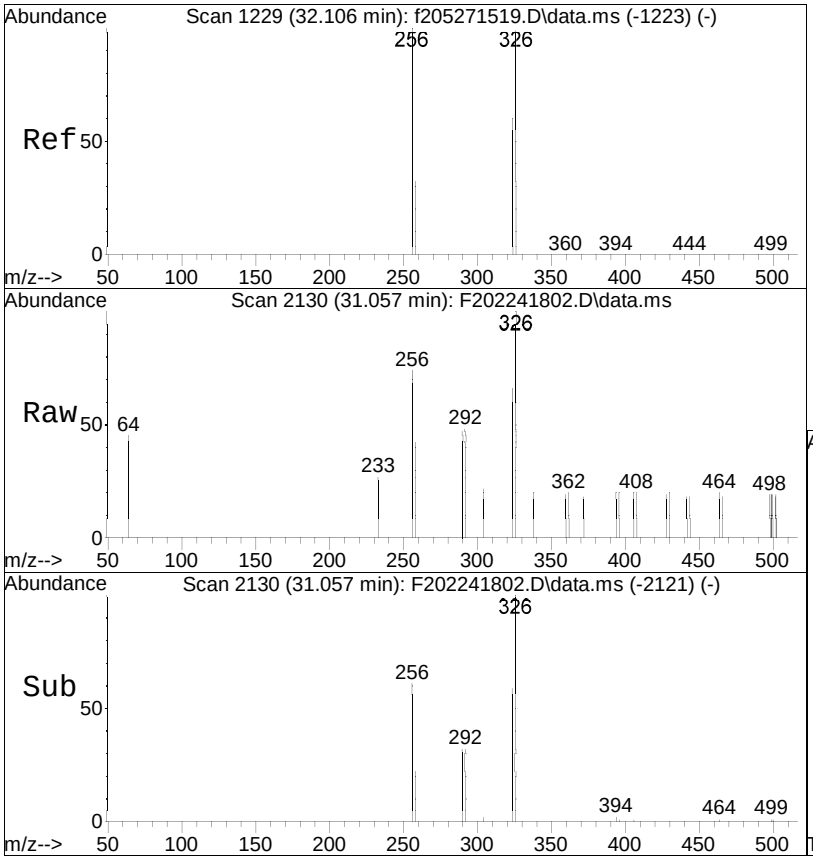


#75
Cl4-BZ#67/#58
Concen: 0.66 ng/mL
RT: 31.007 min Scan# 2127
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1858

Ion	Ratio	Lower	Upper
292	100		
290	79.4	62.3	93.5

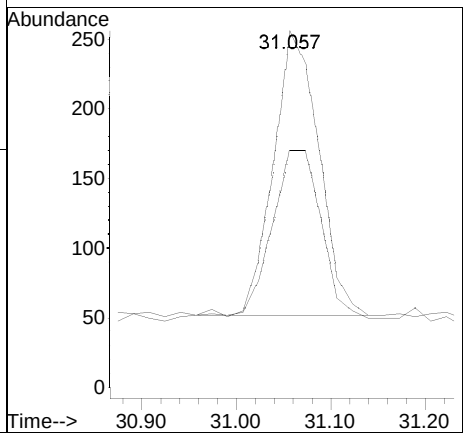


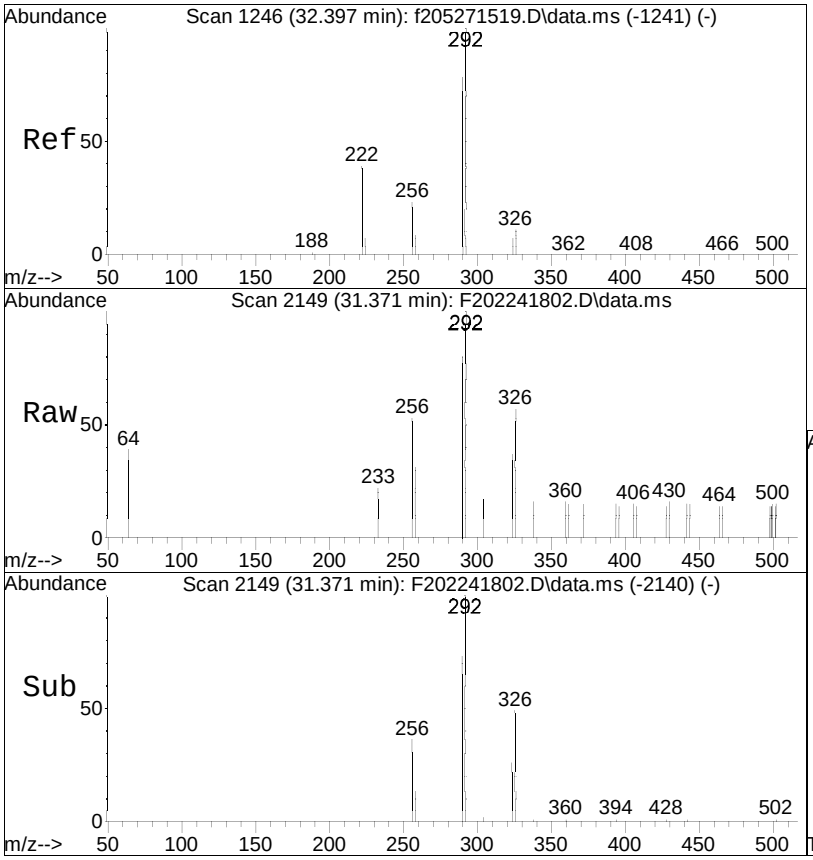


#76
Cl5-BZ#102
Concen: 0.33 ng/mL
RT: 31.057 min Scan# 2130
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 677

Ion	Ratio	Lower	Upper
326	100		
324	64.3	49.8	74.8

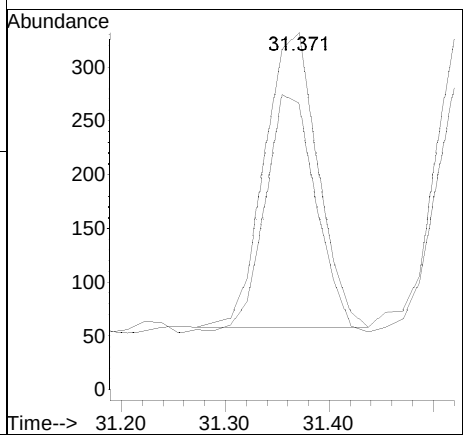


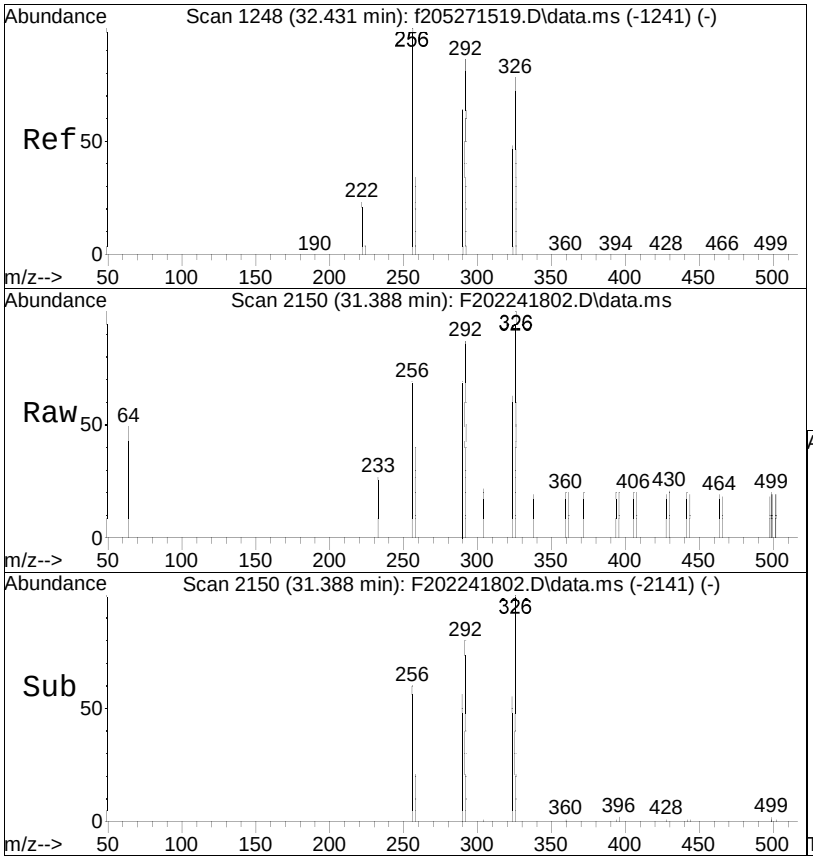


#77
Cl4-BZ#61
Concen: 0.36 ng/mL
RT: 31.371 min Scan# 2149
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 979

Ion	Ratio	Lower	Upper
292	100		
290	76.5	61.5	92.3

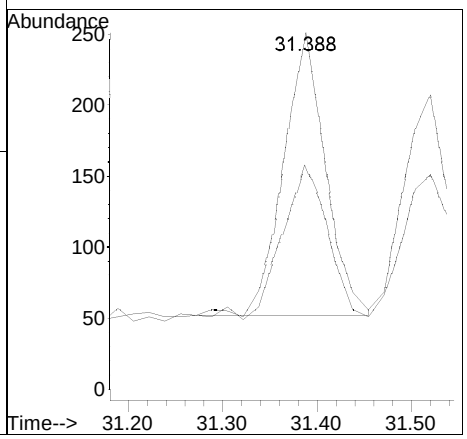


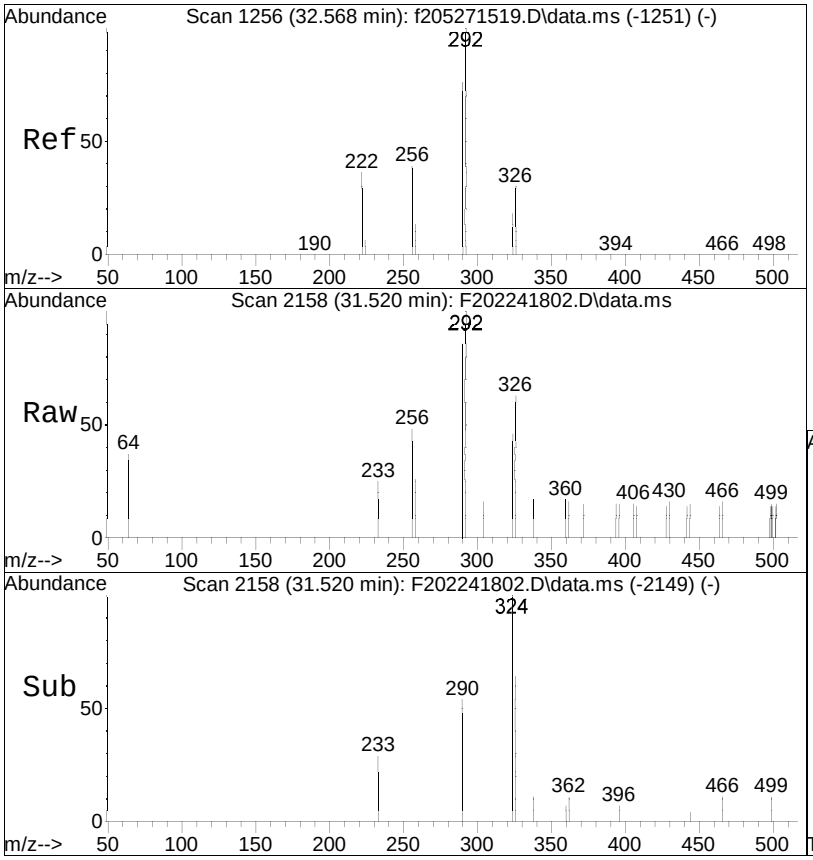


#78
Cl5-BZ#98
Concen: 0.33 ng/mL
RT: 31.388 min Scan# 2150
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 615

Ion	Ratio	Lower	Upper
326	100		
324	57.2	50.2	75.2

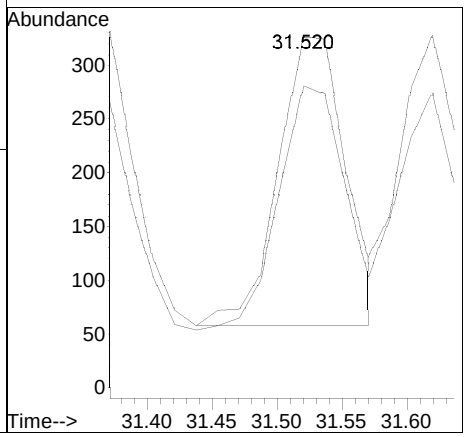


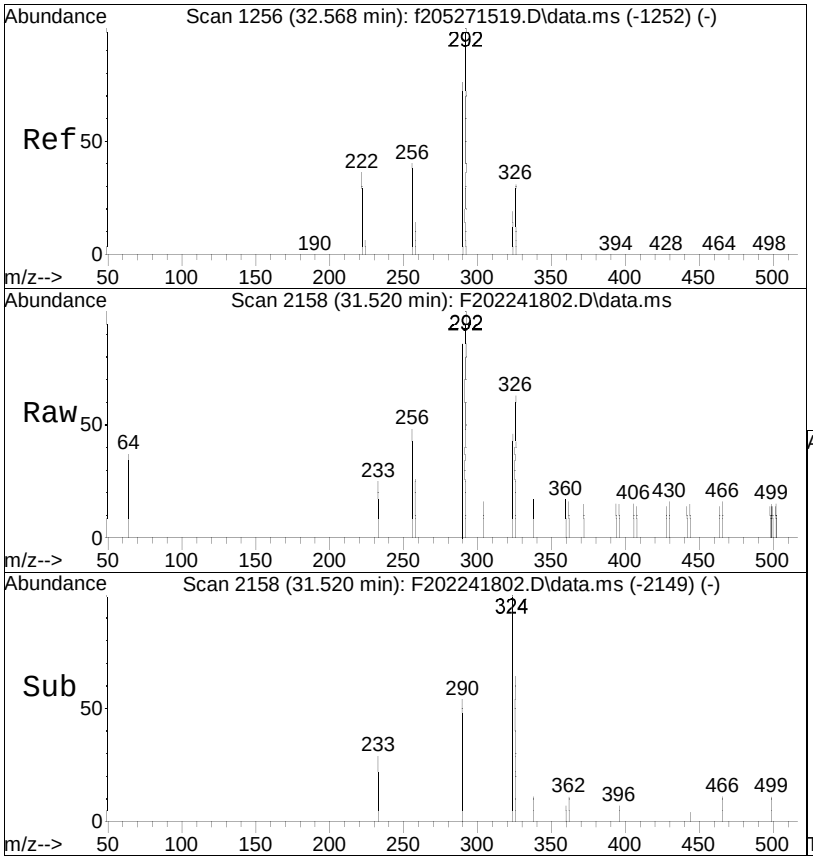


#79
Cl4-BZ#76
Concen: 0.32 ng/mL
RT: 31.520 min Scan# 2158
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 976

Ion	Ratio	Lower	Upper
292	100		
290	83.9	62.2	93.2

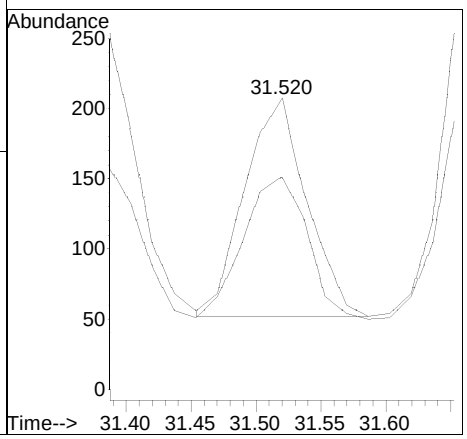


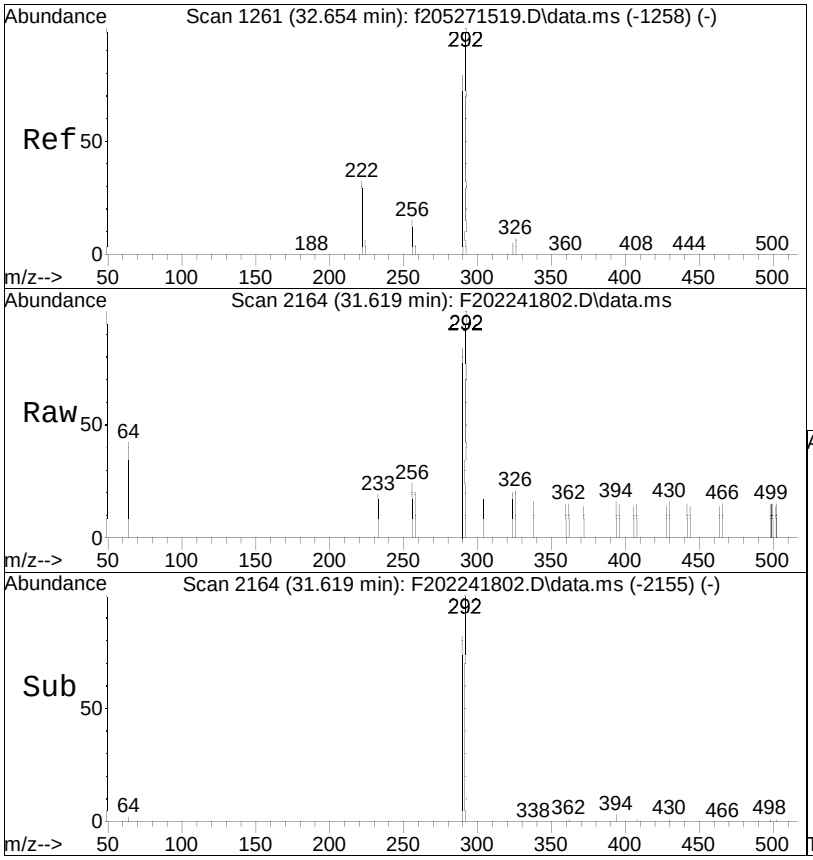


#80
Cl5-BZ#93
Concen: 0.34 ng/mL
RT: 31.520 min Scan# 2158
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 515

Ion	Ratio	Lower	Upper
326	100		
324	67.4	49.8	74.6

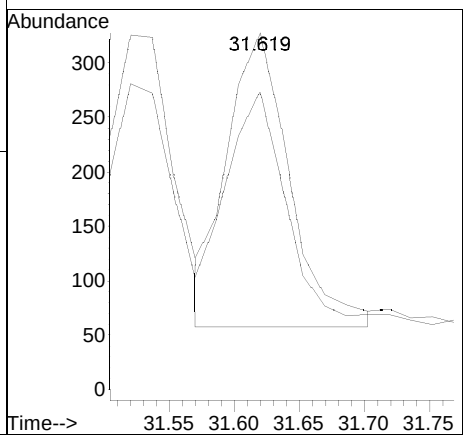


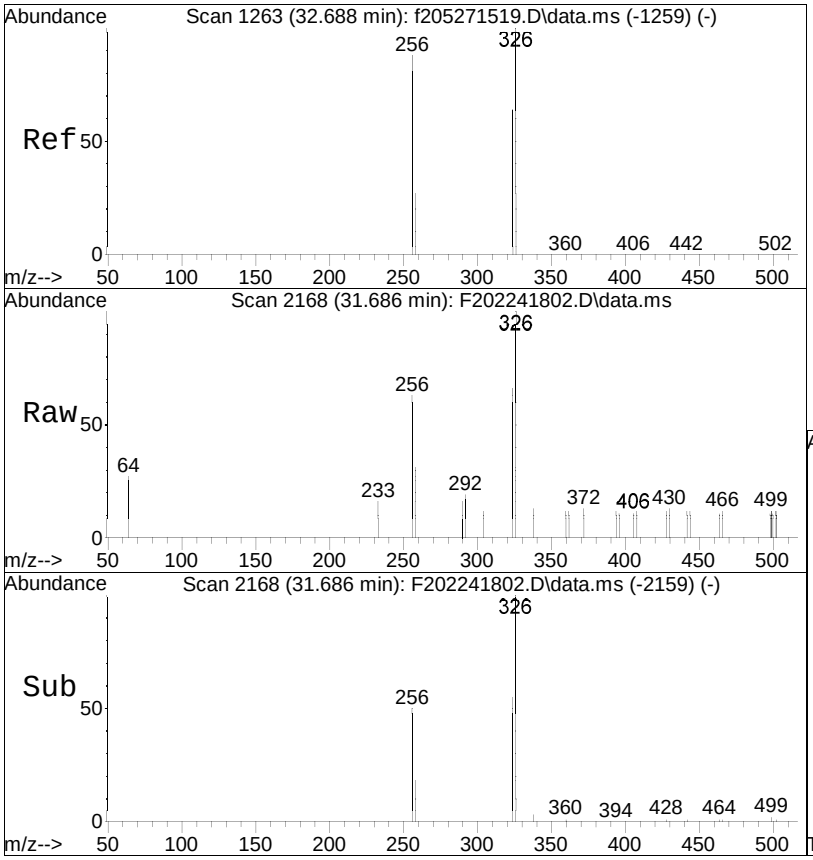


#81
Cl4-BZ#63
Concen: 0.34 ng/mL M4
RT: 31.619 min Scan# 2164
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 899

Ion	Ratio	Lower	Upper
292	100		
290	83.5	61.7	92.5

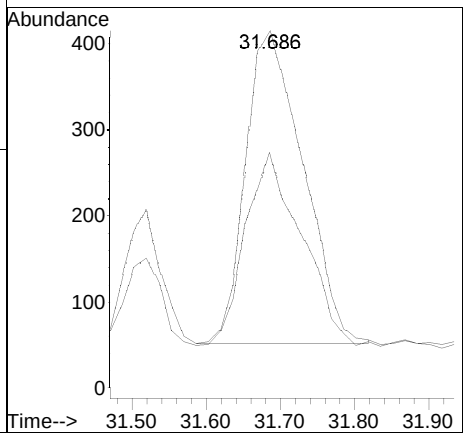


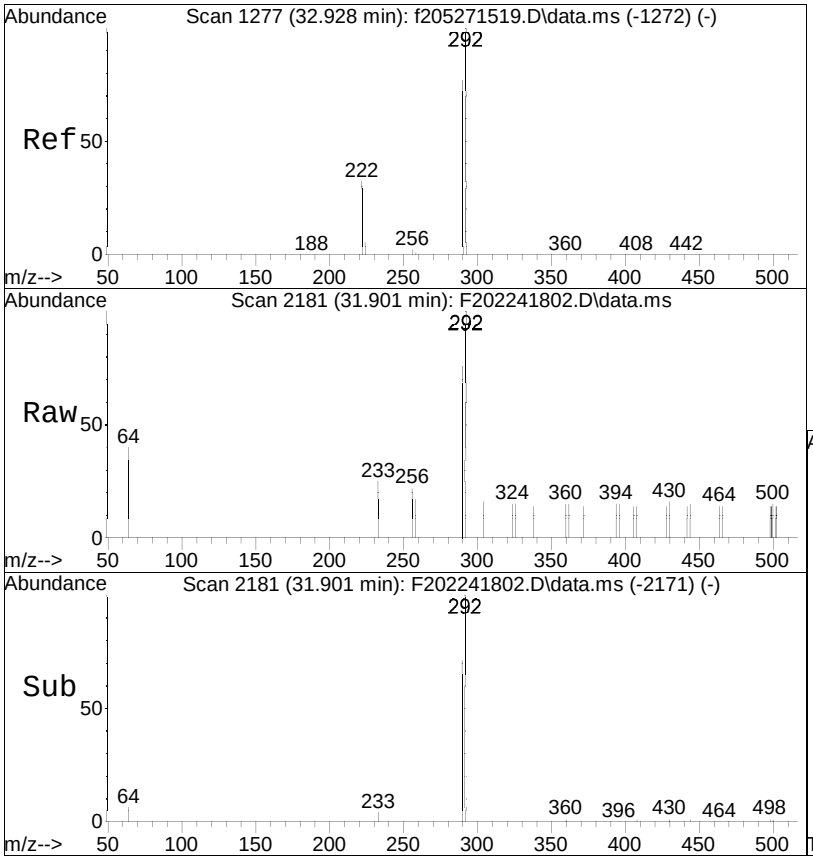


#82
Cl5-BZ#121/#95/#88
Concen: 0.98 ng/mL
RT: 31.686 min Scan# 2168
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1944

Ion	Ratio	Lower	Upper
326	100		
324	60.3	49.4	74.2

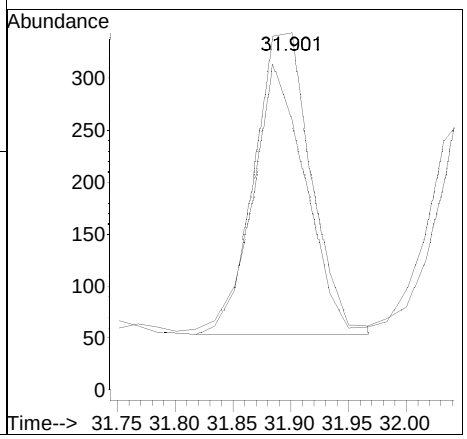


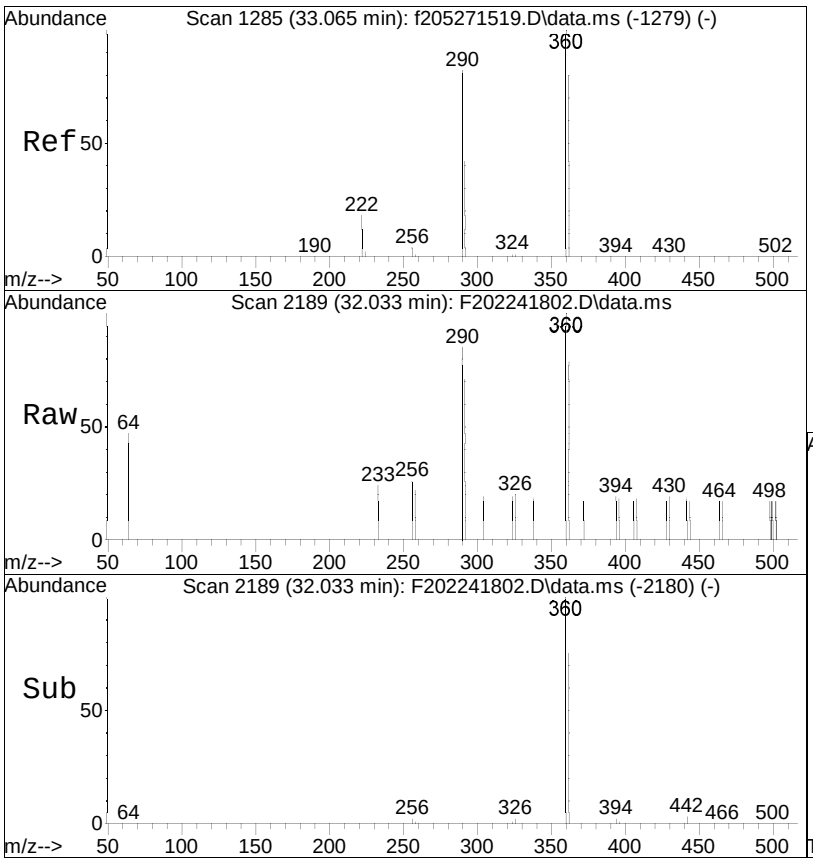


#83
Cl4-BZ#74
Concen: 0.35 ng/mL
RT: 31.901 min Scan# 2181
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1004

Ion	Ratio	Lower	Upper
292	100		
290	75.9	63.6	95.4

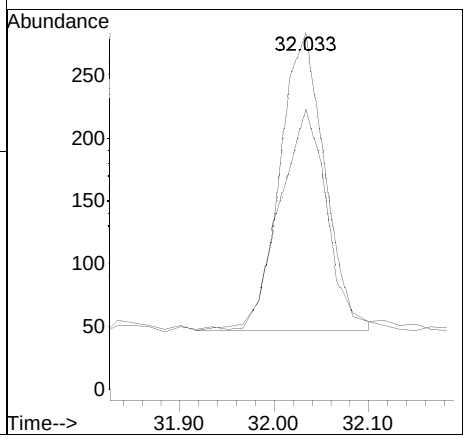


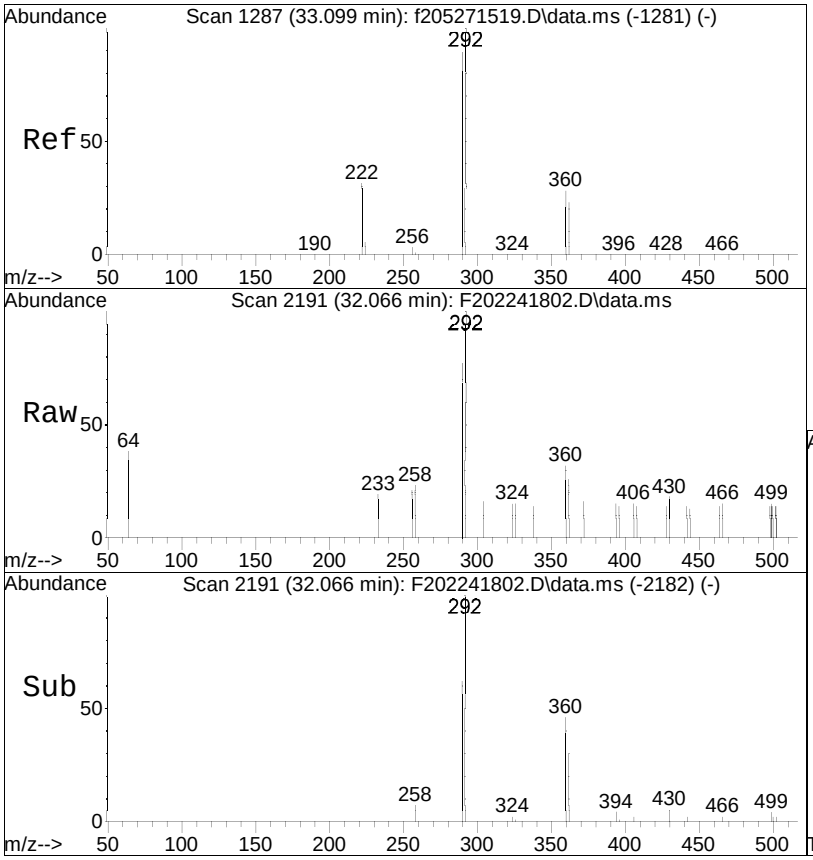


#84
Cl6-BZ#155-RTW
Concen: 0.35 ng/mL
RT: 32.033 min Scan# 2189
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 778

Ion	Ratio	Lower	Upper
360	100		
362	77.2	63.7	95.5

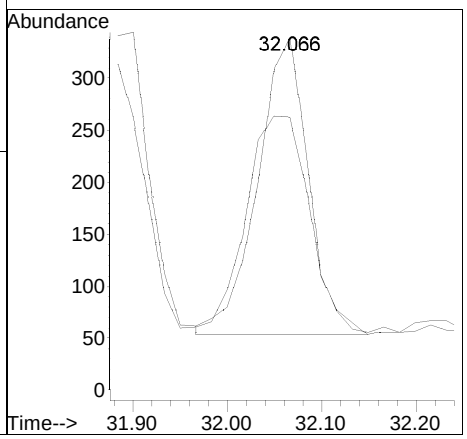


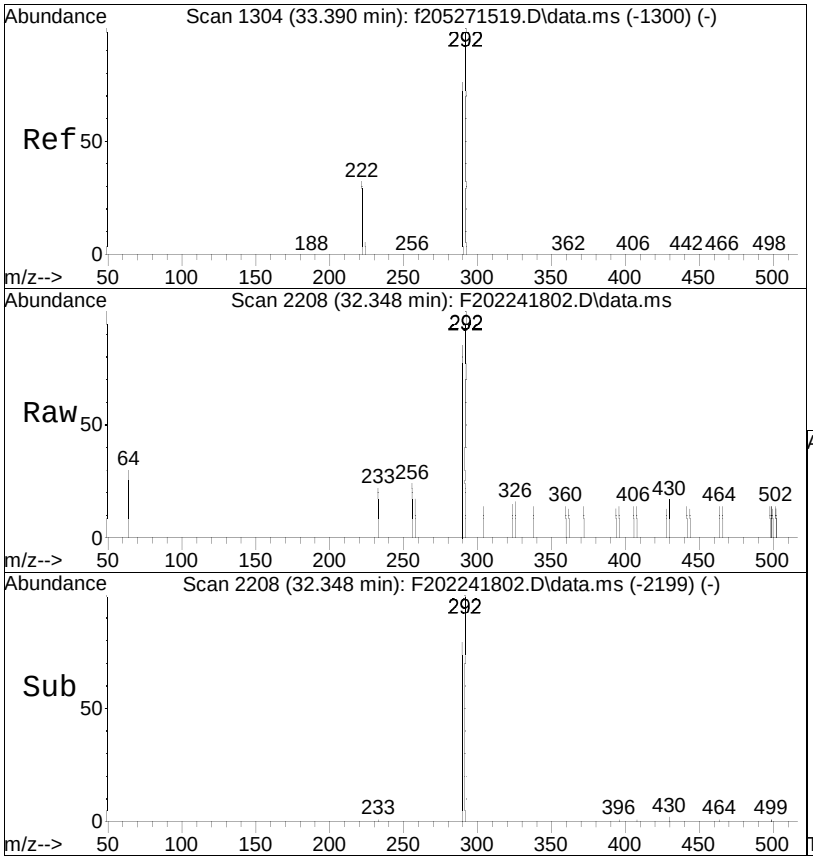


#85
Cl4-BZ#70
Concen: 0.32 ng/mL
RT: 32.066 min Scan# 2191
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1075

Ion	Ratio	Lower	Upper
292	100		
290	77.3	66.7	100.1

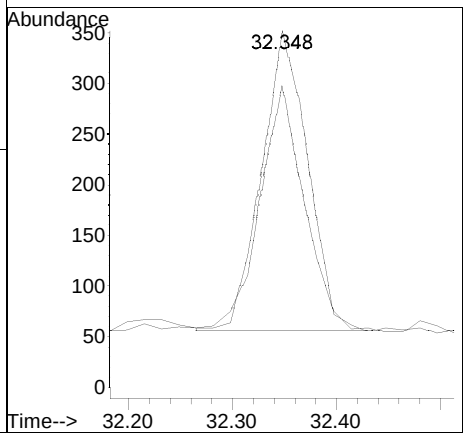


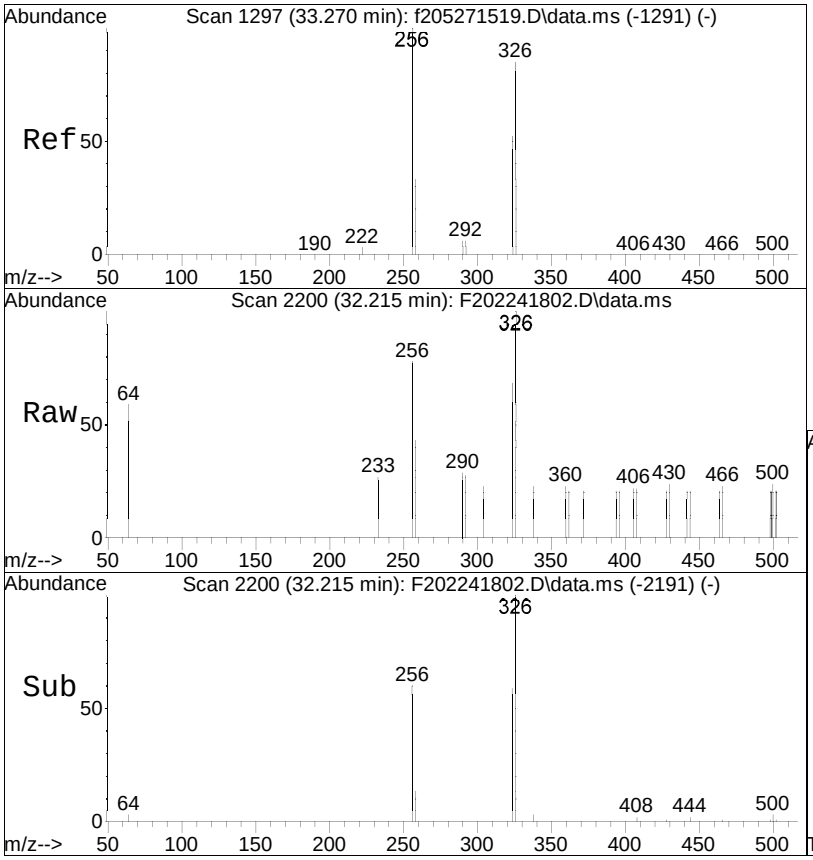


#86
Cl4-BZ#66
Concen: 0.34 ng/mL
RT: 32.348 min Scan# 2208
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 917

Ion	Ratio	Lower	Upper
292	100		
290	84.7	62.3	93.5

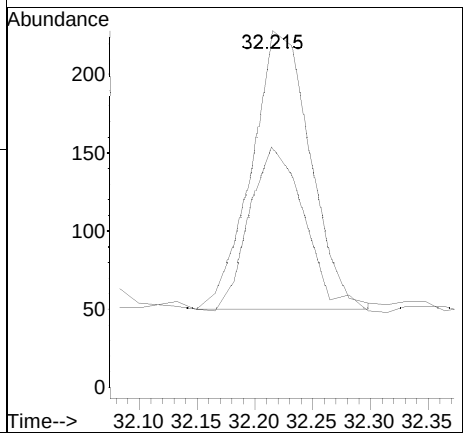


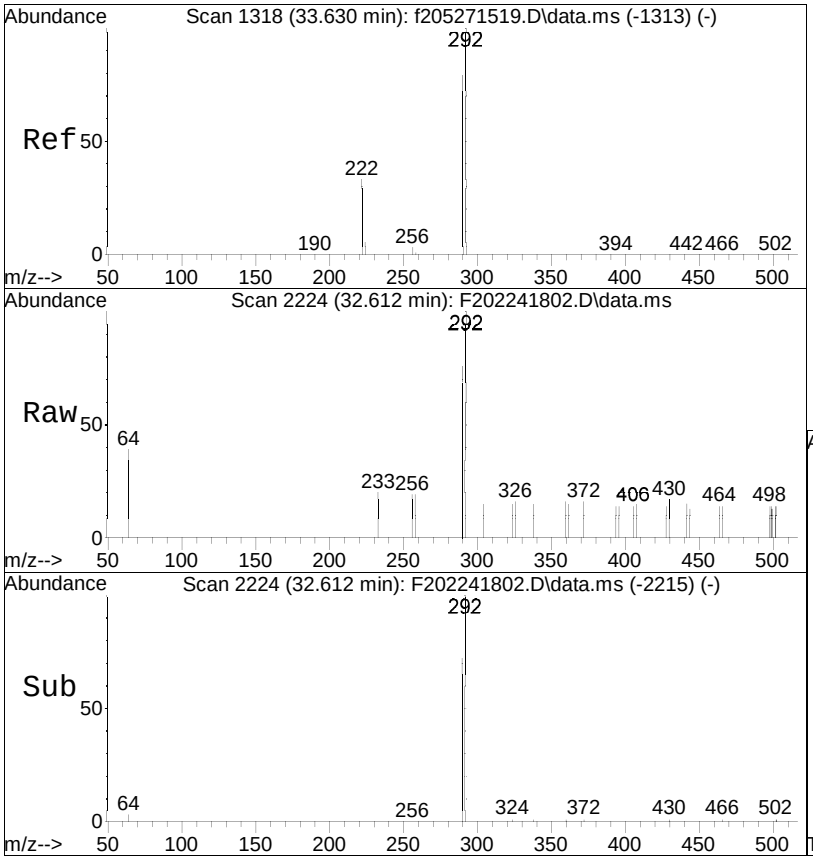


#87
Cl5-BZ#91
Concen: 0.36 ng/mL
RT: 32.215 min Scan# 2200
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 629

Ion	Ratio	Lower	Upper
326	100		
324	67.5	50.0	75.0

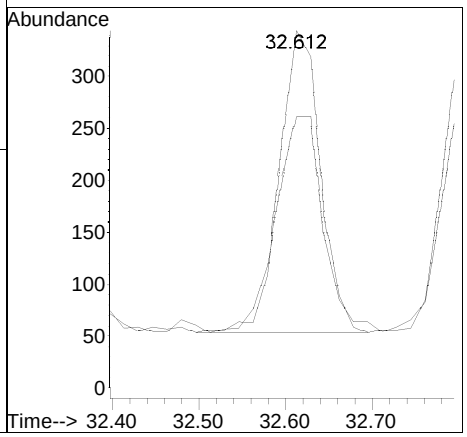


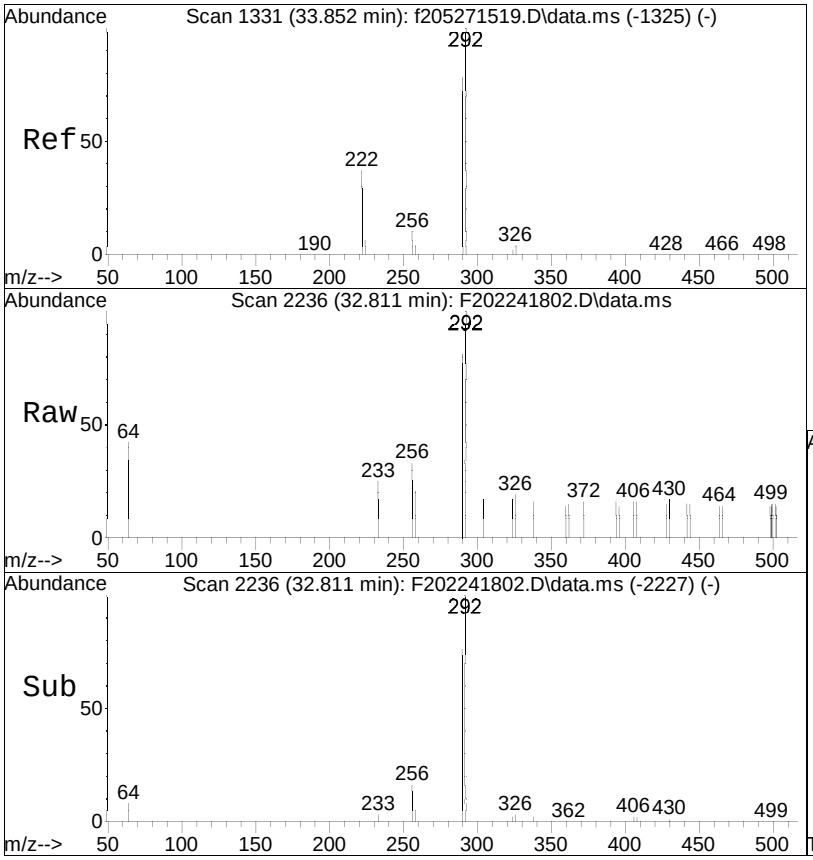


#88
Cl4-BZ#80
Concen: 0.36 ng/mL
RT: 32.612 min Scan# 2224
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 966

Ion	Ratio	Lower	Upper
292	100		
290	81.4	63.5	95.3

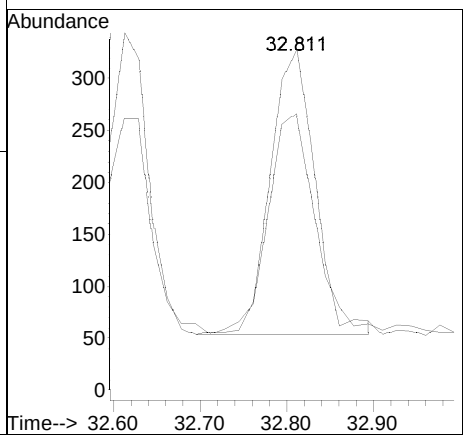


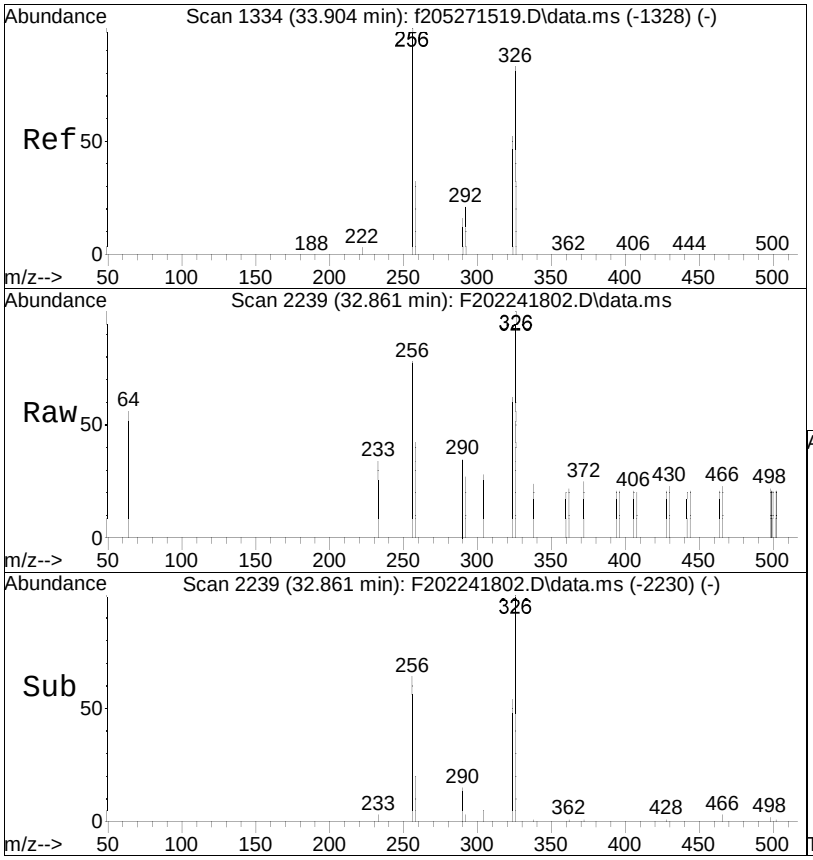


#89
Cl4-BZ#55
Concen: 0.36 ng/mL
RT: 32.811 min Scan# 2236
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 988

Ion	Ratio	Lower	Upper
292	100		
290	80.2	61.8	92.6

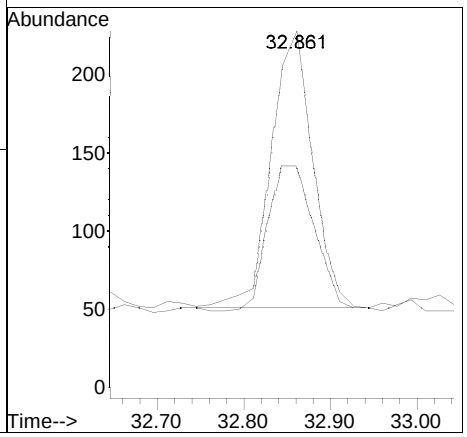


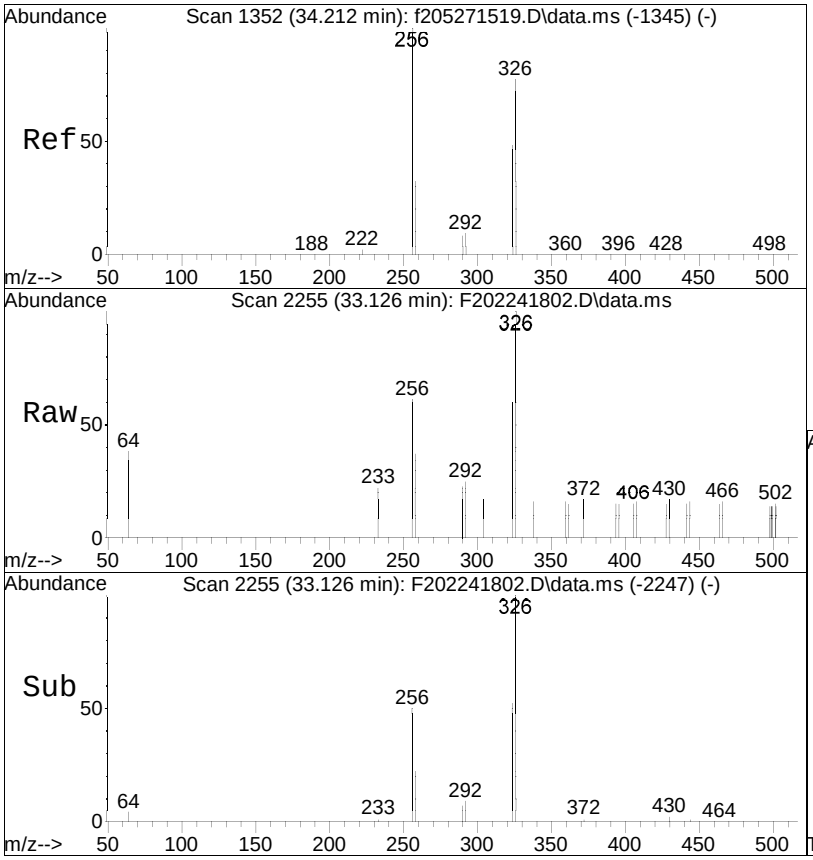


#90
Cl5-BZ#92
Concen: 0.35 ng/mL
RT: 32.861 min Scan# 2239
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 587

Ion	Ratio	Lower	Upper
326	100		
324	62.3	49.1	73.7

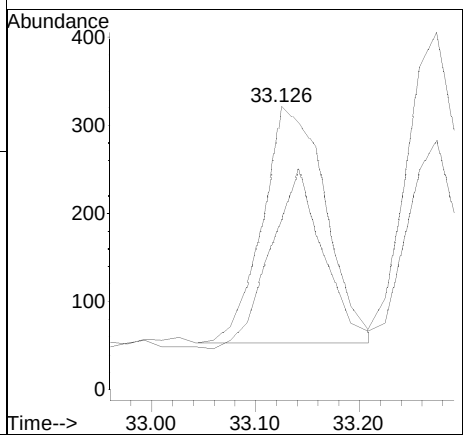


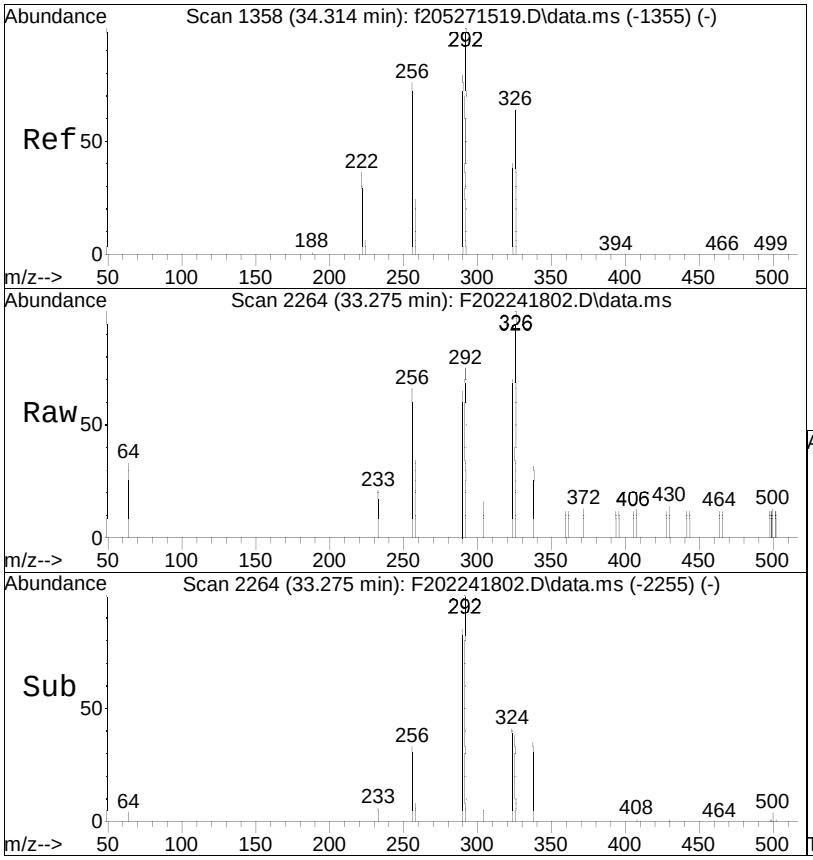


#91
Cl5-BZ#89/#84
Concen: 0.64 ng/mL
RT: 33.126 min Scan# 2255
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1129

Ion	Ratio	Lower	Upper
326	100		
324	59.8	47.8	71.8

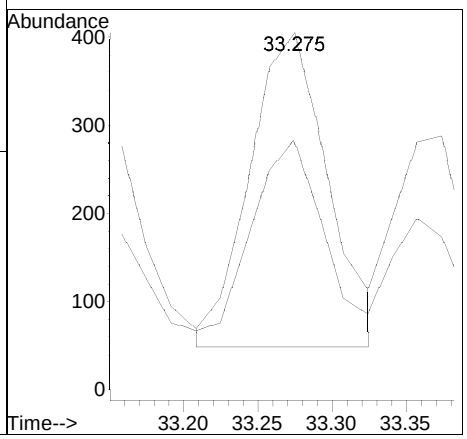


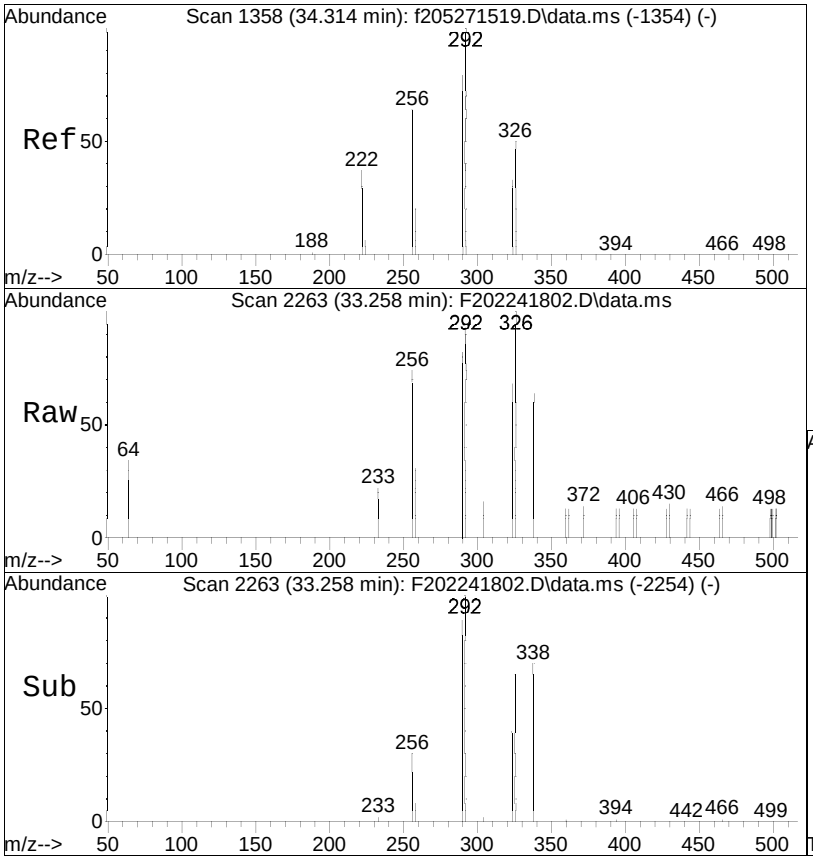


#92
Cl5-BZ#101/#90
Concen: 0.72 ng/mL M4
RT: 33.275 min Scan# 2264
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1304

Ion	Ratio	Lower	Upper
326	100		
324	52.7	48.9	73.3

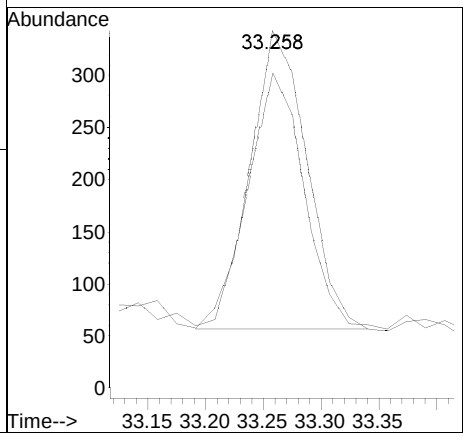


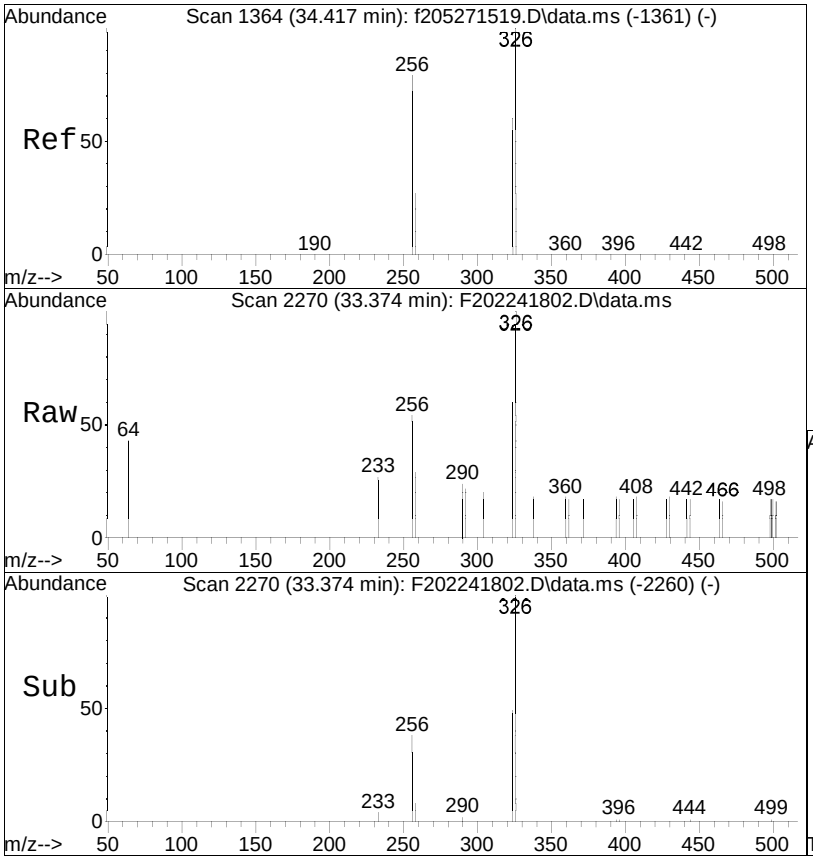


#94
Cl4-BZ#56
Concen: 0.34 ng/mL
RT: 33.258 min Scan# 2263
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 983

Ion	Ratio	Lower	Upper
292	100		
290	81.0	63.5	95.3

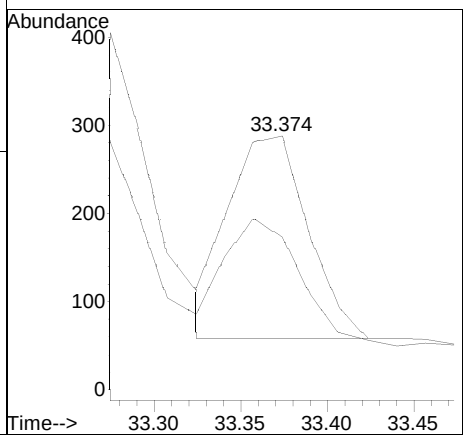


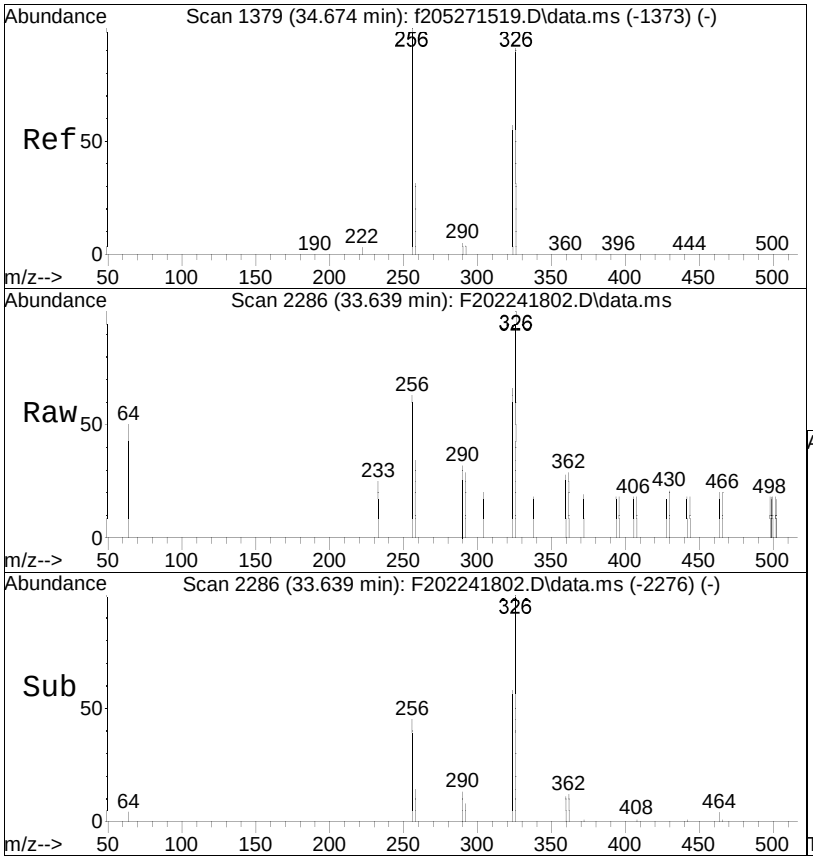


#95
Cl5-BZ#113
Concen: 0.33 ng/mL
RT: 33.374 min Scan# 2270
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 734

Ion	Ratio	Lower	Upper
326	100		
324	60.4	50.5	75.7

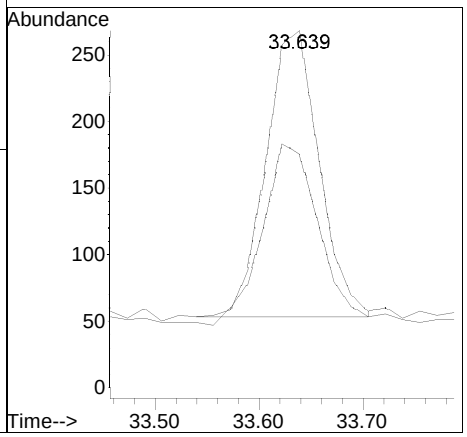


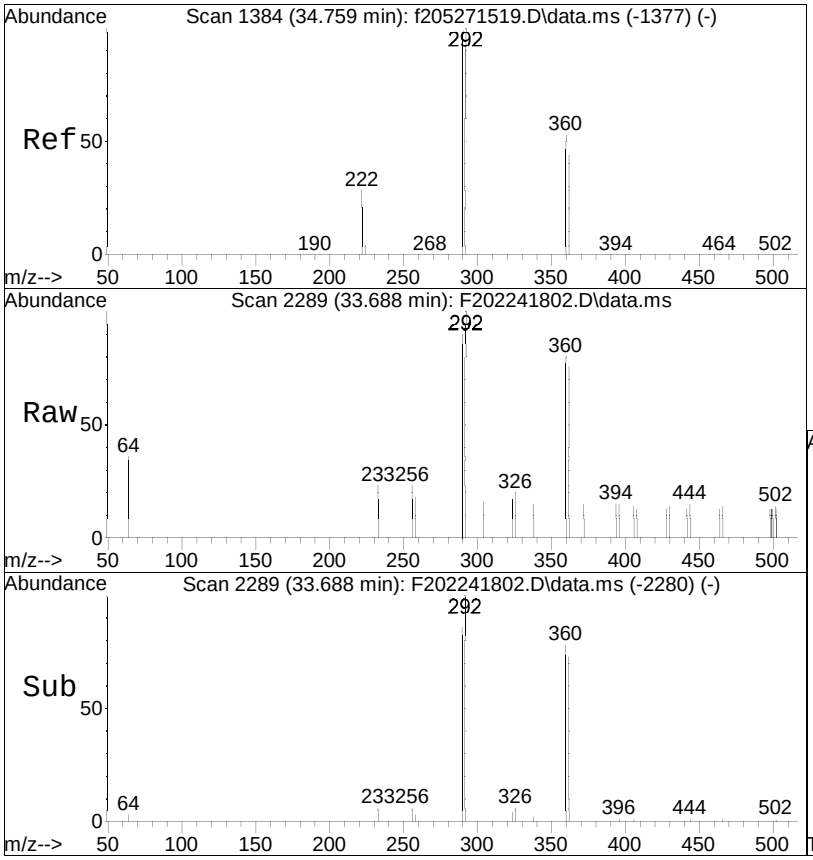


#96
Cl5-BZ#99
Concen: 0.37 ng/mL
RT: 33.639 min Scan# 2286
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 763

Ion	Ratio	Lower	Upper
326	100		
324	65.0	50.5	75.7

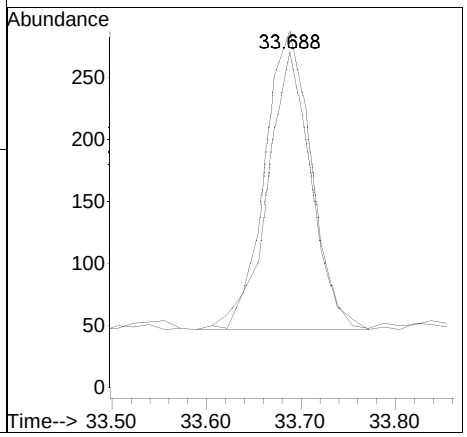


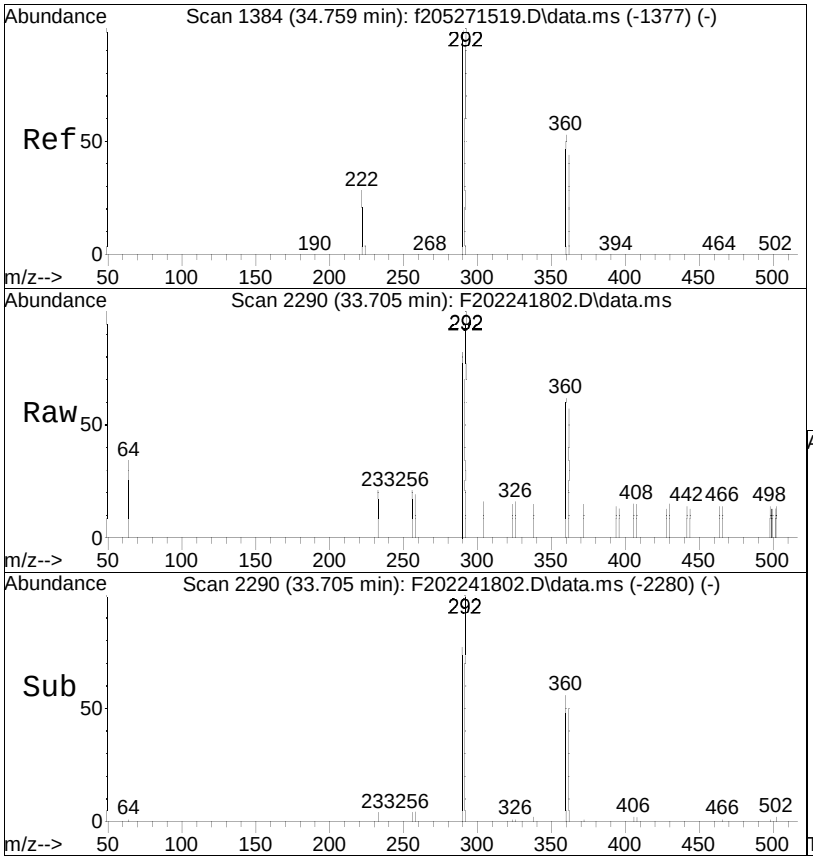


#97
Cl6-BZ#150
Concen: 0.36 ng/mL
RT: 33.688 min Scan# 2289
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 831

Ion	Ratio	Lower	Upper
360	100		
362	85.8	65.2	97.8

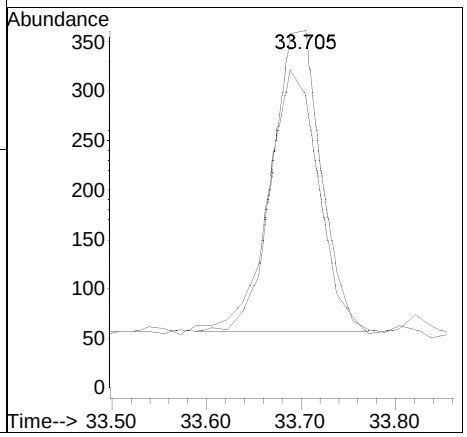


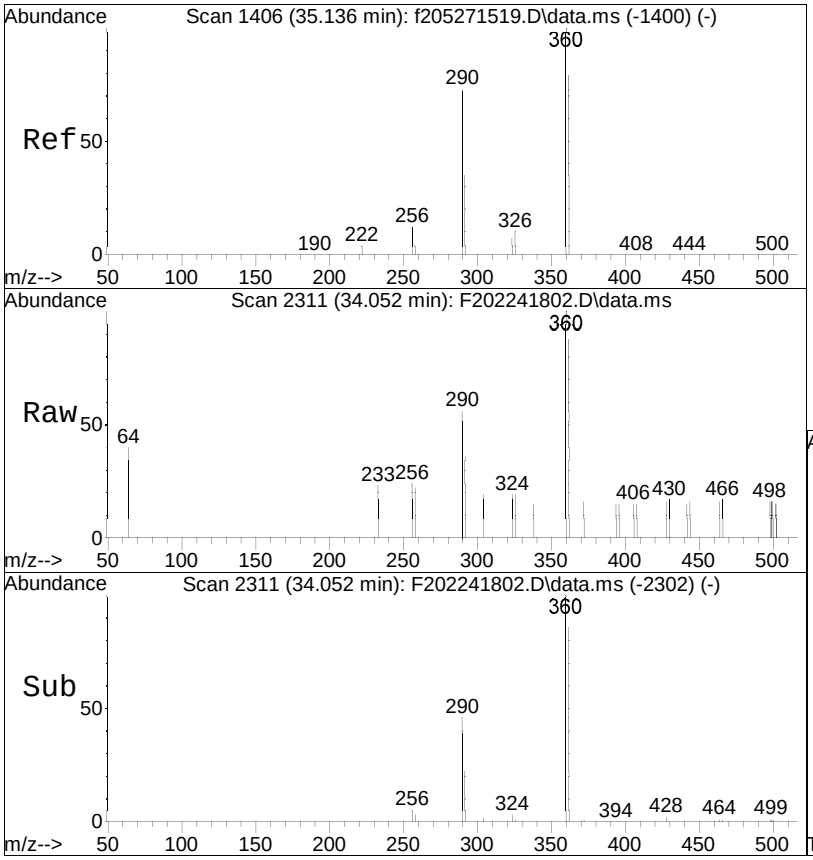


#98
Cl4-BZ#60
Concen: 0.34 ng/mL
RT: 33.705 min Scan# 2290
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1097

Ion	Ratio	Lower	Upper
292	100		
290	93.5	79.1	118.7

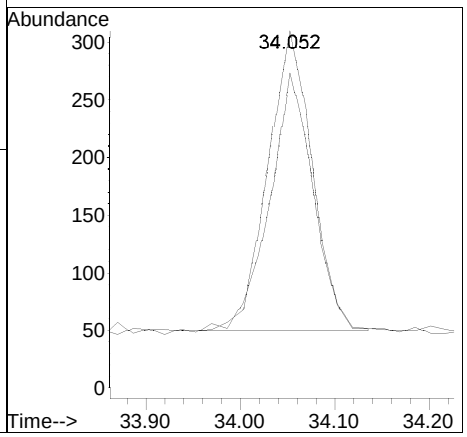


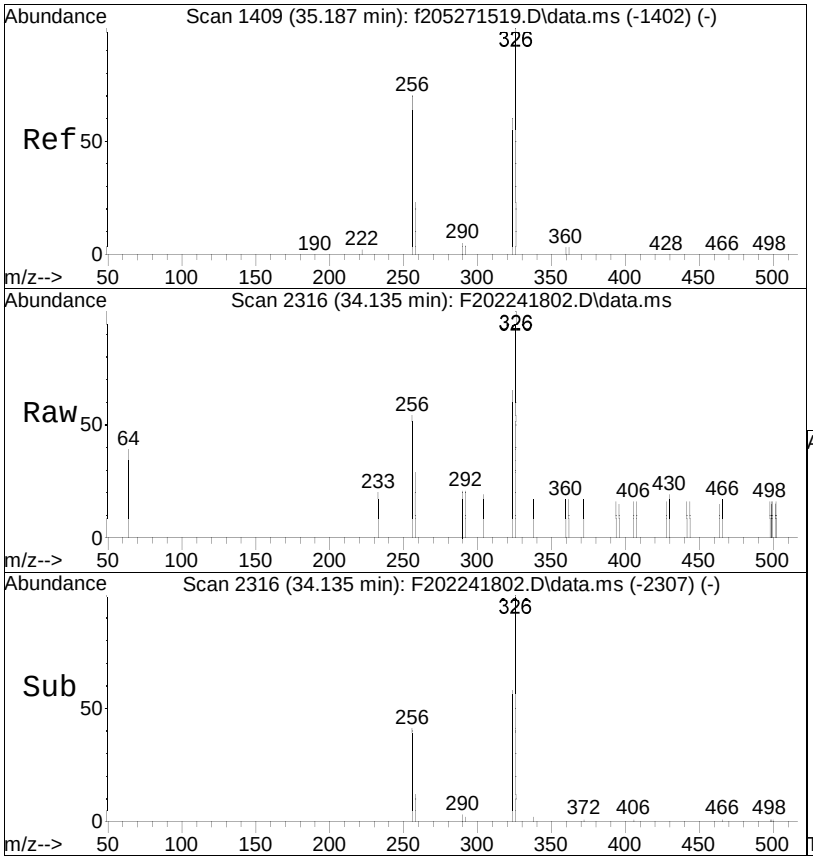


#99
Cl6-BZ#152
Concen: 0.33 ng/mL
RT: 34.052 min Scan# 2311
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 845

Ion	Ratio	Lower	Upper
360	100		
362	86.5	64.2	96.4

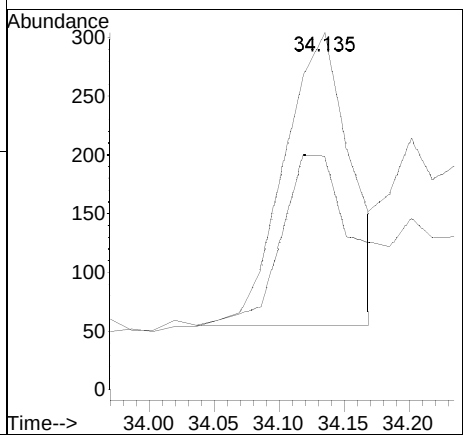


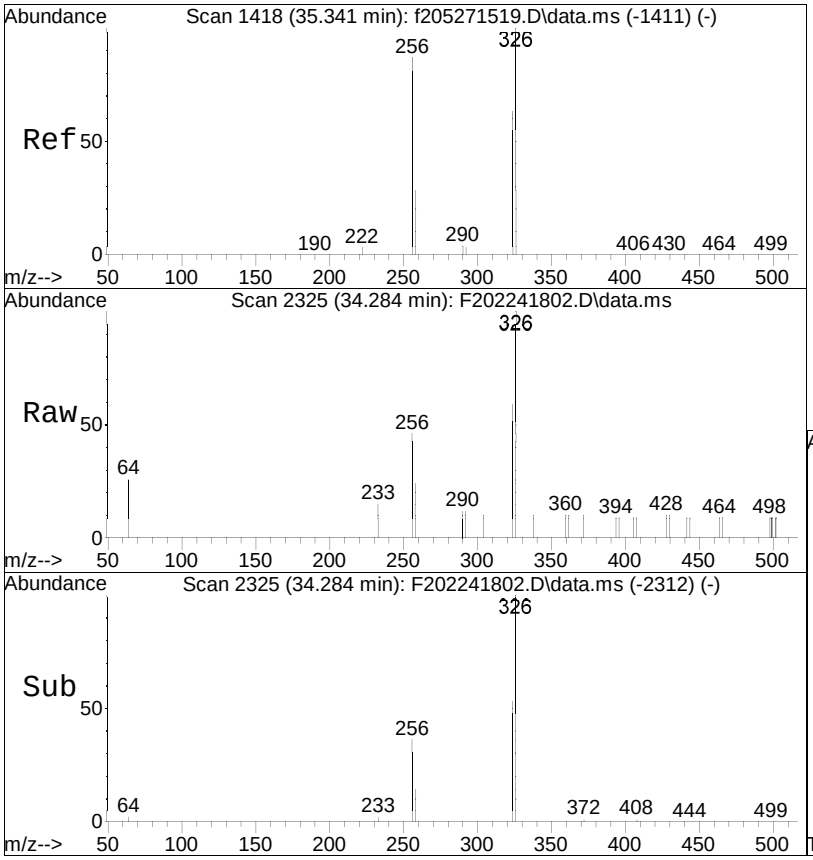


#100
Cl5-BZ#119
Concen: 0.35 ng/mL
RT: 34.135 min Scan# 2316
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 895

Ion	Ratio	Lower	Upper
326	100		
324	65.5	47.9	71.9

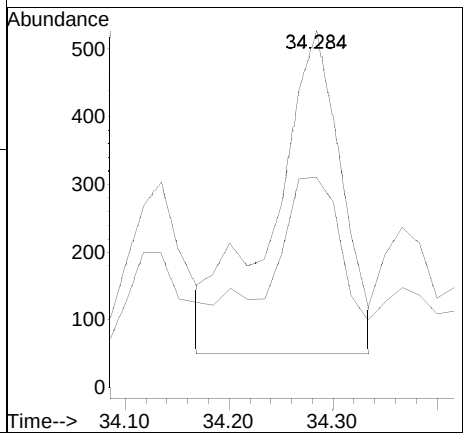


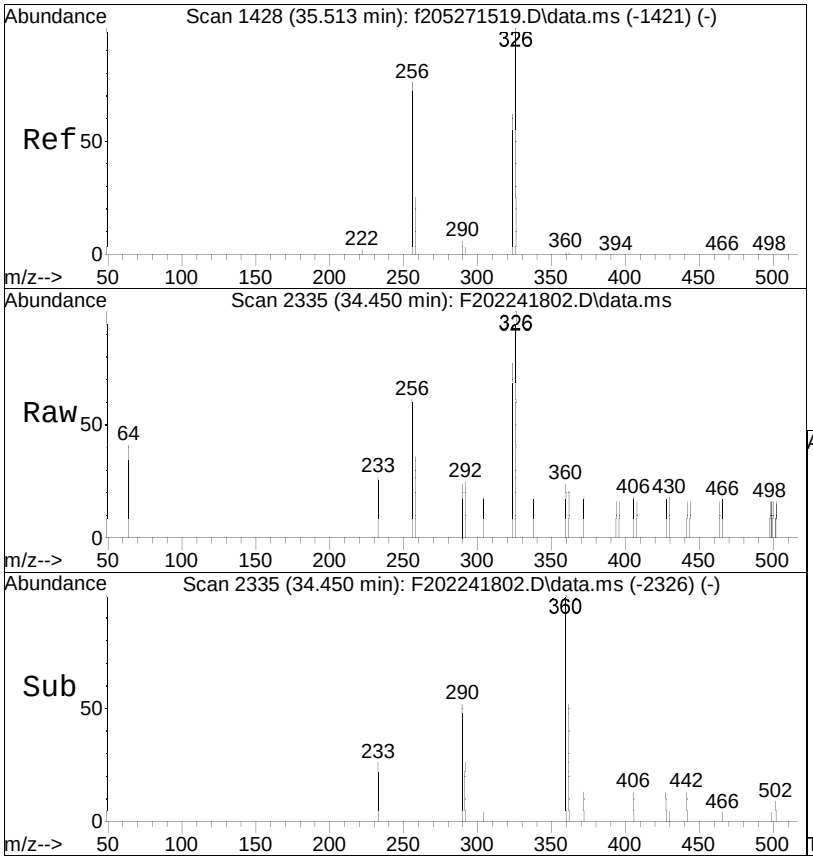


#101
Cl5-BZ#83/#125/#112
Concen: 1.06 ng/mL M4
RT: 34.284 min Scan# 2325
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 2215

Ion	Ratio	Lower	Upper
326	100		
324	34.2	49.5	74.3#

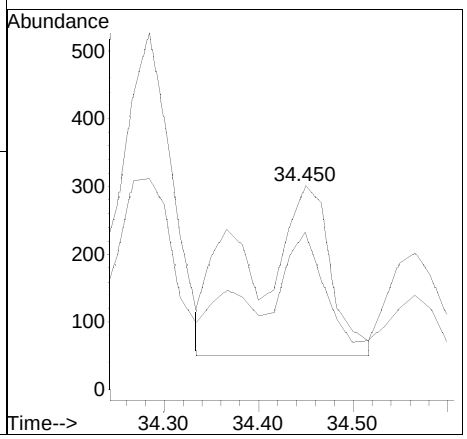


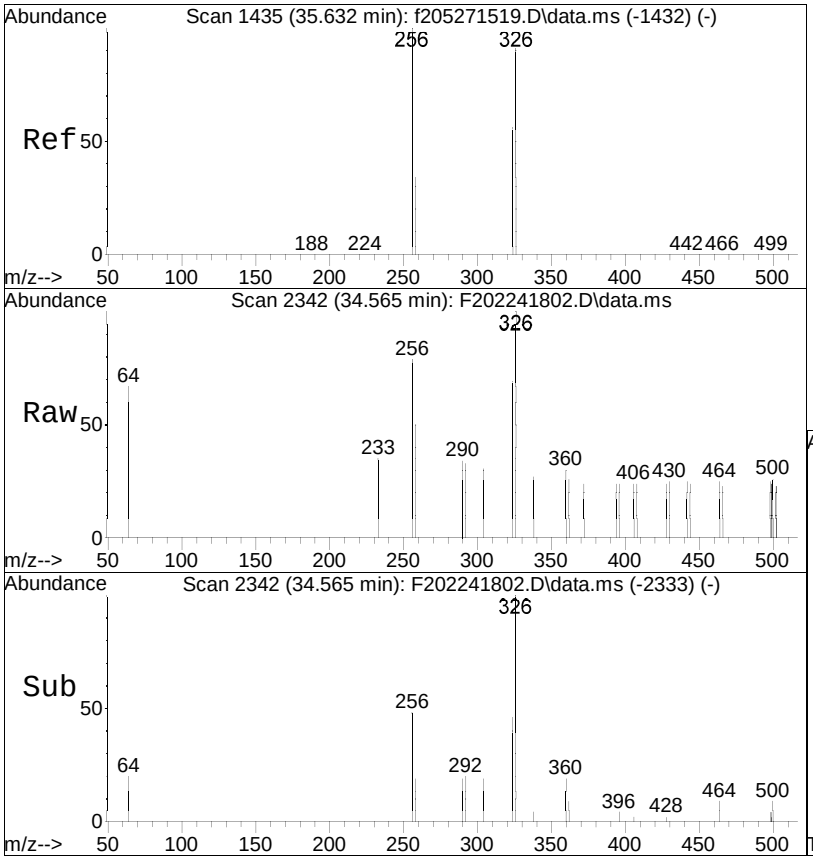


#102
Cl5-BZ#86/#109
Concen: 0.71 ng/mL M1
RT: 34.450 min Scan# 2335
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1466

Ion	Ratio	Lower	Upper
326	100		
324	31.8	49.7	74.5#

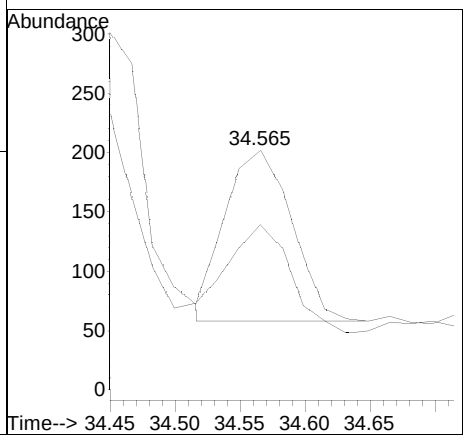


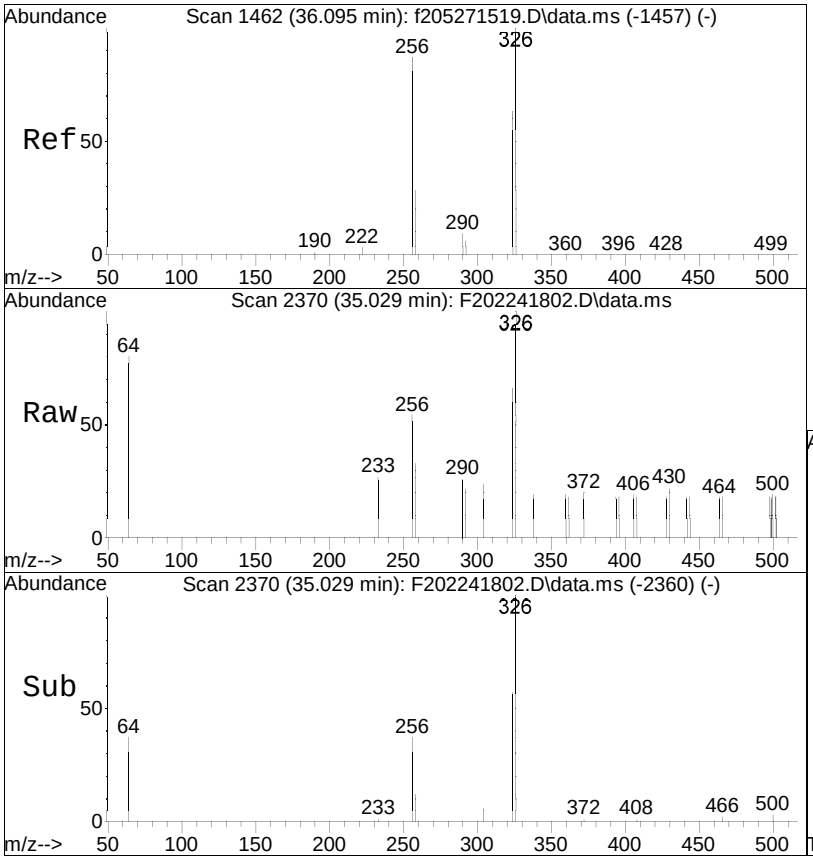


#103
Cl5-BZ#97
Concen: 0.32 ng/mL
RT: 34.565 min Scan# 2342
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 513

Ion	Ratio	Lower	Upper
326	100		
324	65.5	51.2	76.8

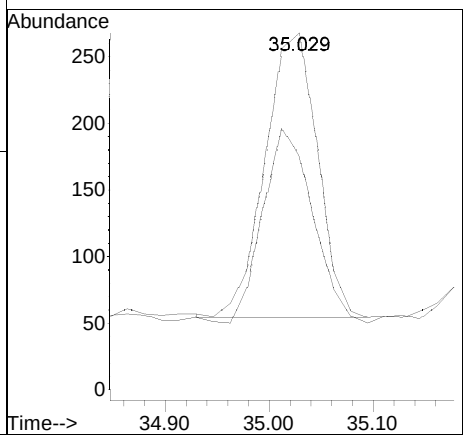


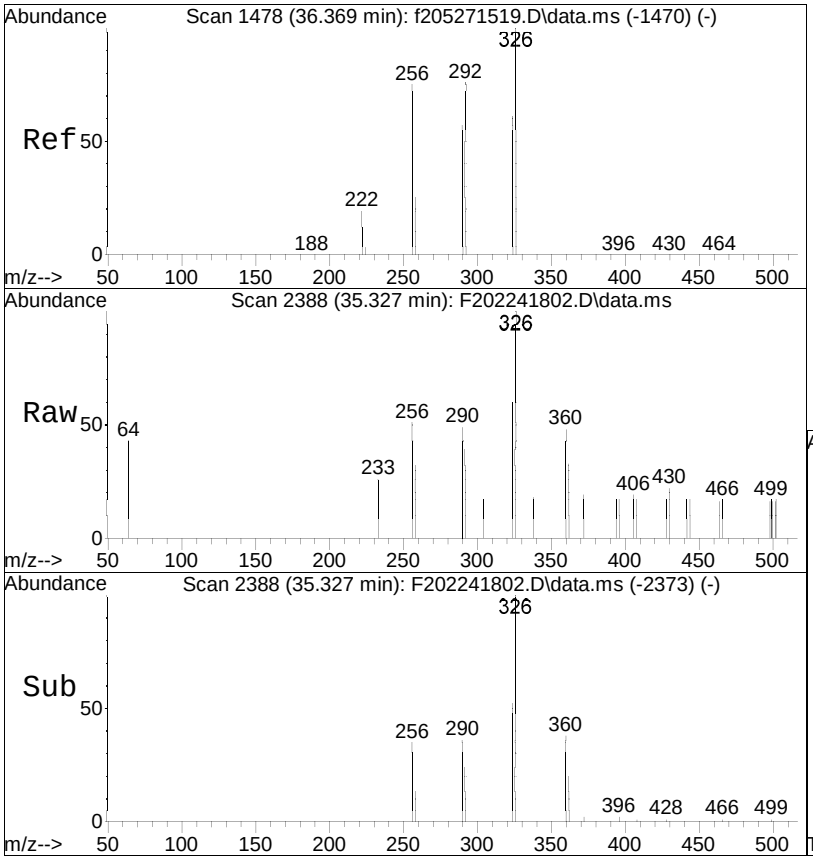


#104
Cl5-BZ#116
Concen: 0.35 ng/mL
RT: 35.029 min Scan# 2370
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 748

Ion	Ratio	Lower	Upper
326	100		
324	65.2	49.0	73.6

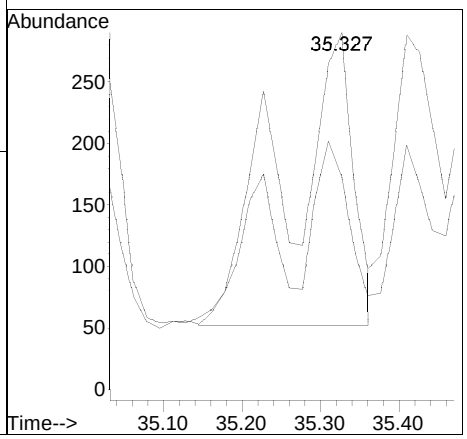


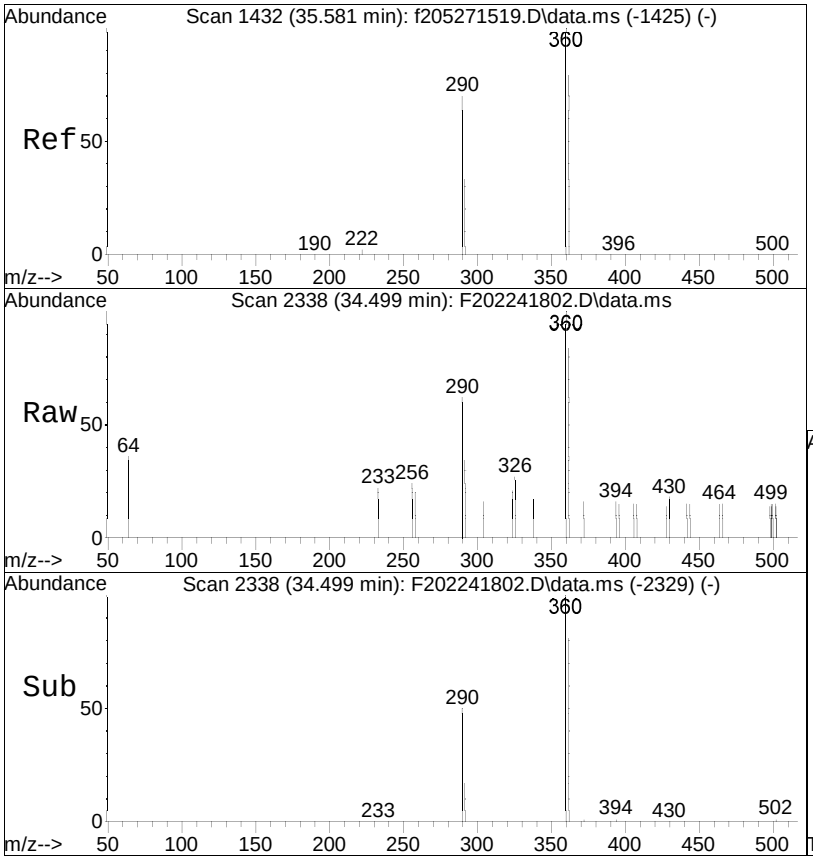


#105
Cl5-BZ#87/#111
Concen: 0.67 ng/mL M1
RT: 35.327 min Scan# 2388
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1420

Ion	Ratio	Lower	Upper
326	100		
324	22.5	50.6	75.8#

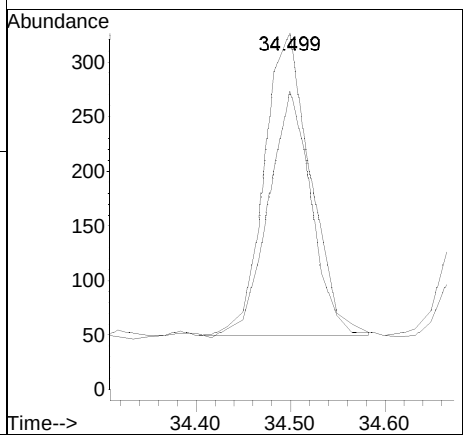


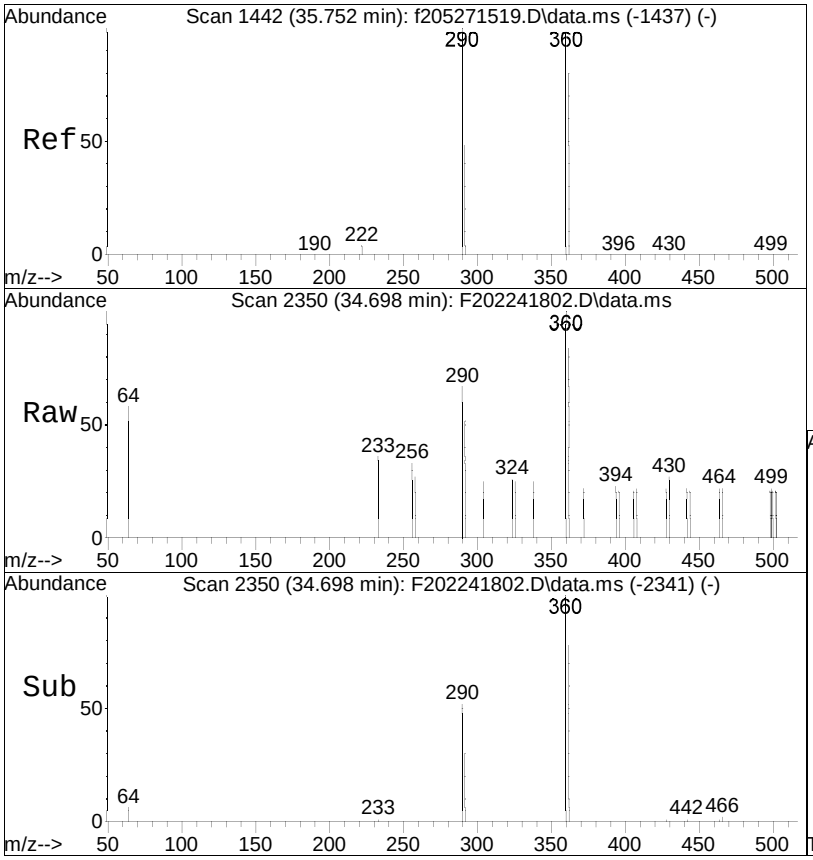


#108
Cl6-BZ#145
Concen: 0.36 ng/mL
RT: 34.499 min Scan# 2338
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 948

Ion	Ratio	Lower	Upper
360	100		
362	76.6	64.9	97.3

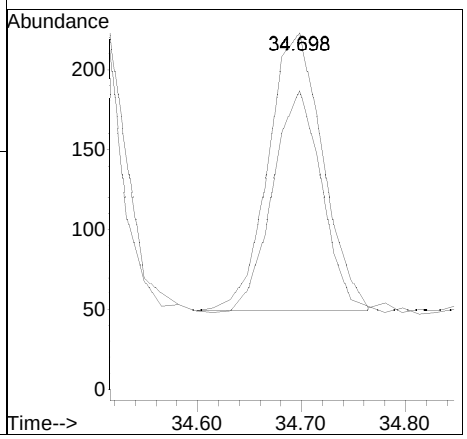


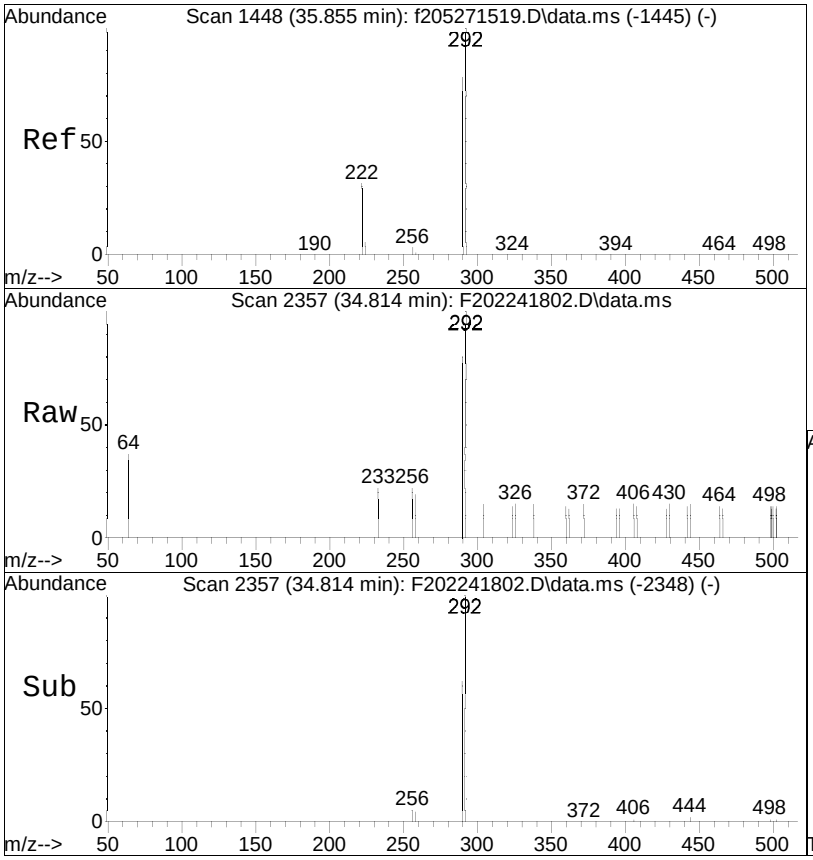


#109
Cl6-BZ#148
Concen: 0.37 ng/mL
RT: 34.698 min Scan# 2350
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 636

Ion	Ratio	Lower	Upper
360	100		
362	72.6	63.3	94.9

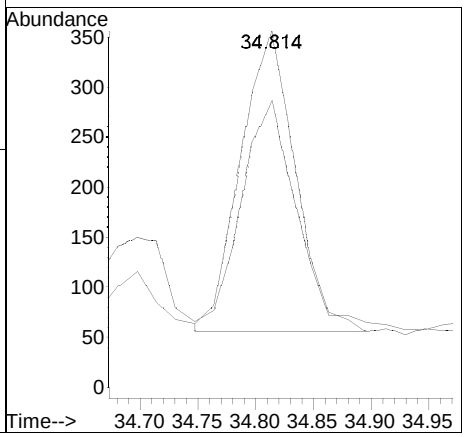


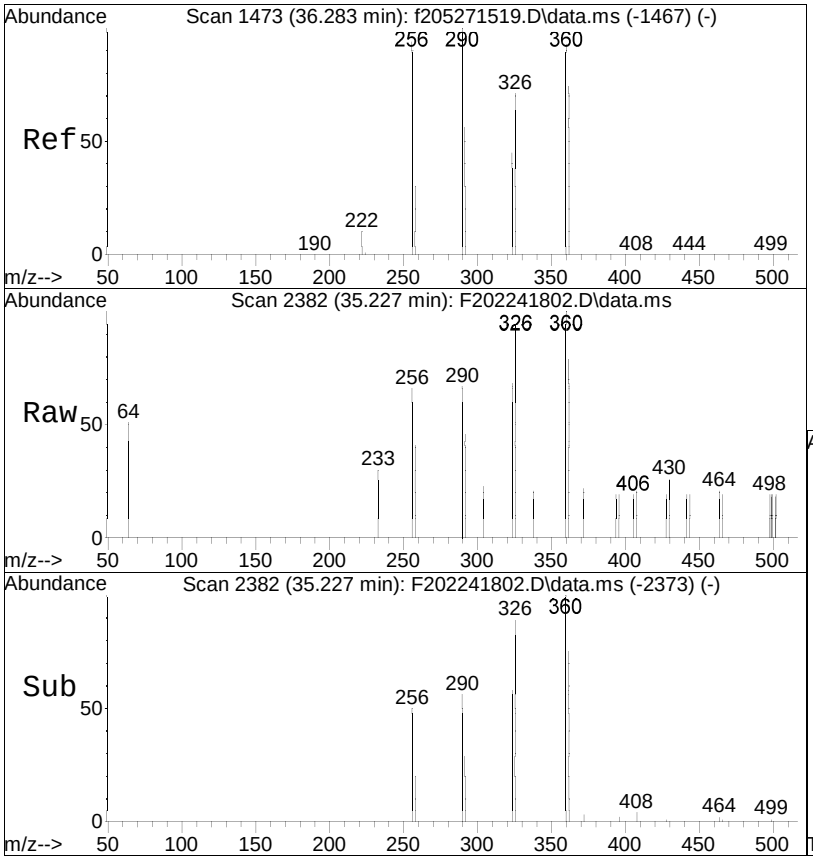


#110
Cl4-BZ#79
Concen: 0.38 ng/mL
RT: 34.814 min Scan# 2357
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 993

Ion	Ratio	Lower	Upper
292	100		
290	70.0	62.6	93.8

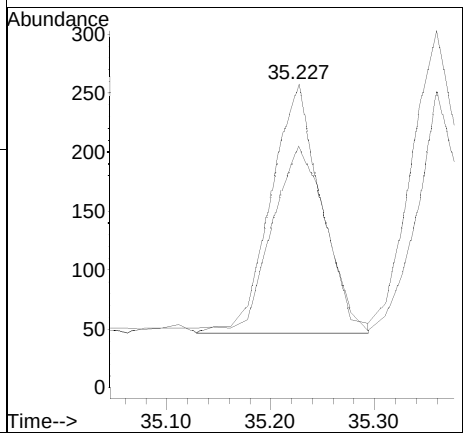


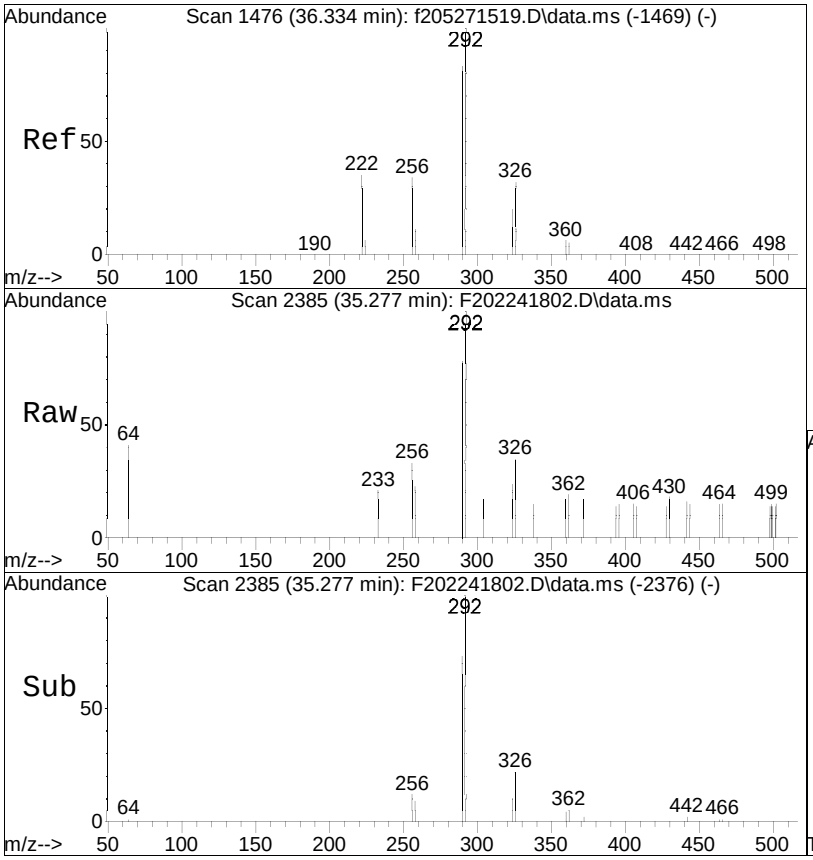


#111
Cl6-BZ#154-Cal
Concen: 0.36 ng/mL
RT: 35.227 min Scan# 2382
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 704

Ion	Ratio	Lower	Upper
360	100		
362	78.8	64.2	96.4

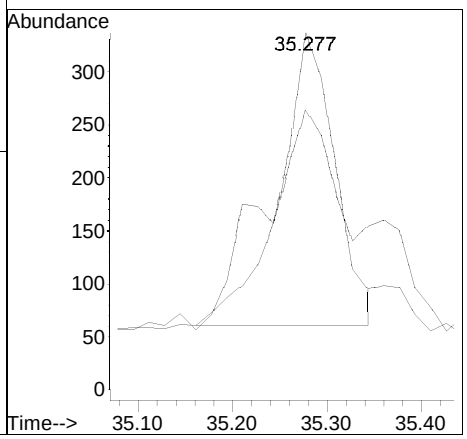


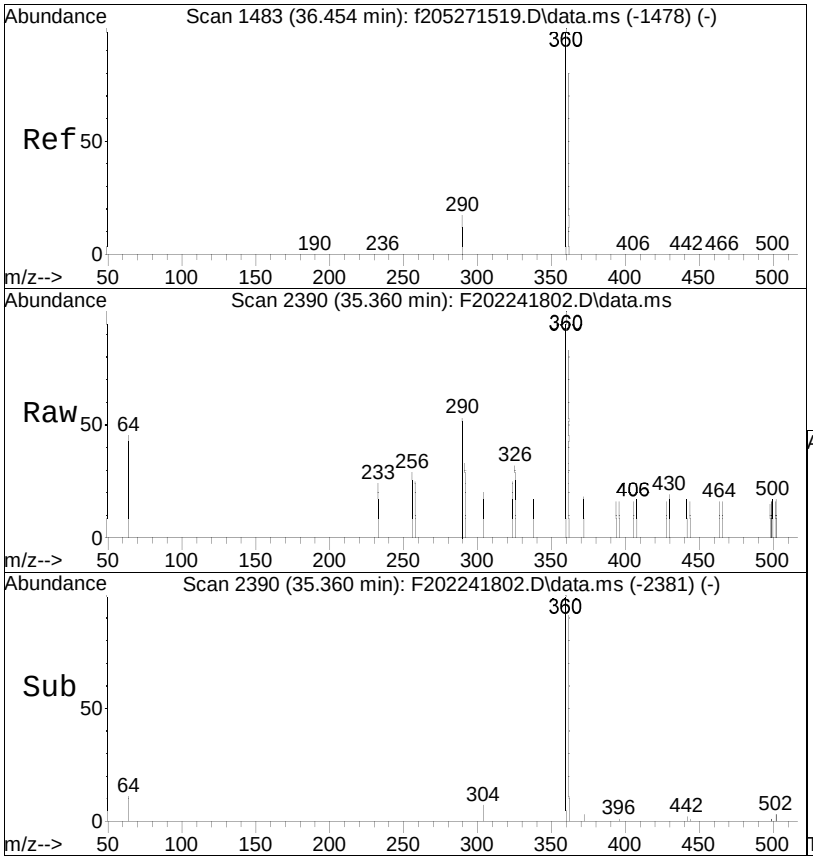


#114
Cl4-BZ#78
Concen: 0.33 ng/mL
RT: 35.277 min Scan# 2385
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 1130

Ion	Ratio	Lower	Upper
292	100		
290	109.8	65.0	97.6#

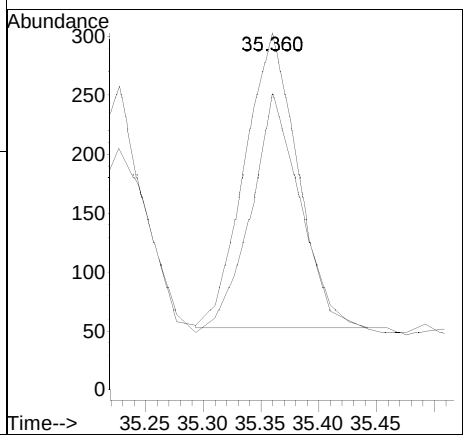


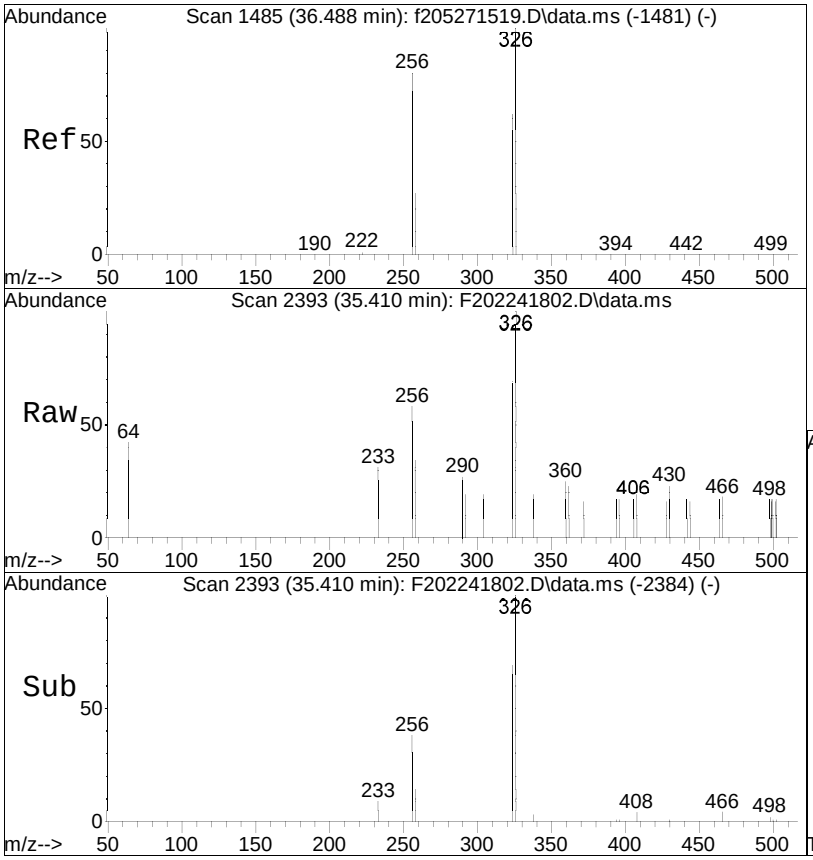


#115
Cl6-BZ#136
Concen: 0.34 ng/mL
RT: 35.360 min Scan# 2390
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 796

Ion	Ratio	Lower	Upper
360	100		
362	77.1	64.9	97.3

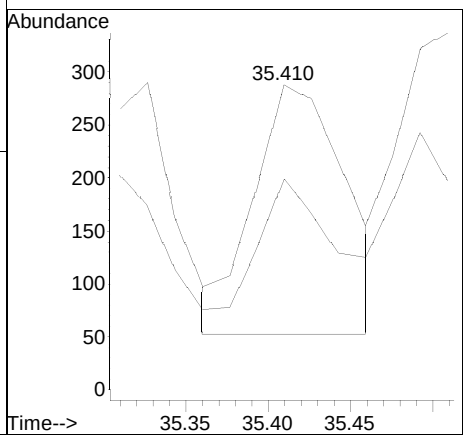


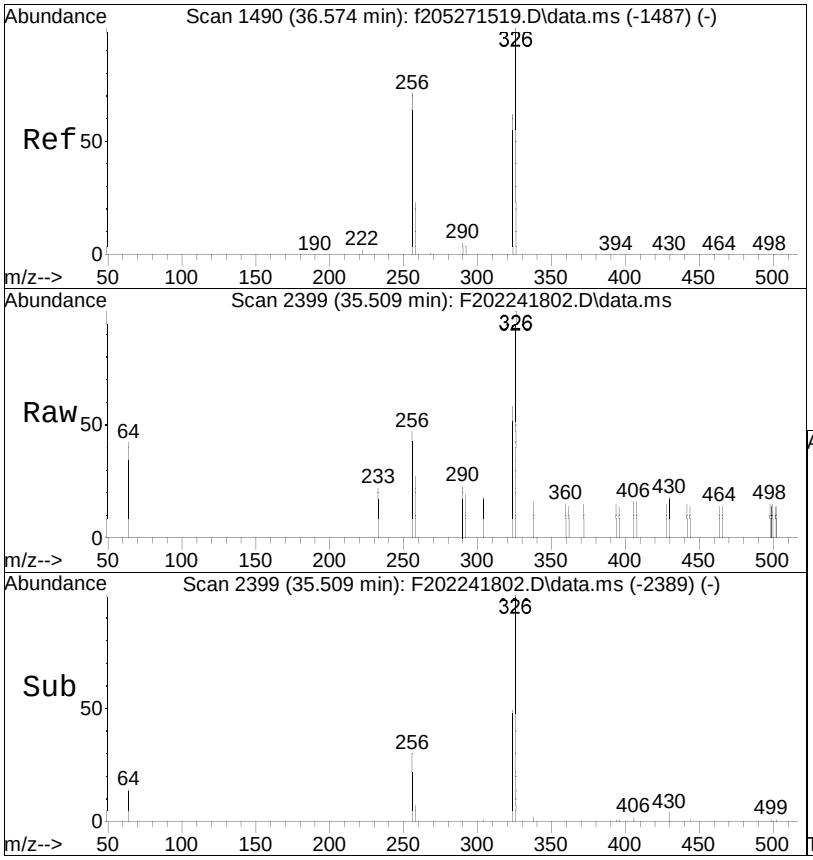


#116
Cl5-BZ#117
Concen: 0.34 ng/mL M4
RT: 35.410 min Scan# 2393
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 913

Ion	Ratio	Lower	Upper
326	100		
324	40.7	49.1	73.7#

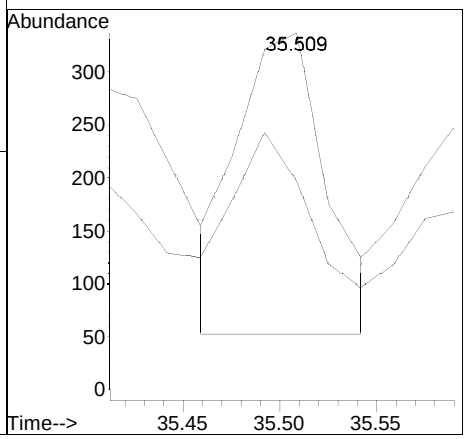


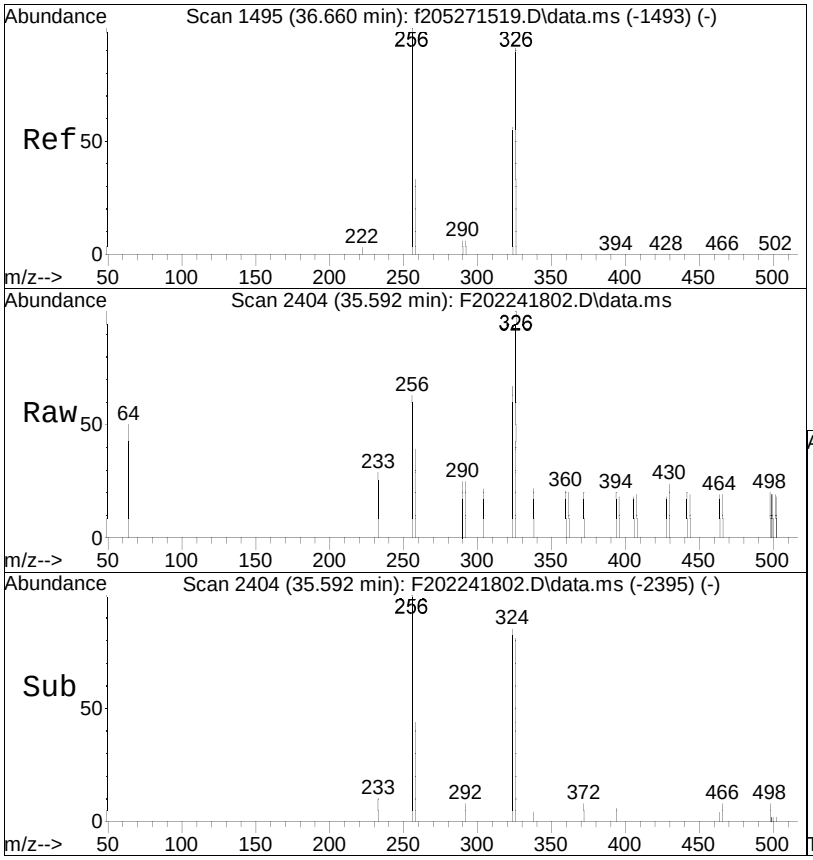


#117
Cl5-BZ#115
Concen: 0.37 ng/mL M4
RT: 35.509 min Scan# 2399
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 914

Ion	Ratio	Lower	Upper
326	100		
324	40.5	48.7	73.1#

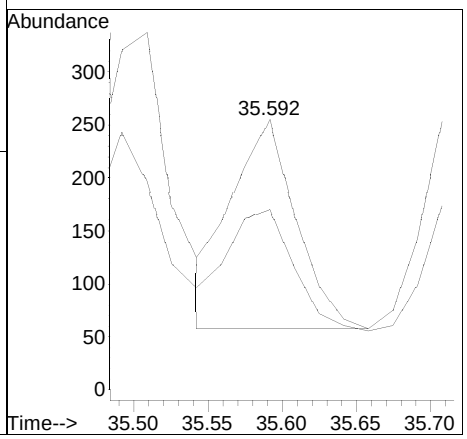


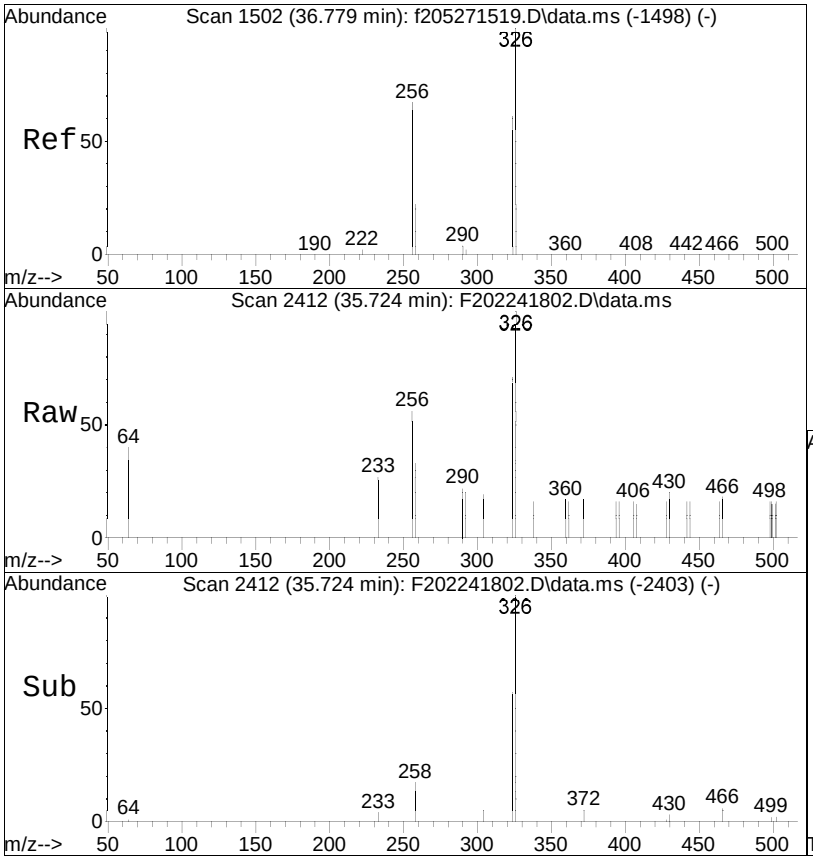


#118
Cl5-BZ#85
Concen: 0.37 ng/mL
RT: 35.592 min Scan# 2404
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 601

Ion	Ratio	Lower	Upper
326	100		
324	59.9	49.6	74.4

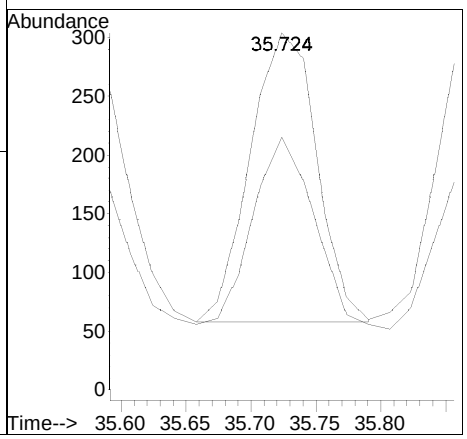


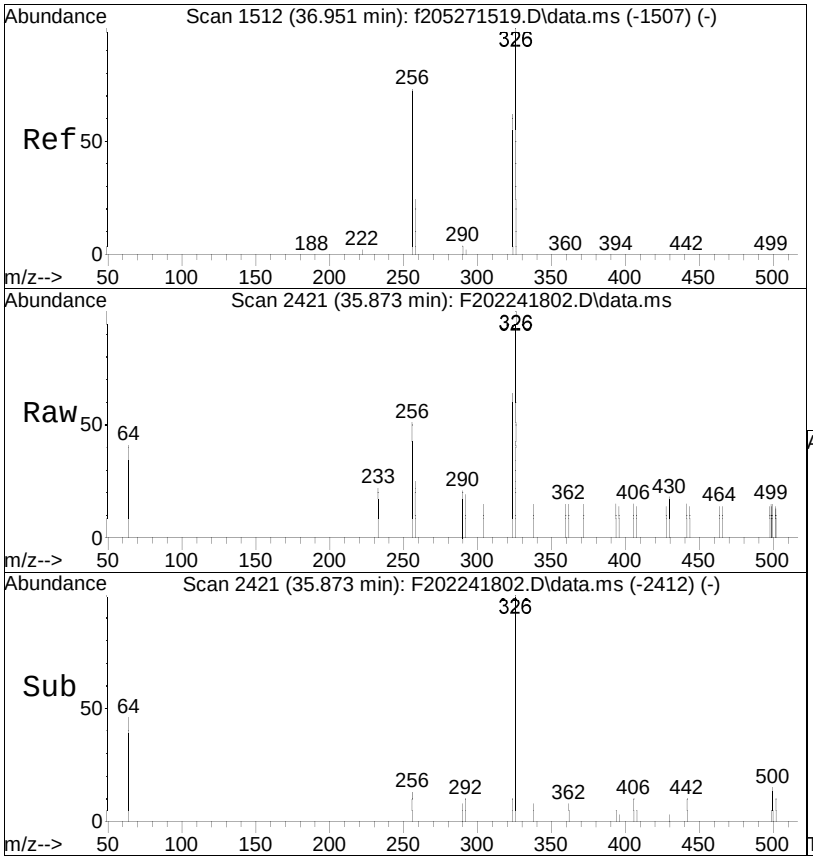


#119
Cl5-BZ#120
Concen: 0.36 ng/mL
RT: 35.724 min Scan# 2412
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 875

Ion	Ratio	Lower	Upper
326	100		
324	62.3	49.7	74.5

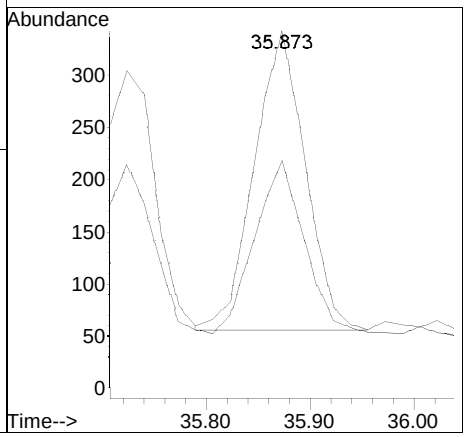


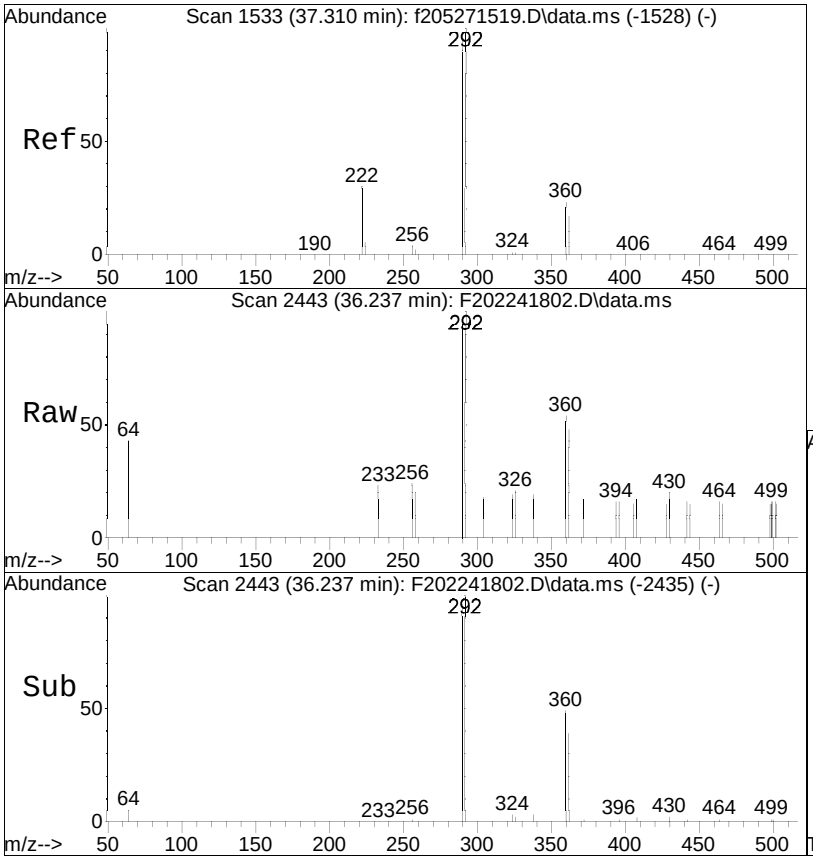


#120
Cl5-BZ#110
Concen: 0.40 ng/mL
RT: 35.873 min Scan# 2421
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 972

Ion	Ratio	Lower	Upper
326	100		
324	56.8	49.4	74.2

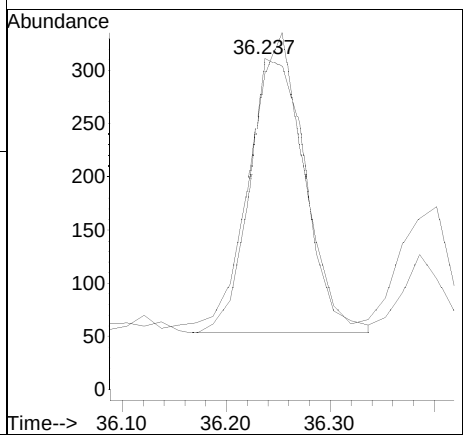


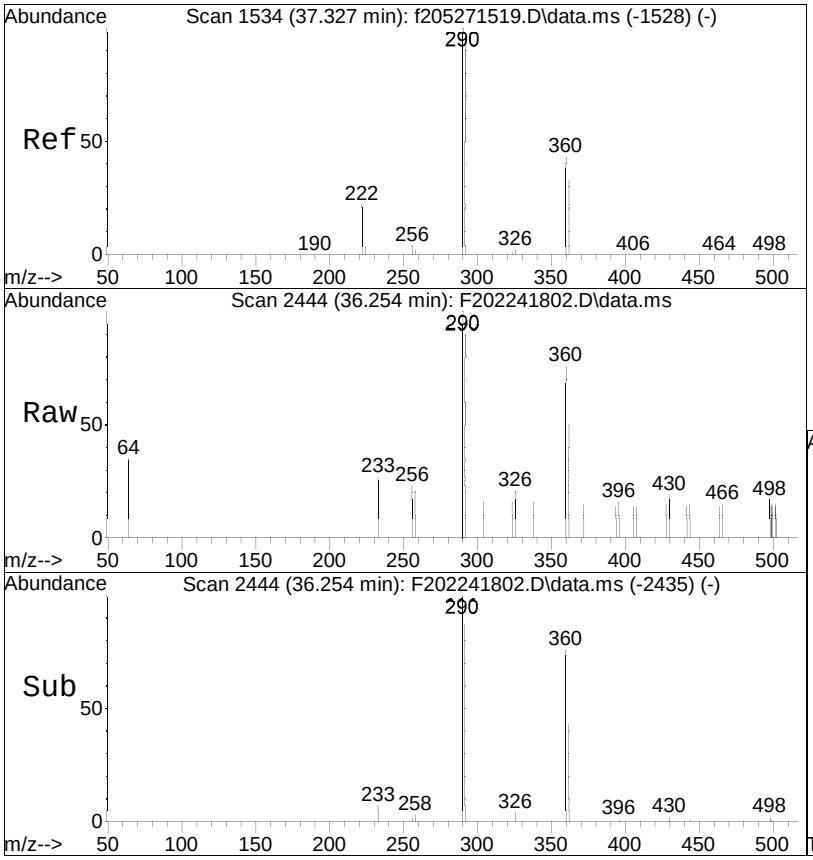


#121
Cl4-BZ#81
Concen: 0.38 ng/mL
RT: 36.237 min Scan# 2443
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 973

Ion	Ratio	Lower	Upper
292	100		
290	95.5	78.3	117.5

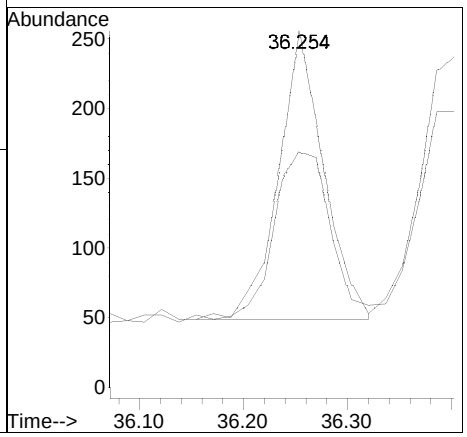


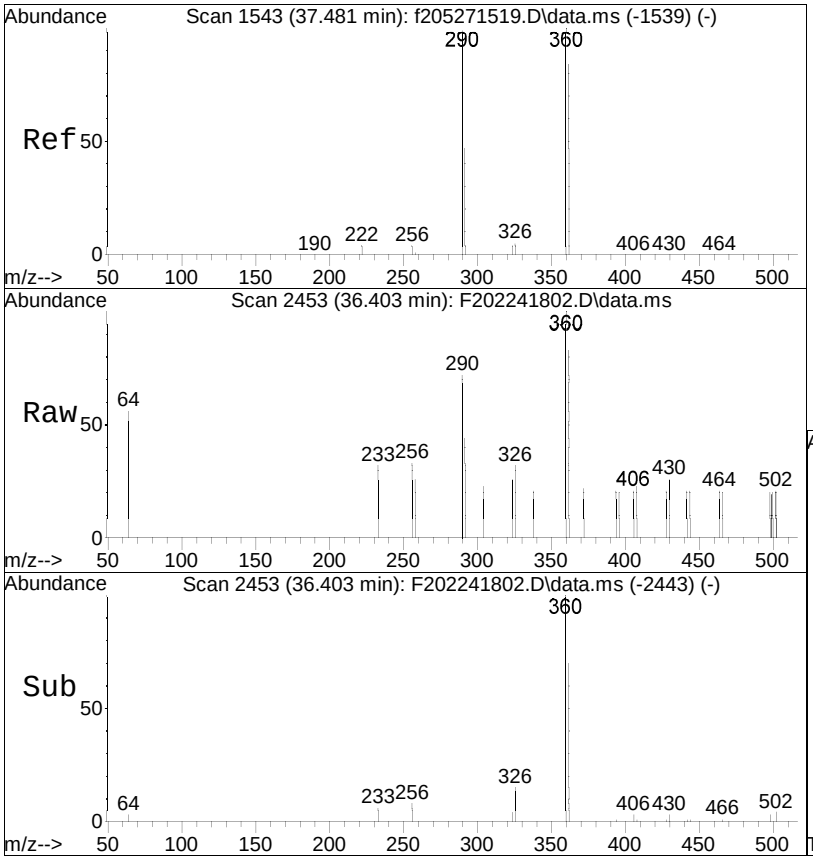


#123
Cl6-BZ#151
Concen: 0.36 ng/mL
RT: 36.254 min Scan# 2444
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 626

Ion	Ratio	Lower	Upper
360	100		
362	72.4	62.7	94.1

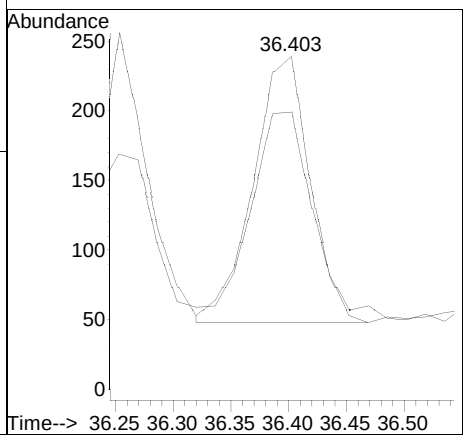


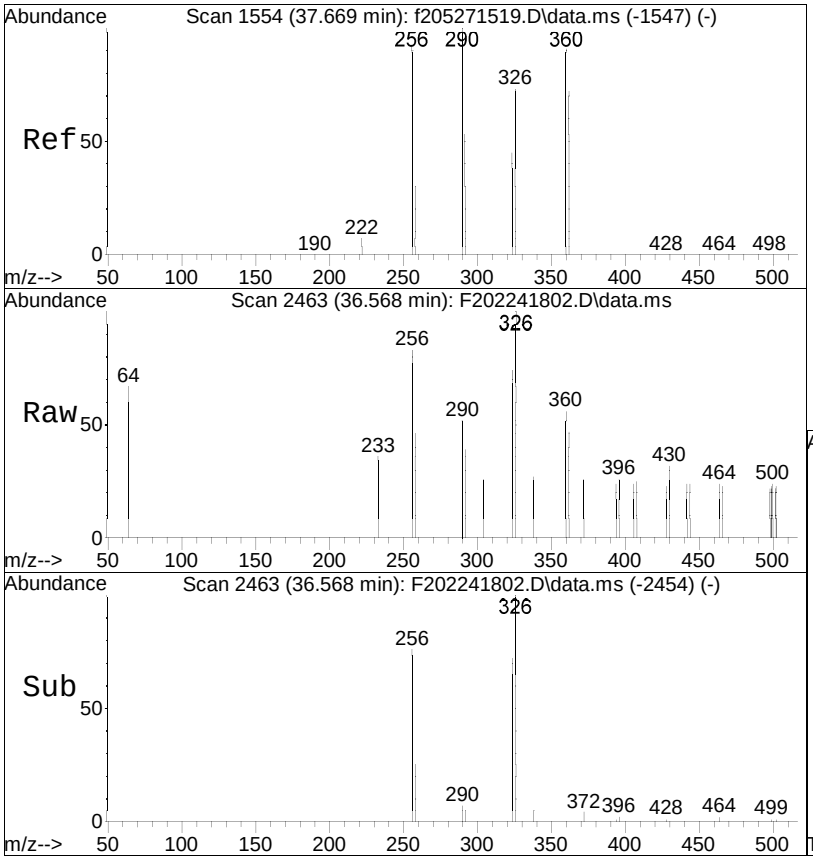


#124
Cl6-BZ#135
Concen: 0.36 ng/mL
RT: 36.403 min Scan# 2453
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 655

Ion	Ratio	Lower	Upper
360	100		
362	83.5	64.3	96.5

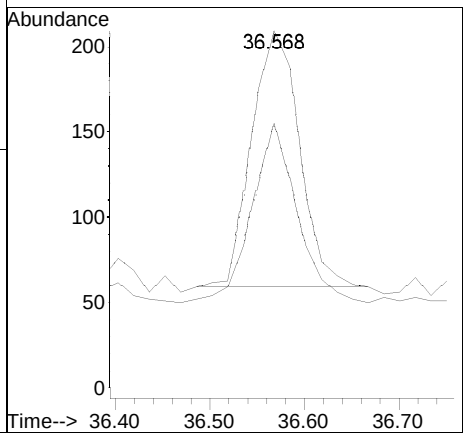


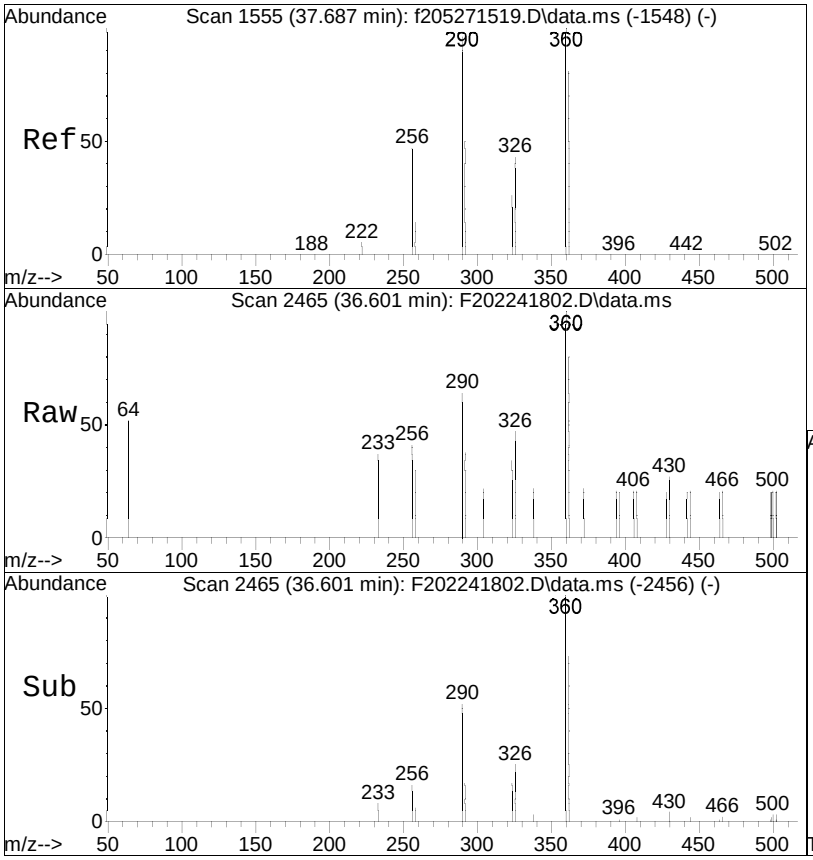


#125
Cl5-BZ#82
Concen: 0.31 ng/mL
RT: 36.568 min Scan# 2463
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 528

Ion	Ratio	Lower	Upper
326	100		
324	66.1	48.7	73.1

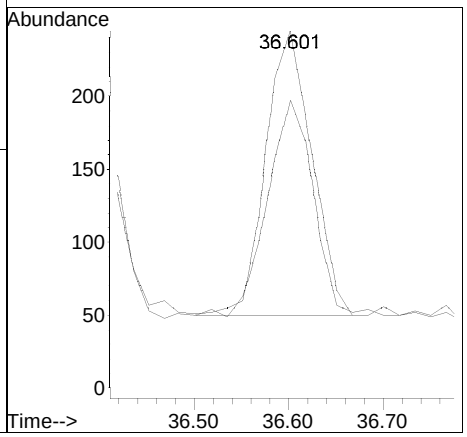


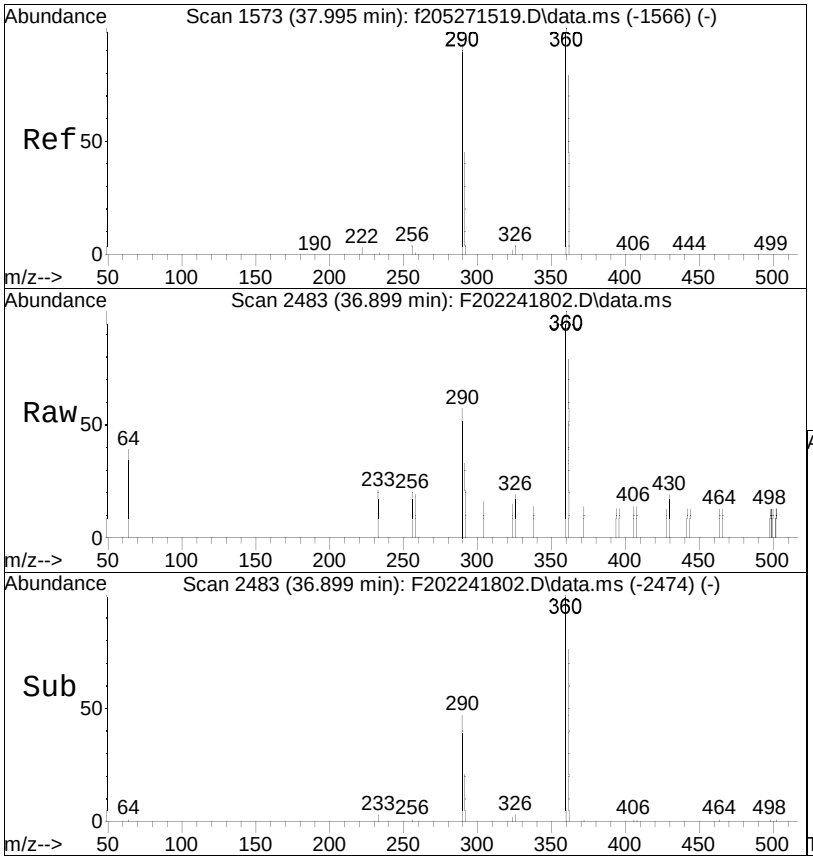


#126
Cl6-BZ#144
Concen: 0.36 ng/mL
RT: 36.601 min Scan# 2465
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 661

Ion	Ratio	Lower	Upper
360	100		
362	75.0	64.8	97.2

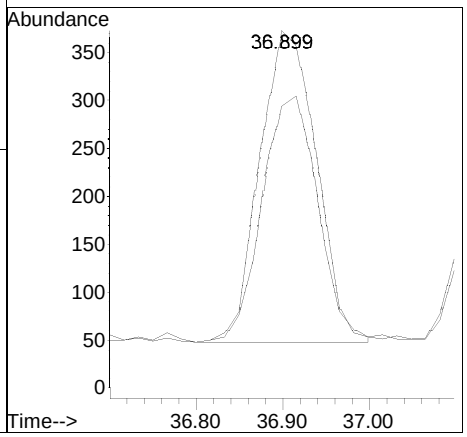


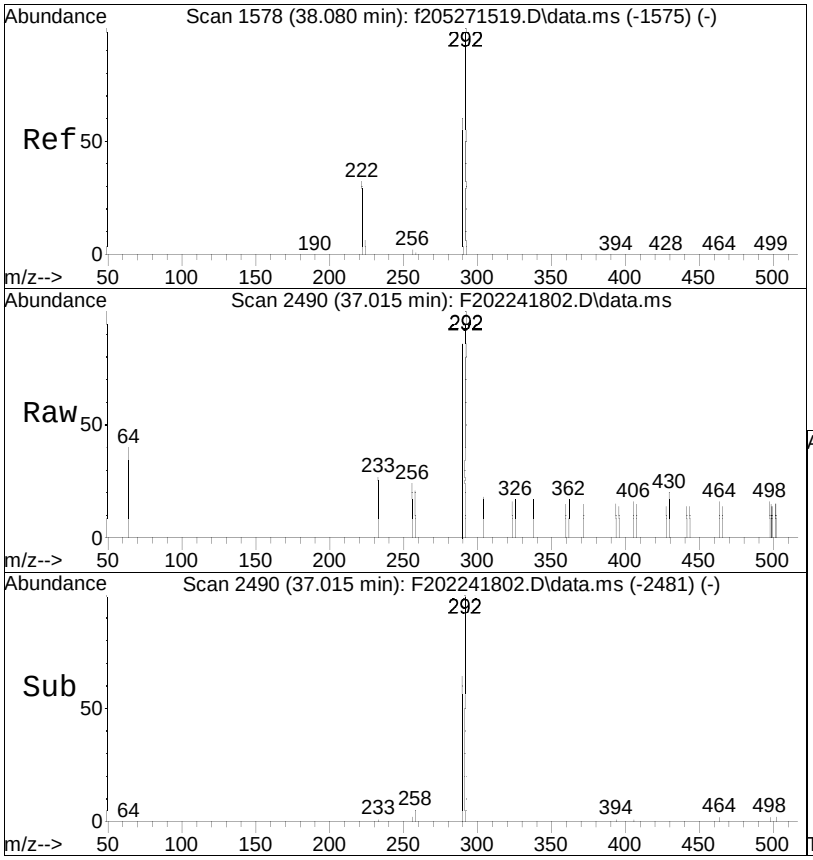


#127
Cl6-BZ#147/#149
Concen: 0.77 ng/mL
RT: 36.899 min Scan# 2483
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1471

Ion	Ratio	Lower	Upper
360	100		
362	77.8	62.6	94.0

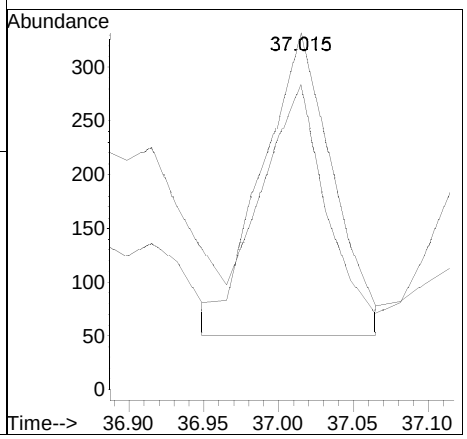


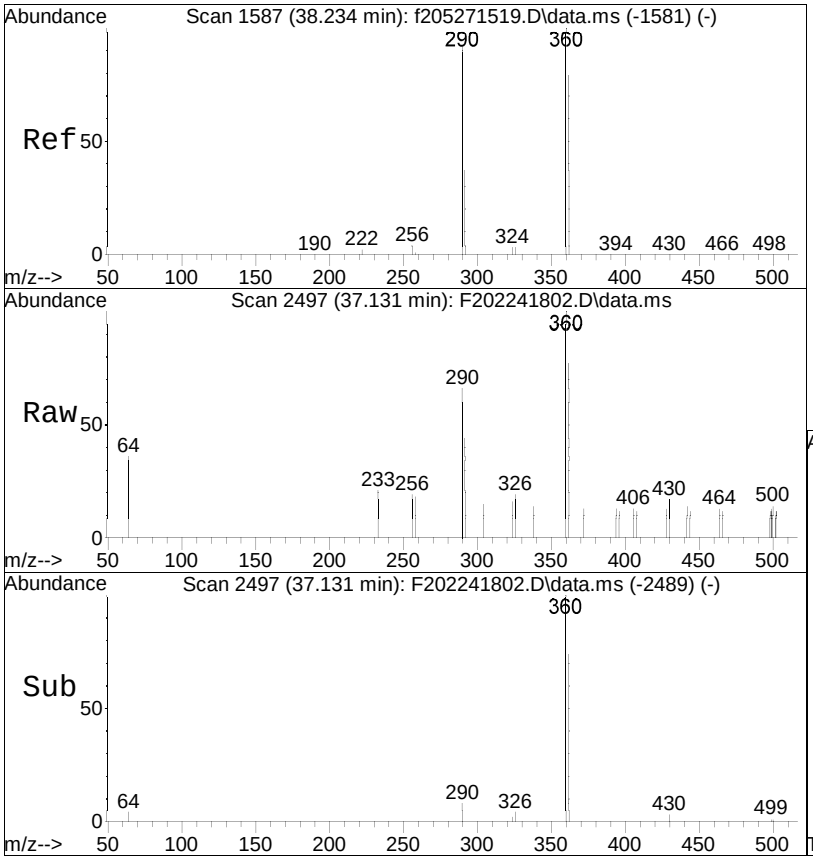


#128
Cl4-BZ#77-RTW
Concen: 0.37 ng/mL M4
RT: 37.015 min Scan# 2490
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:292 Resp: 923

Ion	Ratio	Lower	Upper
292	100		
290	85.5	62.0	93.0

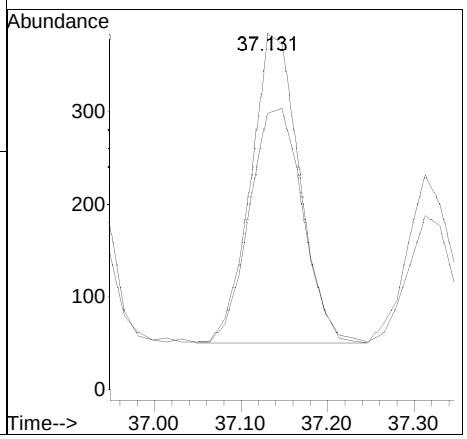


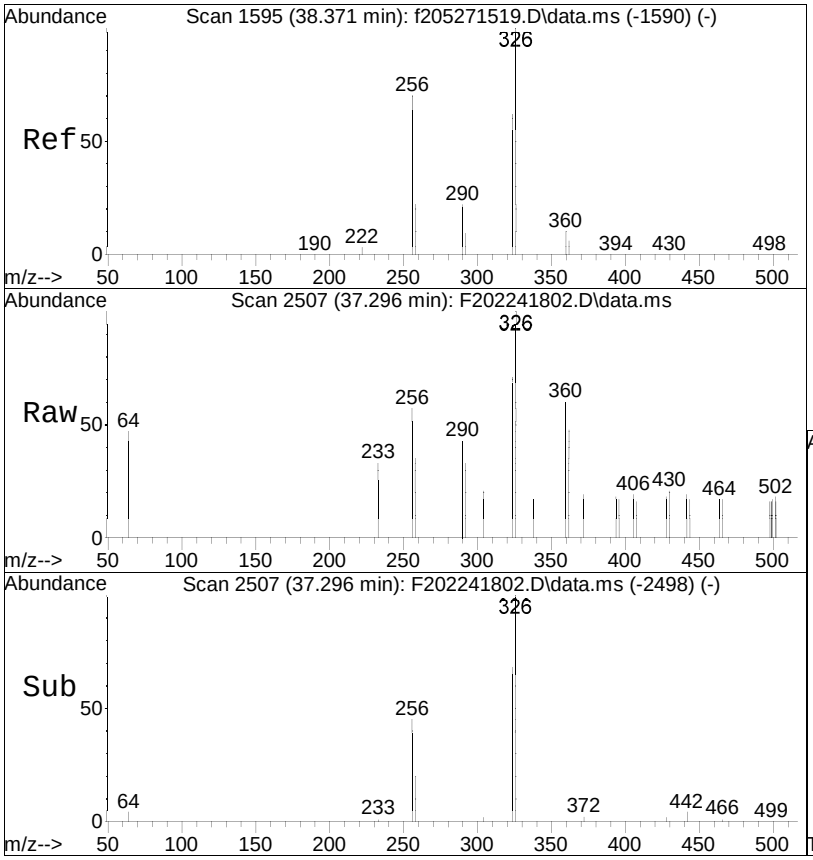


#129
Cl6-BZ#143/#139
Concen: 0.67 ng/mL
RT: 37.131 min Scan# 2497
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1297

Ion	Ratio	Lower	Upper
360	100		
362	82.7	64.7	97.1

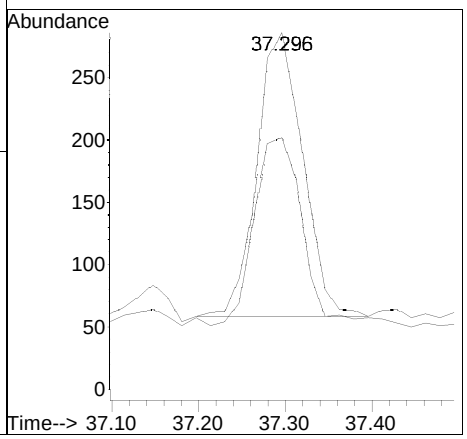


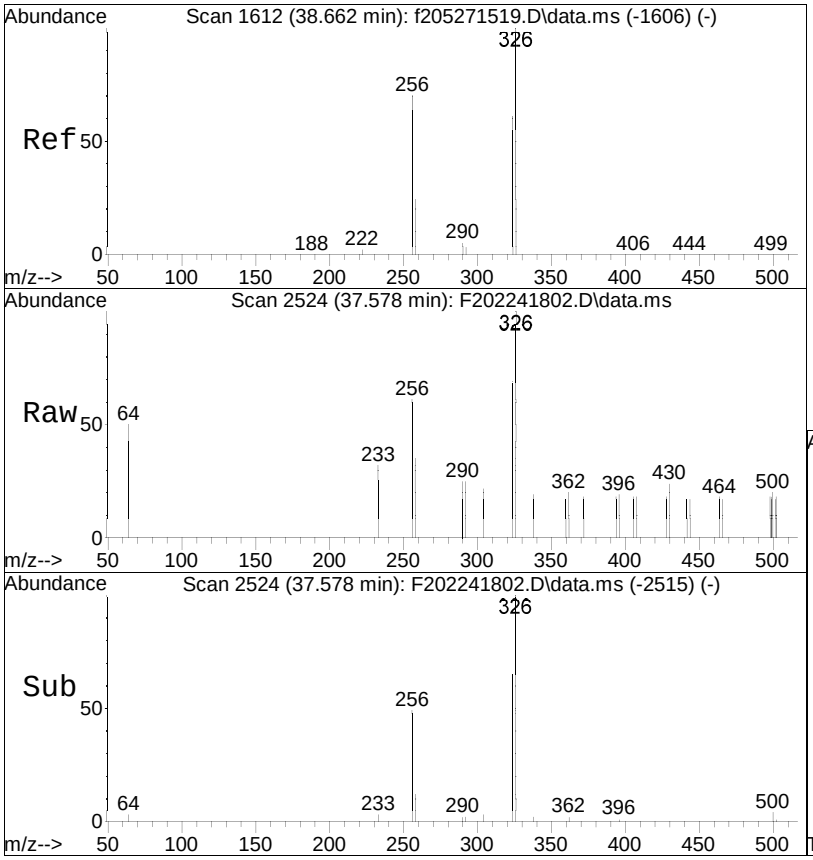


#130
Cl5-BZ#124
Concen: 0.33 ng/mL
RT: 37.296 min Scan# 2507
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 836

Ion	Ratio	Lower	Upper
326	100		
324	68.4	49.2	73.8

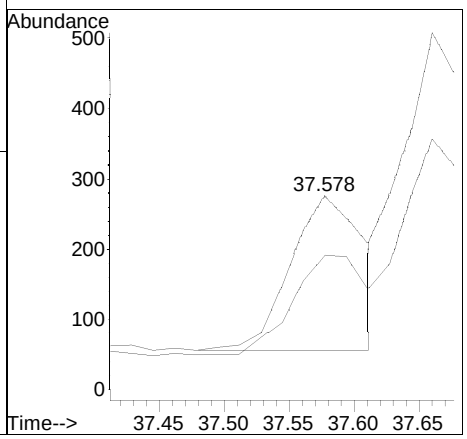


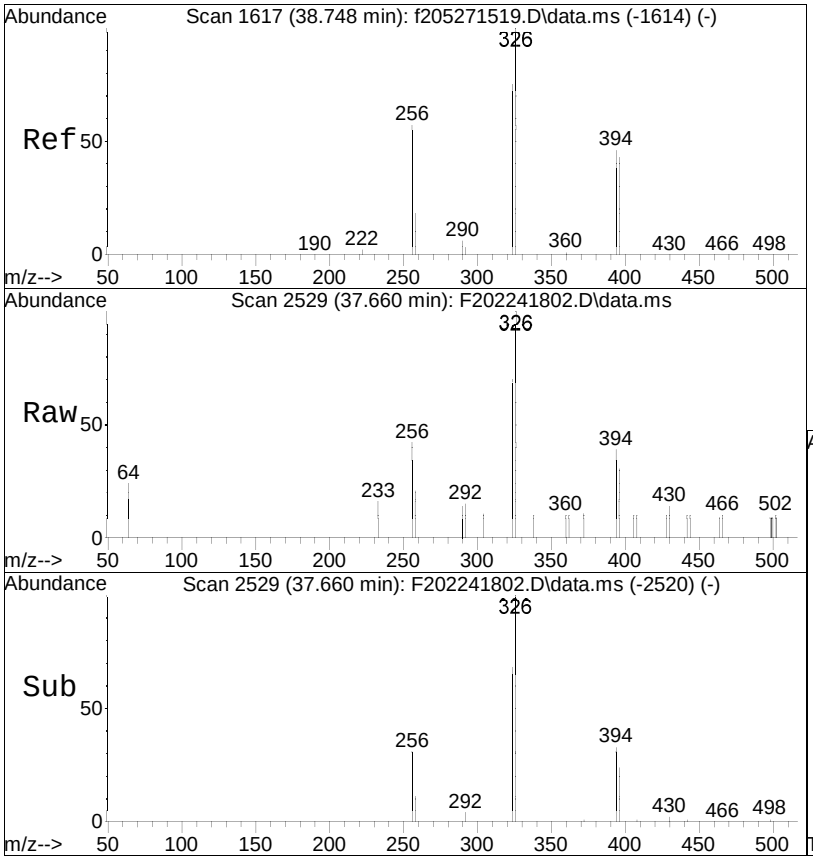


#131
Cl5-BZ#108
Concen: 0.34 ng/mL
RT: 37.578 min Scan# 2524
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 847

Ion	Ratio	Lower	Upper
326	100		
324	64.0	50.0	75.0

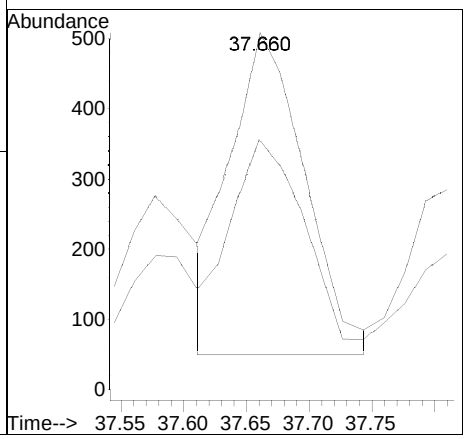


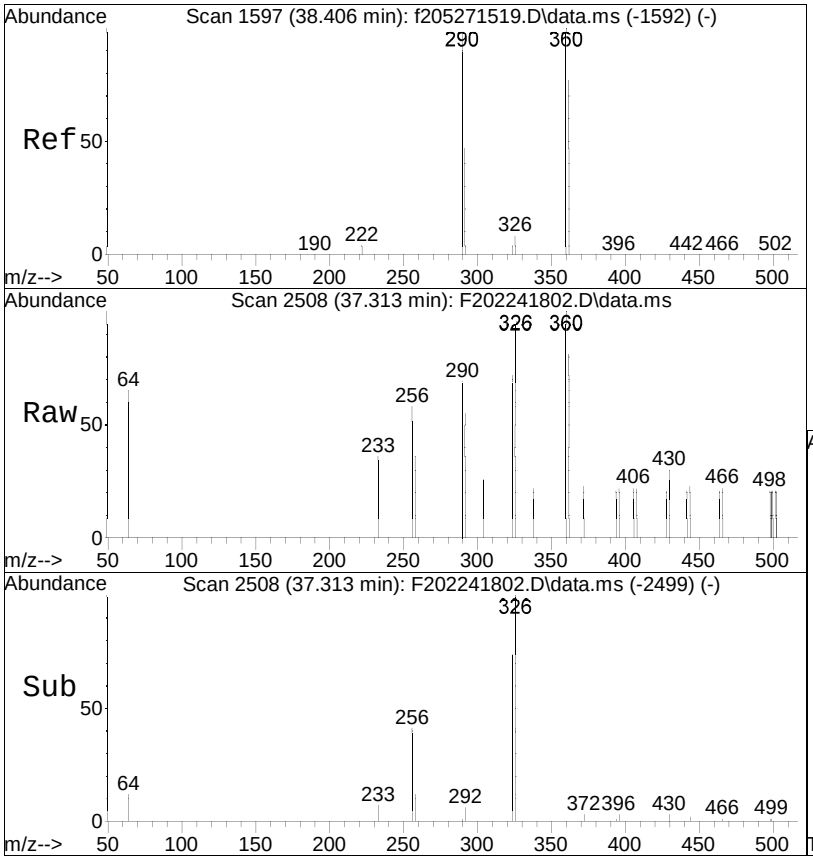


#132
Cl5-BZ#107/#123
Concen: 0.71 ng/mL M4
RT: 37.660 min Scan# 2529
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1902

Ion	Ratio	Lower	Upper
326	100		
324	58.8	57.6	86.4

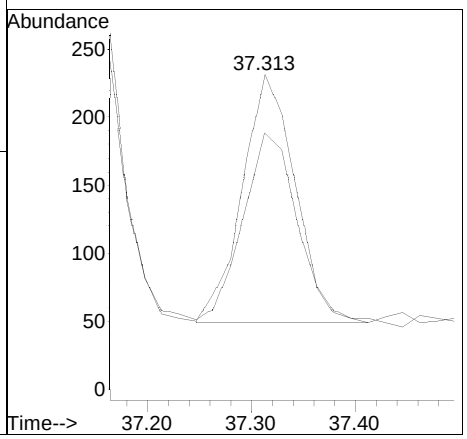


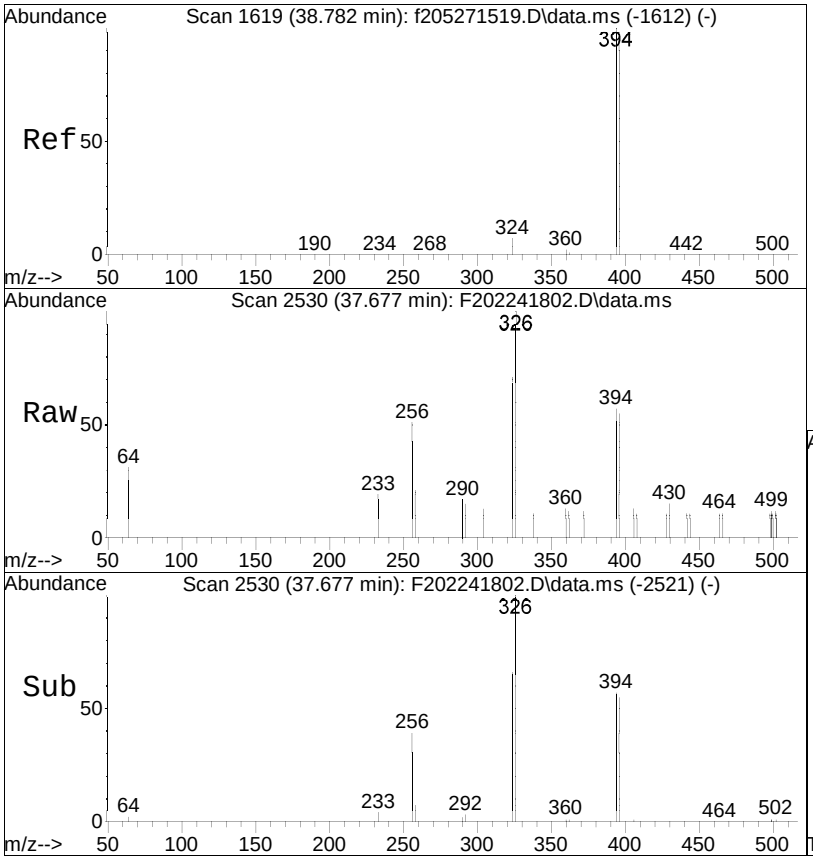


#133
Cl6-BZ#140
Concen: 0.35 ng/mL
RT: 37.313 min Scan# 2508
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 644

Ion	Ratio	Lower	Upper
360	100		
362	76.4	64.8	97.2

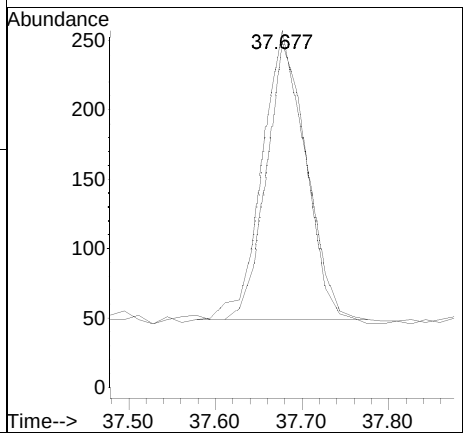


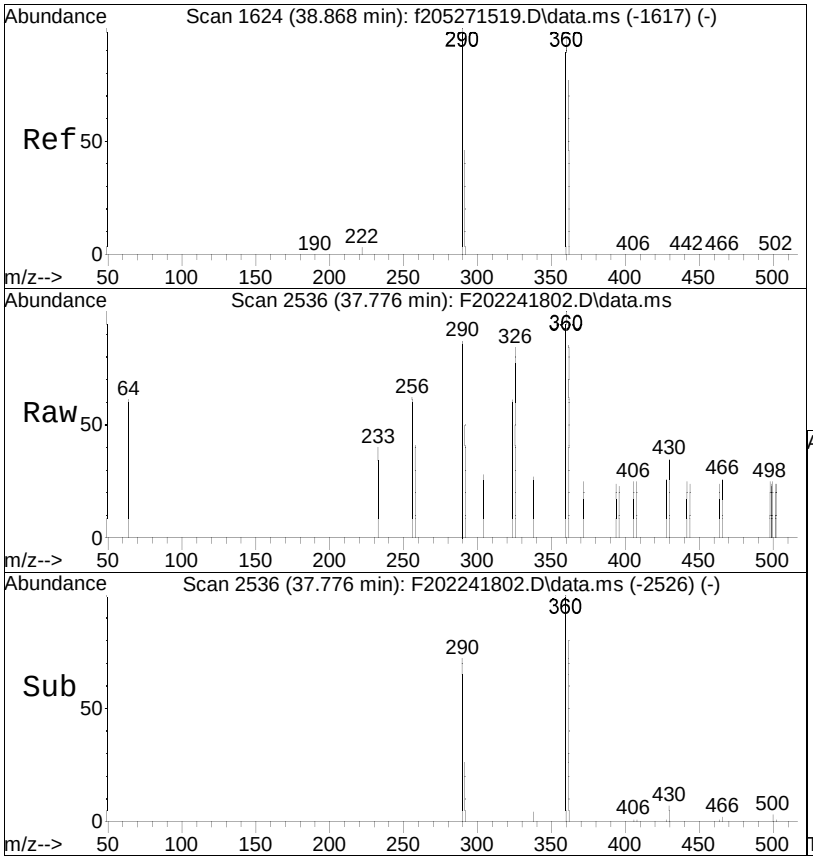


#134
Cl7-BZ#188-Cal/RTW
Concen: 0.32 ng/mL
RT: 37.677 min Scan# 2530
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 725

Ion	Ratio	Lower	Upper
394	100		
396	91.4	76.3	114.5

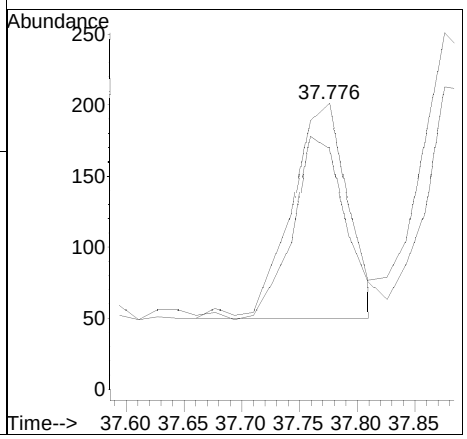


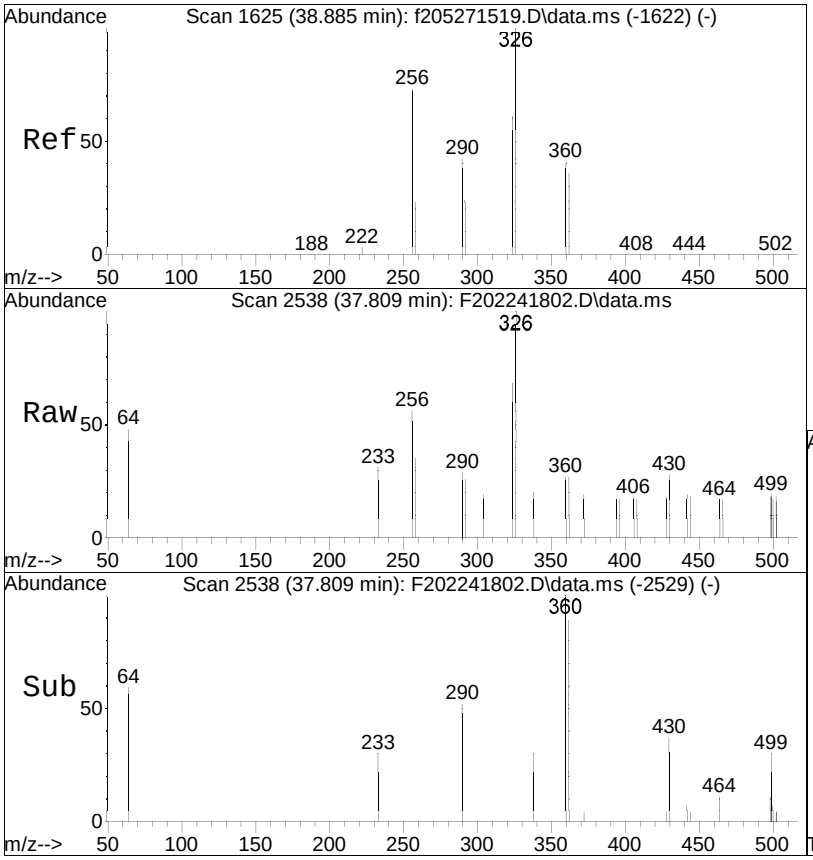


#137
Cl6-BZ#134
Concen: 0.33 ng/mL
RT: 37.776 min Scan# 2536
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 517

Ion	Ratio	Lower	Upper
360	100		
362	83.2	61.2	91.8

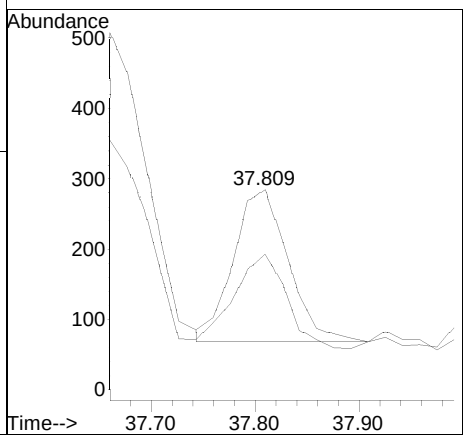


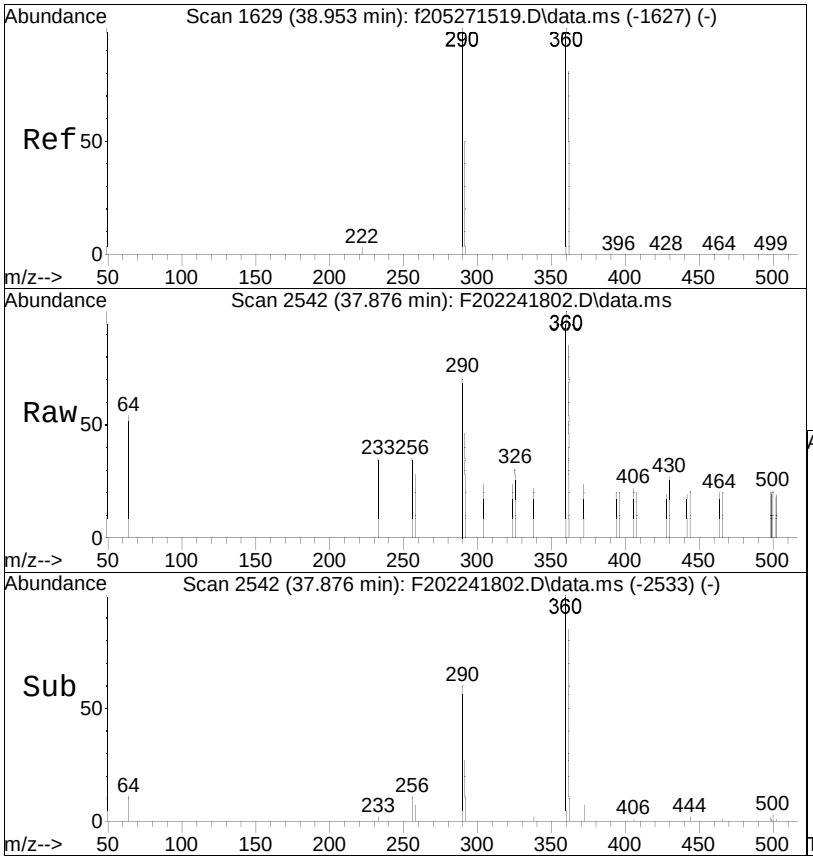


#138
Cl5-BZ#106
Concen: 0.30 ng/mL
RT: 37.809 min Scan# 2538
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 794

Ion	Ratio	Lower	Upper
326	100		
324	60.1	49.8	74.8

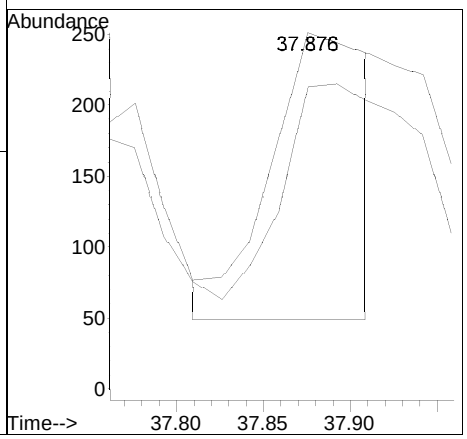


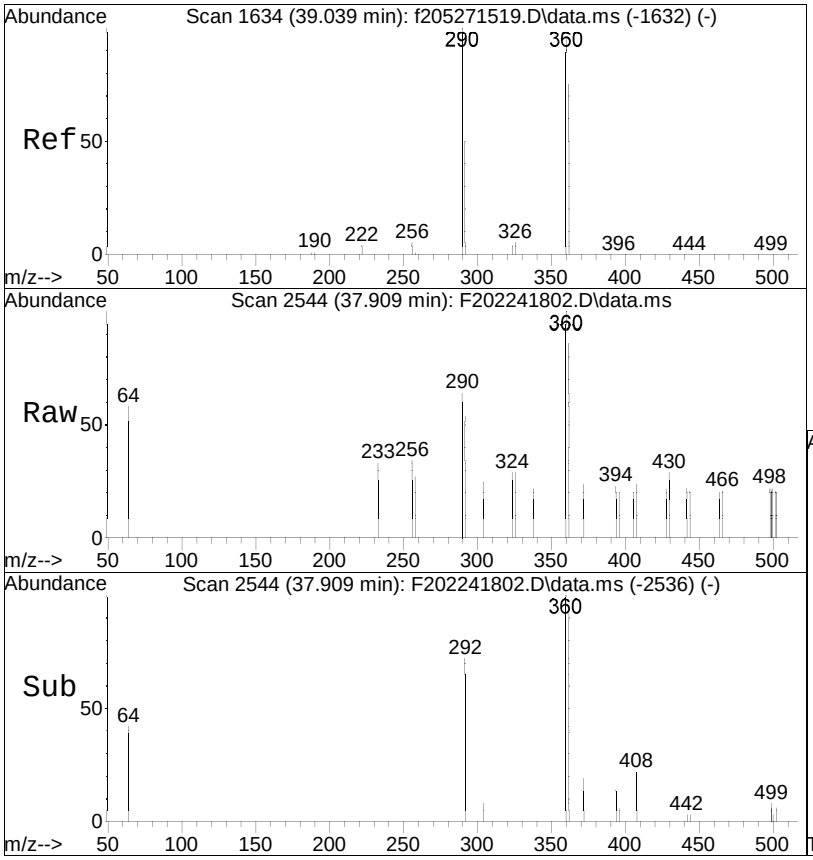


#139
Cl6-BZ#133
Concen: 0.39 ng/mL M3
RT: 37.876 min Scan# 2542
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 792

Ion	Ratio	Lower	Upper
360	100		
362	104.8	62.5	93.7#

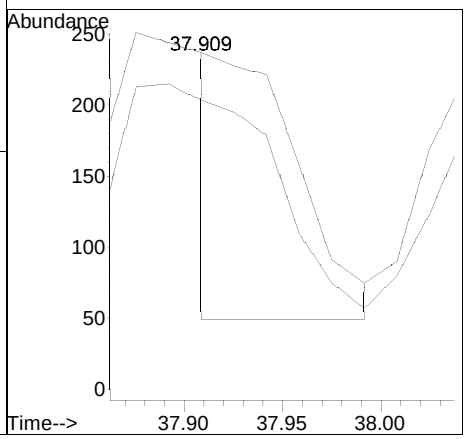


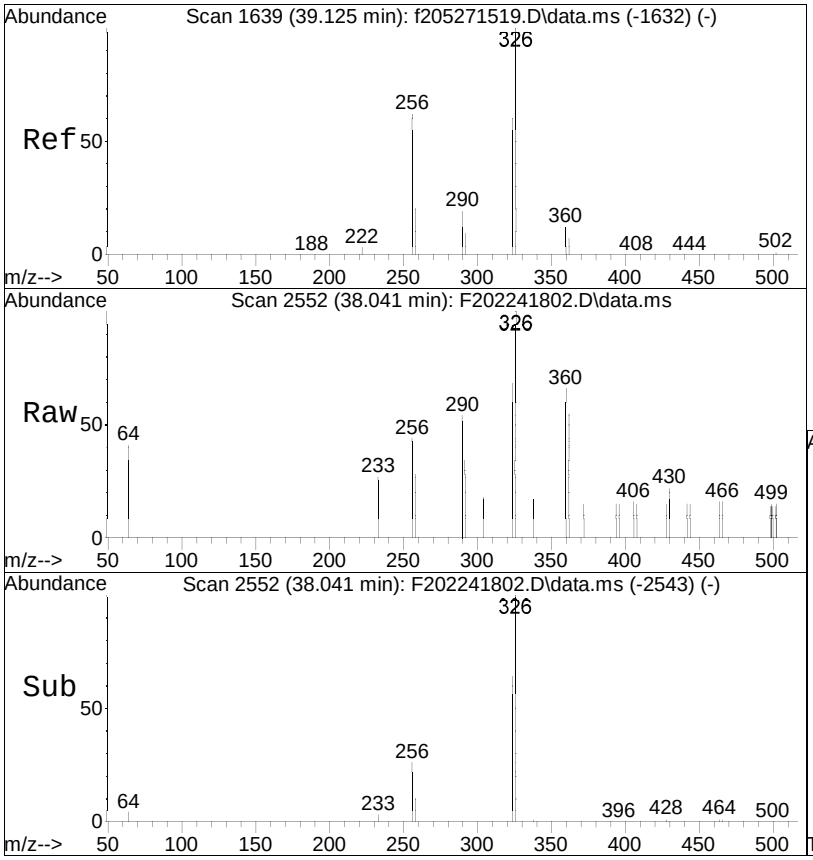


#140
Cl6-BZ#142
Concen: 0.35 ng/mL M3
RT: 37.909 min Scan# 2544
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 525

Ion	Ratio	Lower	Upper
360	100		
362	168.4	63.2	94.8#

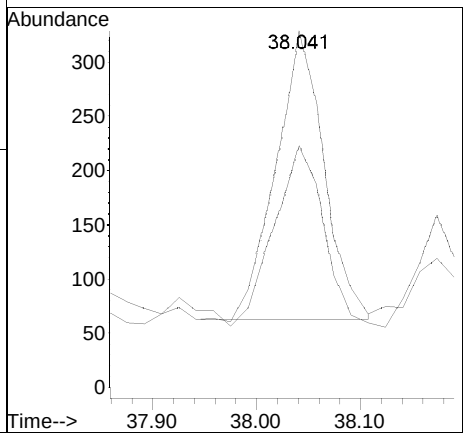


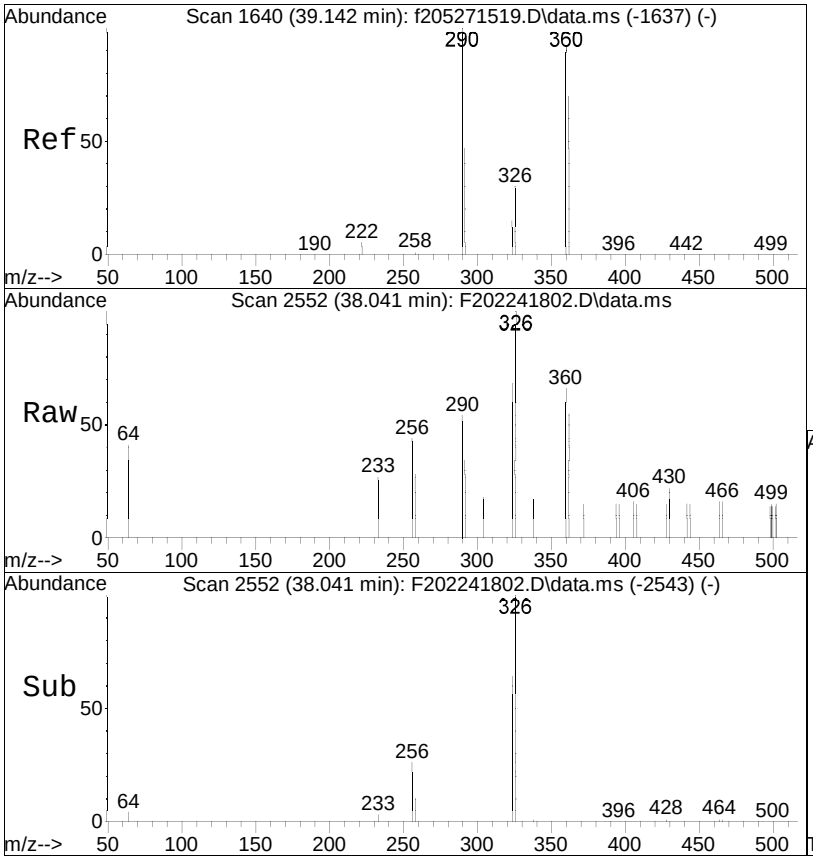


#141
Cl5-BZ#118
Concen: 0.36 ng/mL
RT: 38.041 min Scan# 2552
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 849

Ion	Ratio	Lower	Upper
326	100		
324	65.4	51.4	77.0

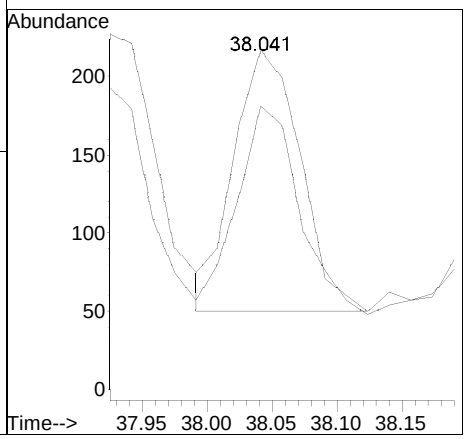


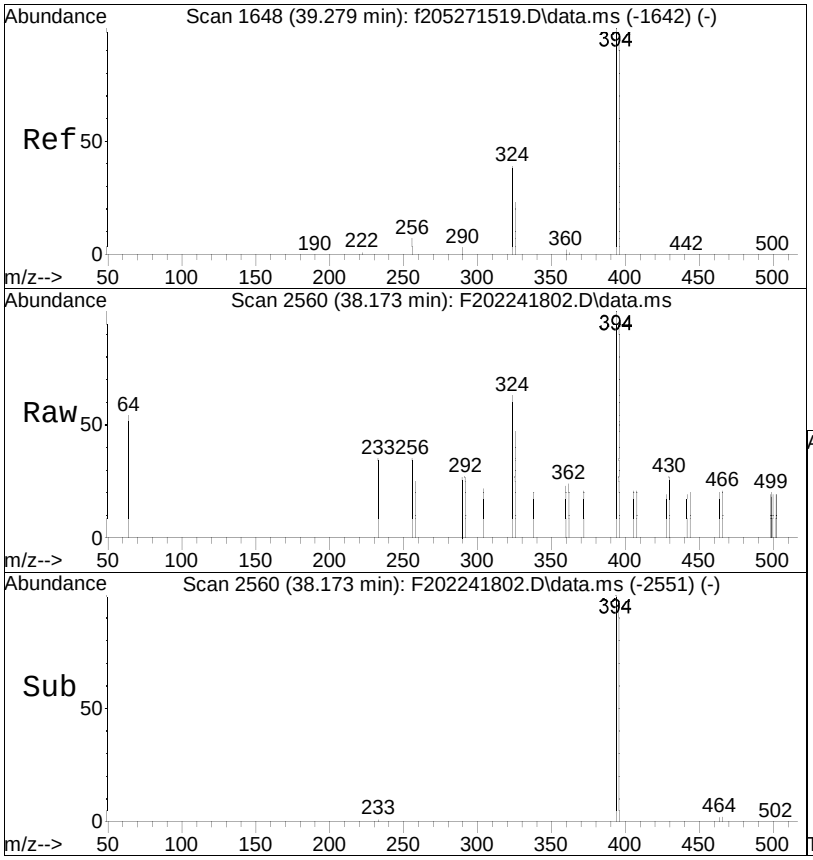


#142
Cl6-BZ#131
Concen: 0.38 ng/mL
RT: 38.041 min Scan# 2552
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 593

Ion	Ratio	Lower	Upper
360	100		
362	75.4	64.2	96.4

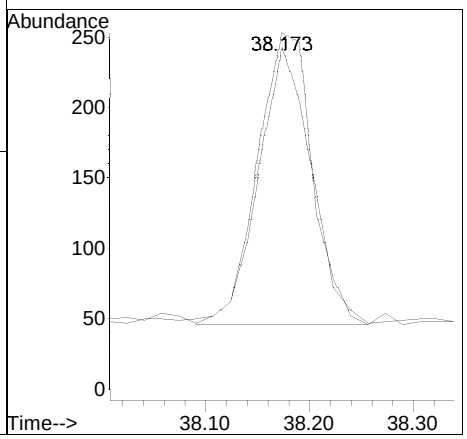


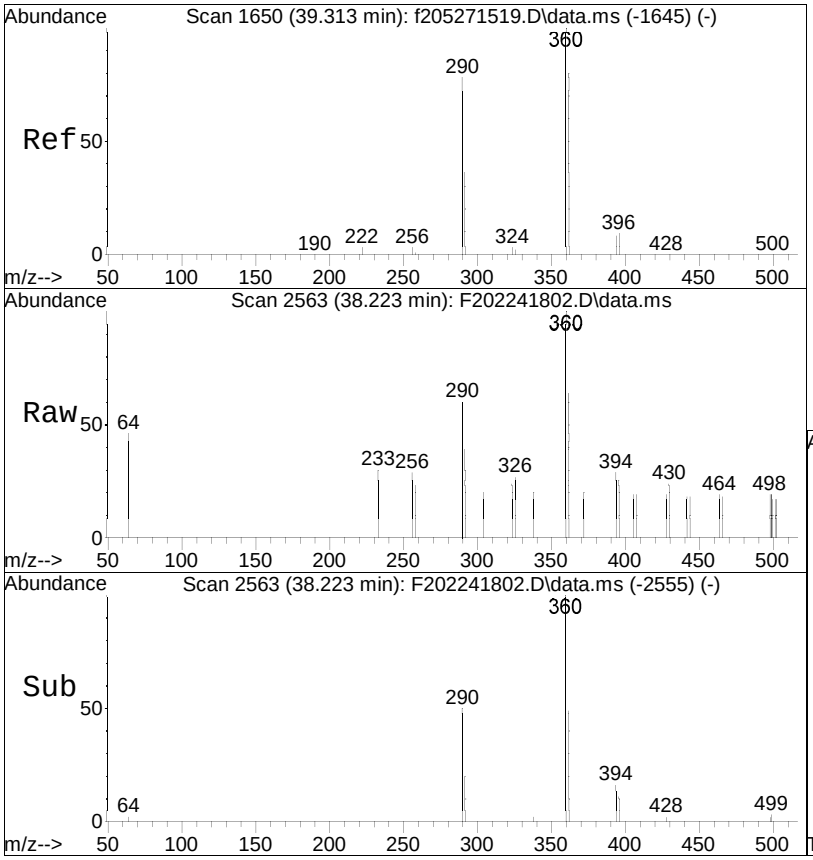


#143
Cl7-BZ#184
Concen: 0.35 ng/mL
RT: 38.173 min Scan# 2560
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 758

Ion	Ratio	Lower	Upper
394	100		
396	90.5	75.3	112.9

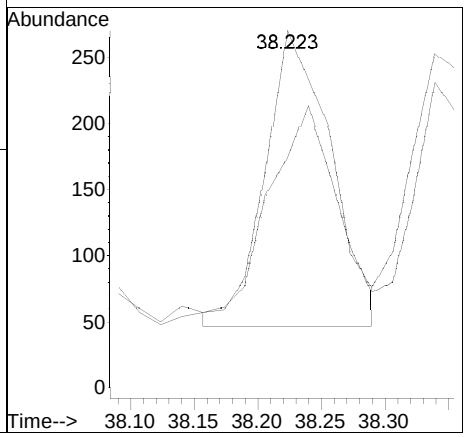


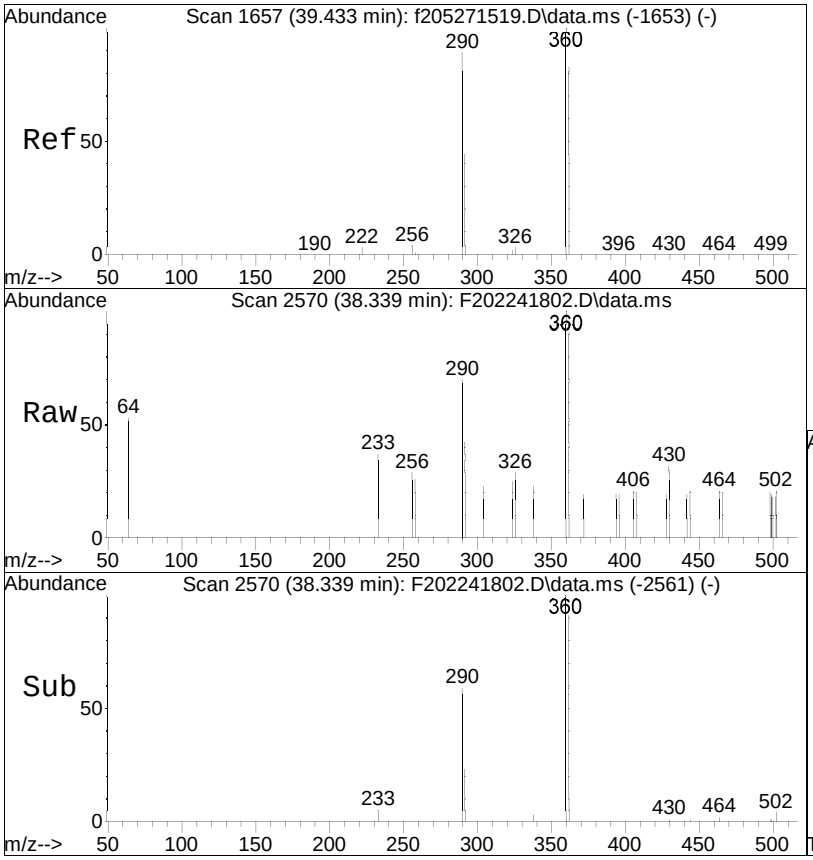


#144
Cl6-BZ#165
Concen: 0.35 ng/mL M4
RT: 38.223 min Scan# 2563
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 802

Ion	Ratio	Lower	Upper
360	100		
362	72.3	65.8	98.8

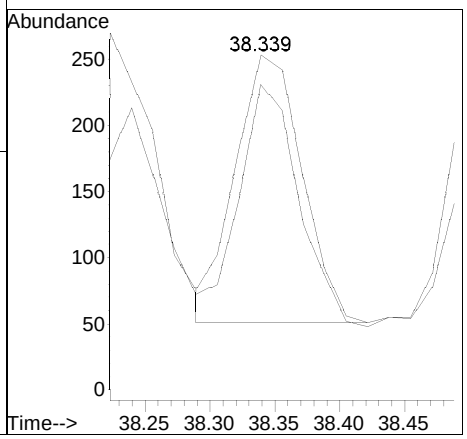


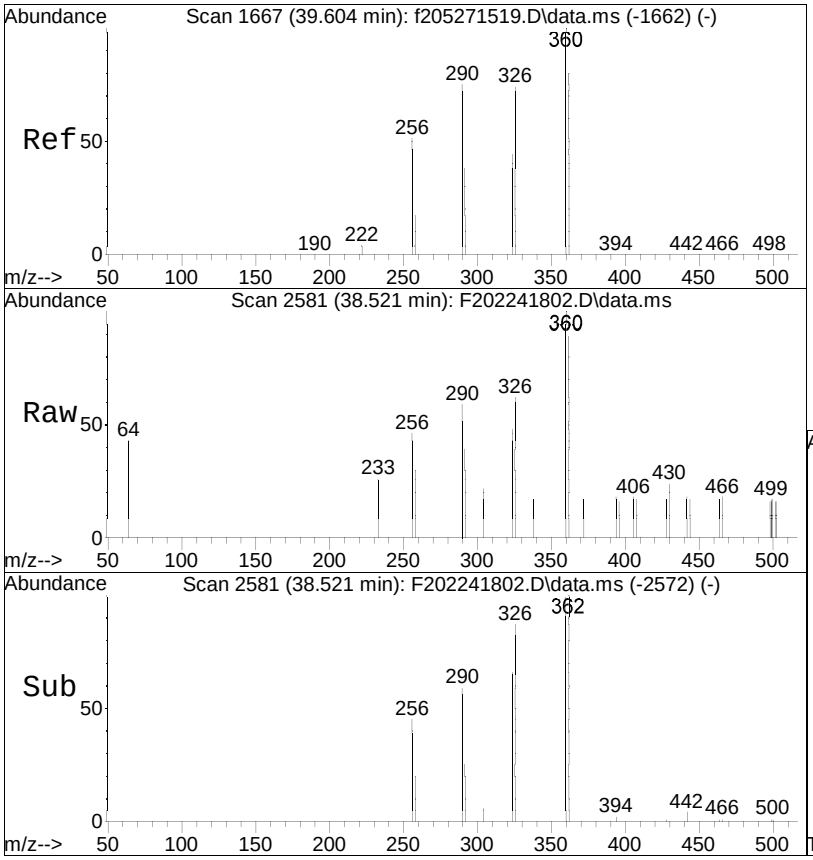


#145
Cl6-BZ#146
Concen: 0.37 ng/mL
RT: 38.339 min Scan# 2570
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 723

Ion	Ratio	Lower	Upper
360	100		
362	81.5	63.4	95.0

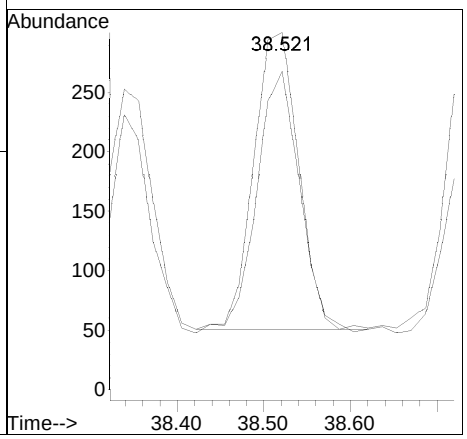


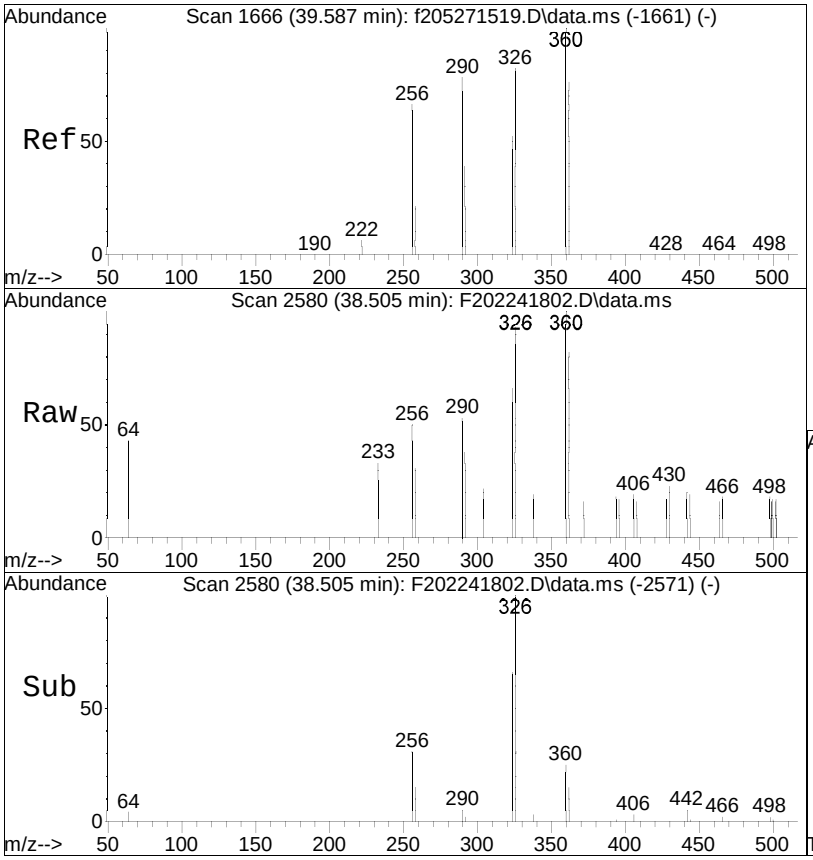


#146
Cl6-BZ#161
Concen: 0.35 ng/mL
RT: 38.521 min Scan# 2581
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 895

Ion	Ratio	Lower	Upper
360	100		
362	85.9	64.0	96.0

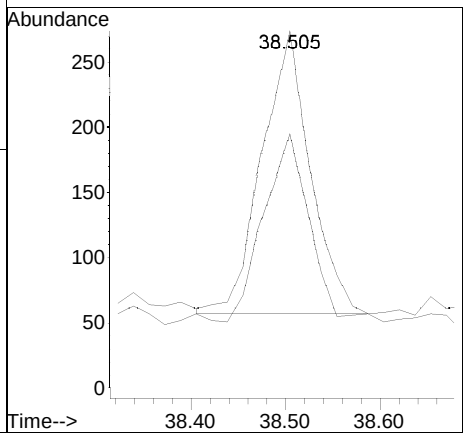


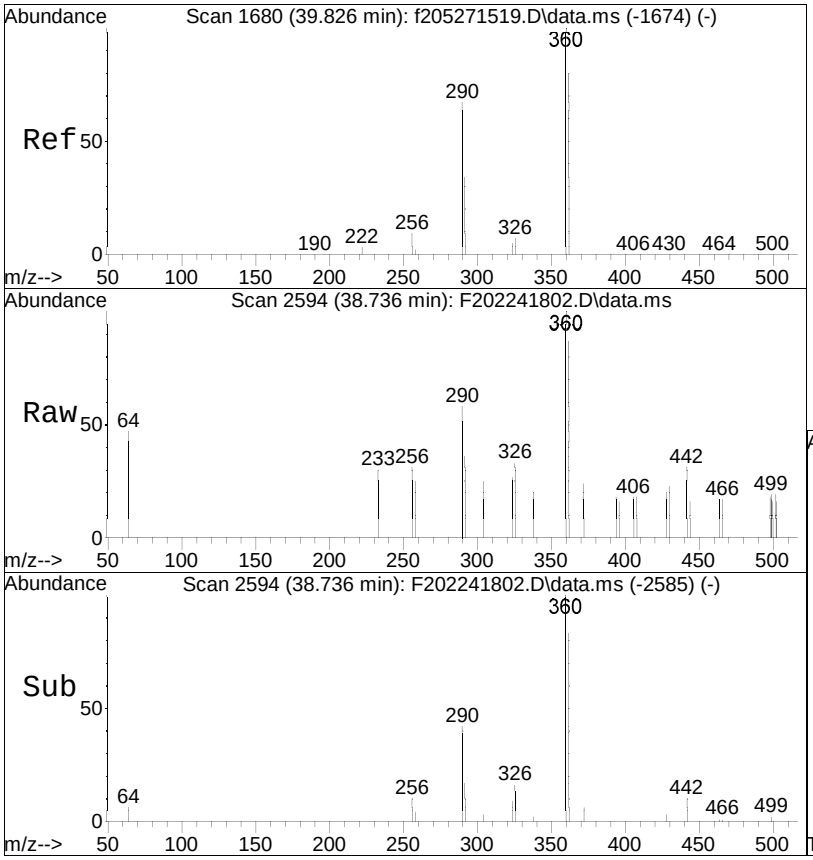


#147
Cl5-BZ#122
Concen: 0.35 ng/mL
RT: 38.505 min Scan# 2580
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 769

Ion	Ratio	Lower	Upper
326	100		
324	62.7	50.1	75.1

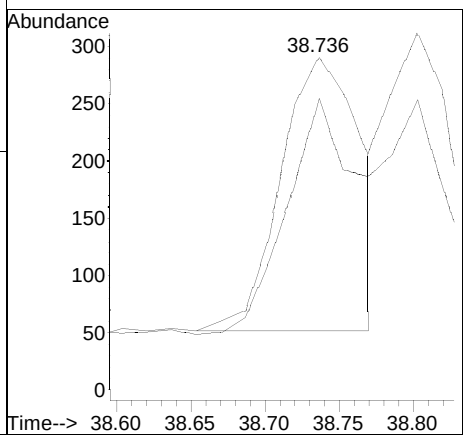


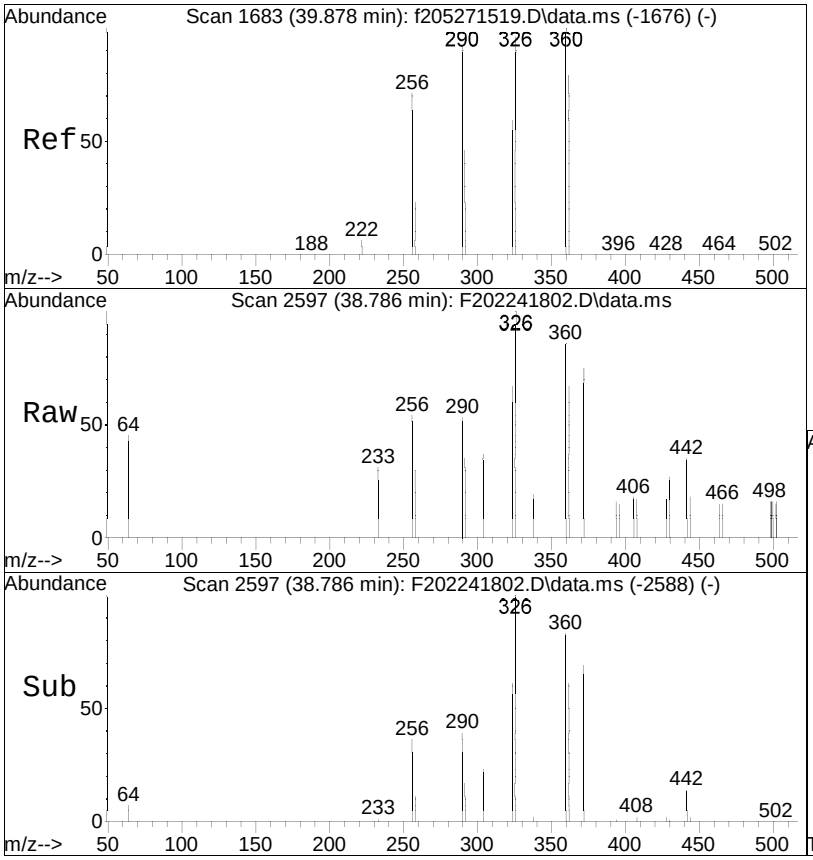


#148
Cl6-BZ#168
Concen: 0.38 ng/mL
RT: 38.736 min Scan# 2594
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 899

Ion	Ratio	Lower	Upper
360	100		
362	77.4	64.2	96.4

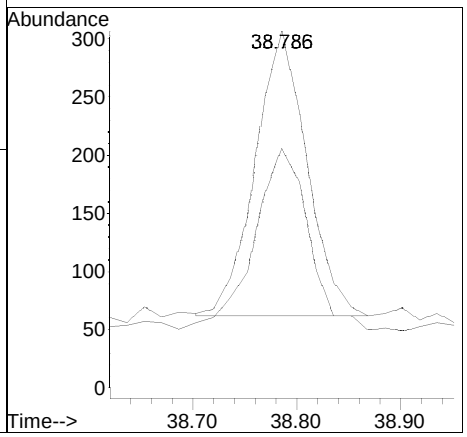


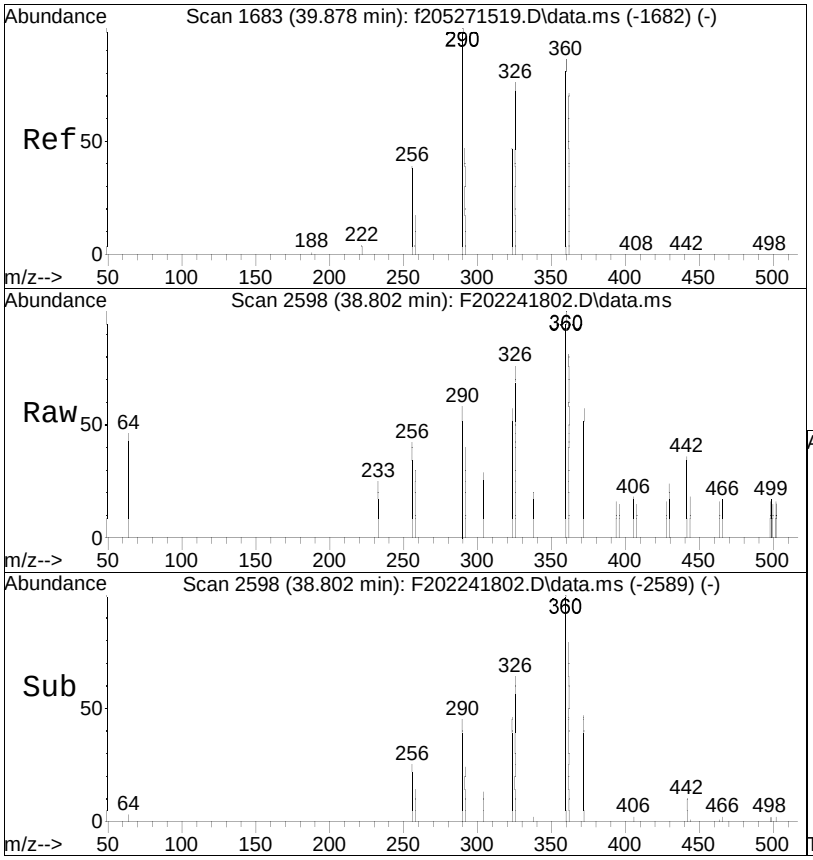


#149
Cl5-BZ#114
Concen: 0.34 ng/mL
RT: 38.786 min Scan# 2597
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 842

Ion	Ratio	Lower	Upper
326	100		
324	67.1	50.4	75.6

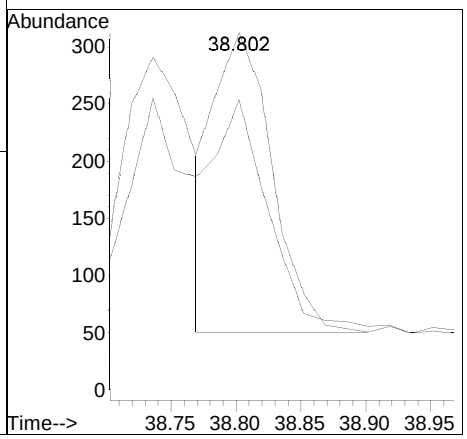


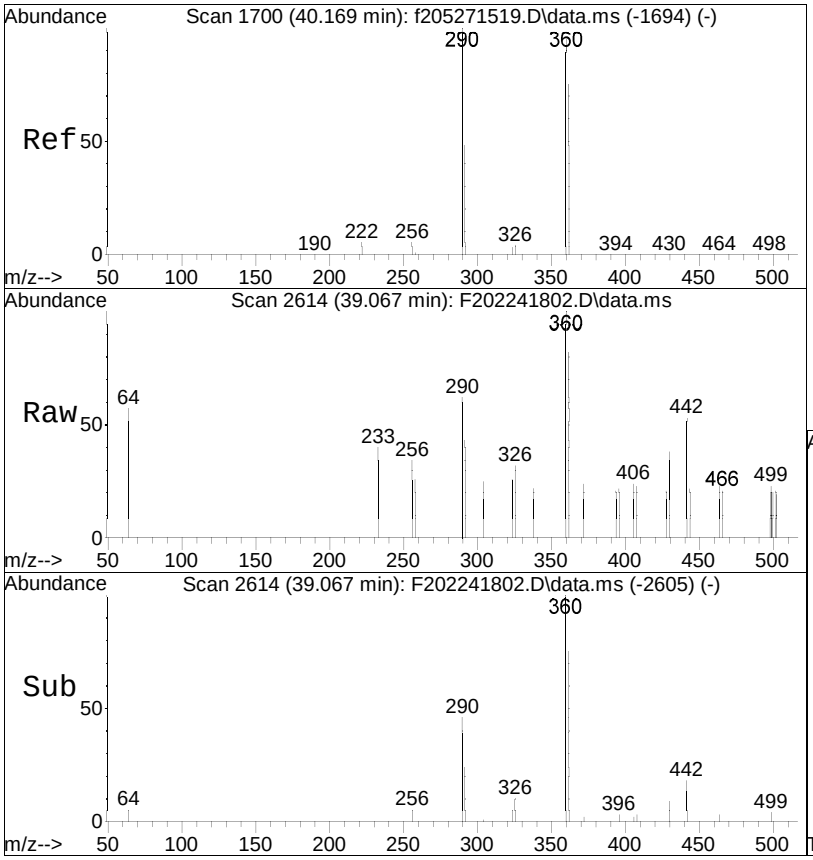


#150
Cl6-BZ#153
Concen: 0.37 ng/mL
RT: 38.802 min Scan# 2598
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 807

Ion	Ratio	Lower	Upper
360	100		
362	68.0	63.0	94.6

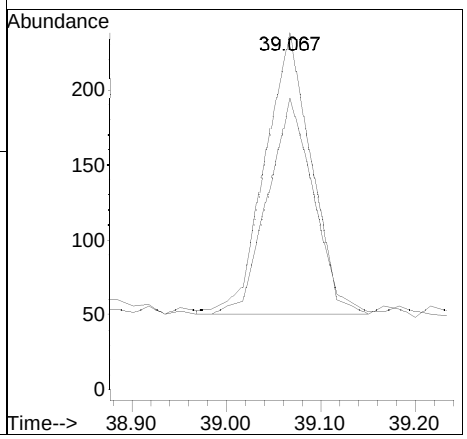


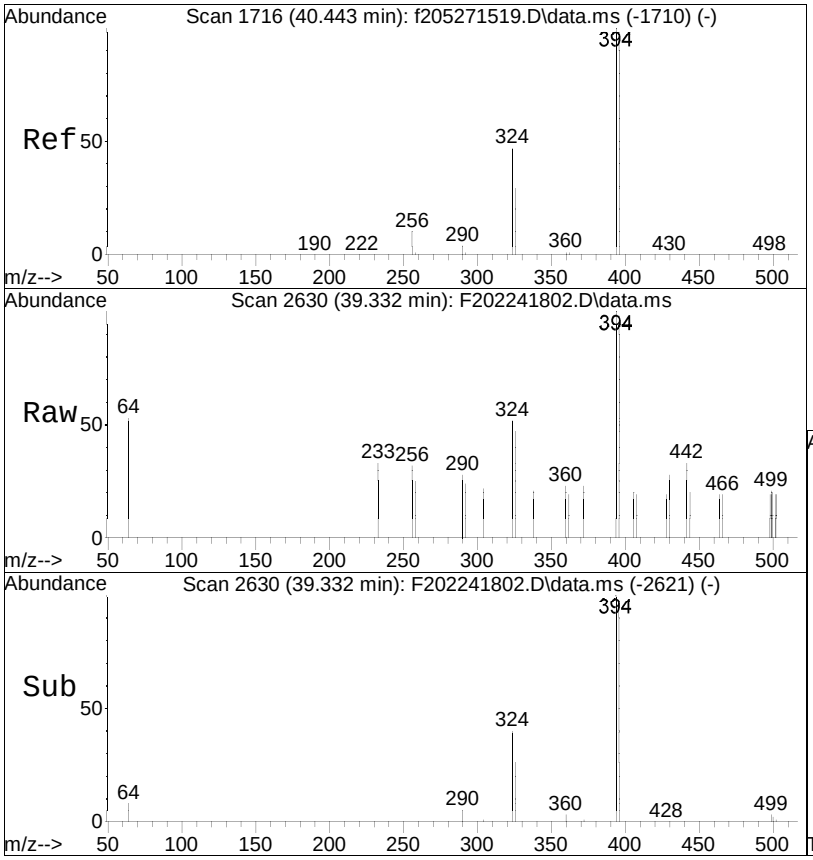


#152
Cl6-BZ#132
Concen: 0.36 ng/mL
RT: 39.067 min Scan# 2614
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 637

Ion	Ratio	Lower	Upper
360	100		
362	77.2	65.2	97.8

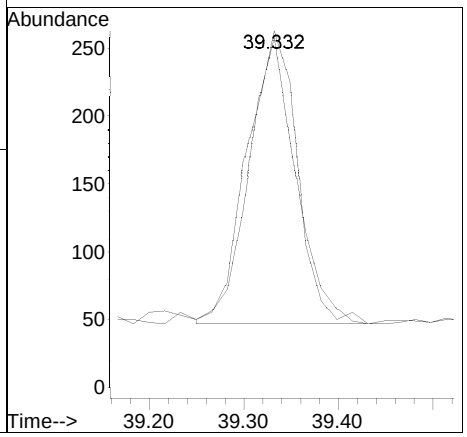


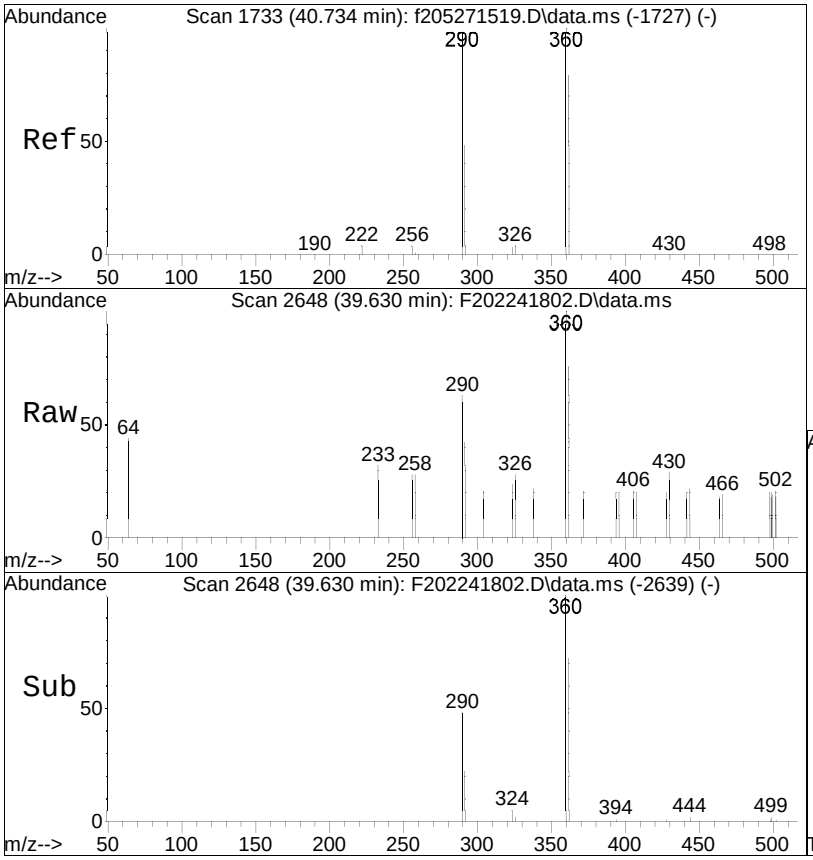


#153
Cl7-BZ#179
Concen: 0.37 ng/mL
RT: 39.332 min Scan# 2630
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 791

Ion	Ratio	Lower	Upper
394	100		
396	92.3	76.2	114.4

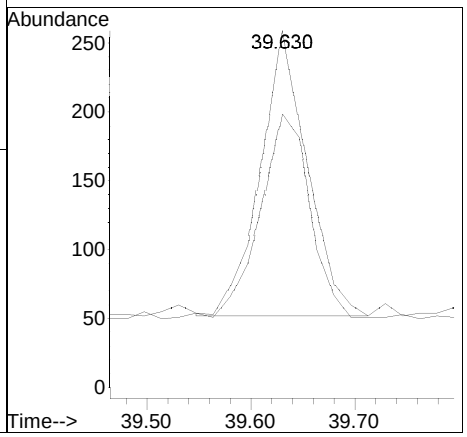


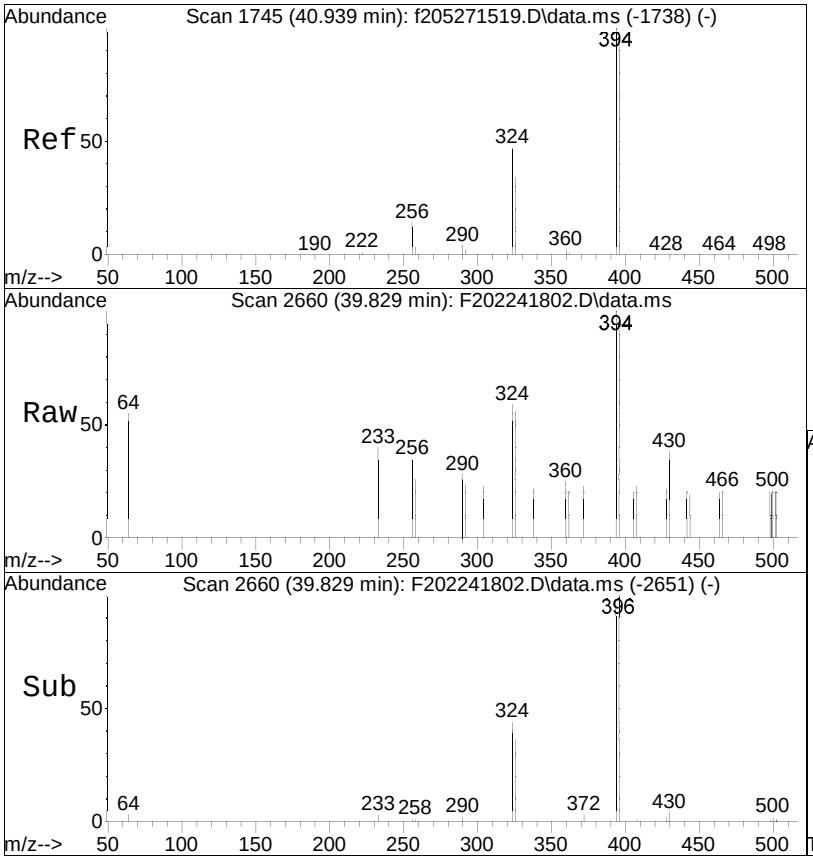


#154
Cl6-BZ#141
Concen: 0.41 ng/mL
RT: 39.630 min Scan# 2648
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 645

Ion	Ratio	Lower	Upper
360	100		
362	75.3	64.1	96.1

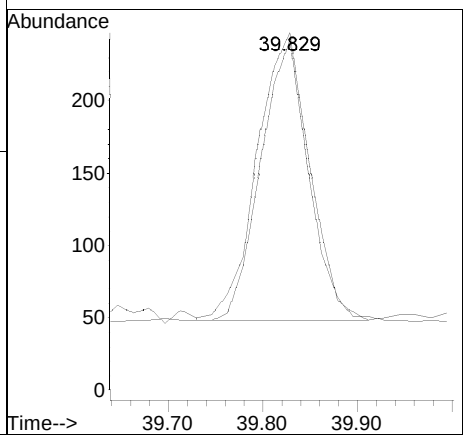


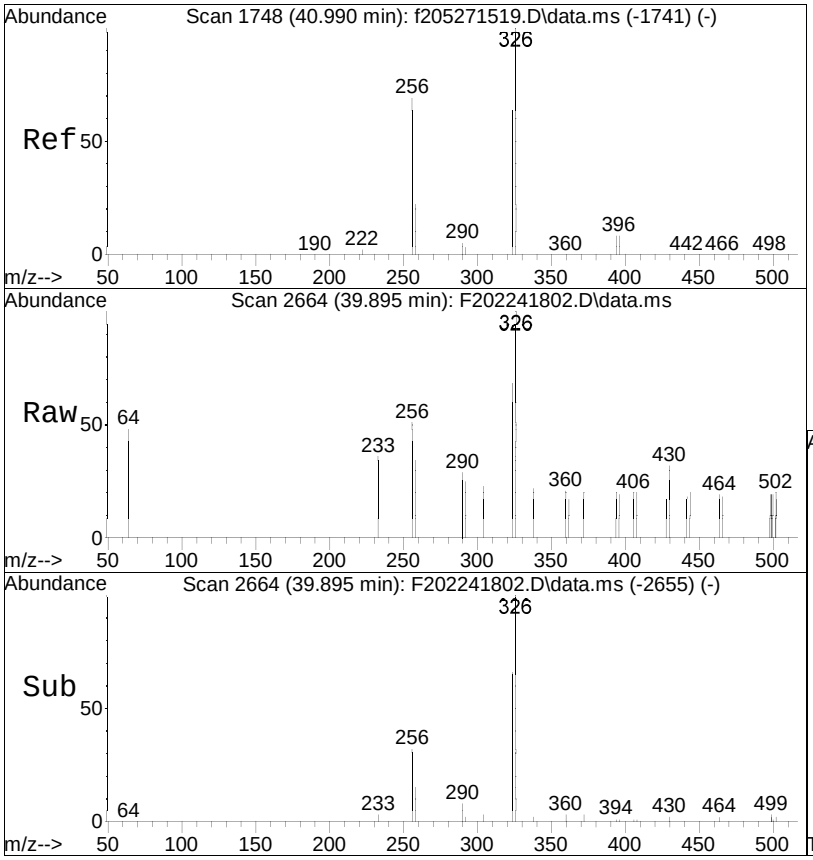


#155
Cl7-BZ#176
Concen: 0.38 ng/mL
RT: 39.829 min Scan# 2660
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 767

Ion	Ratio	Lower	Upper
394	100		
396	88.8	77.4	116.0

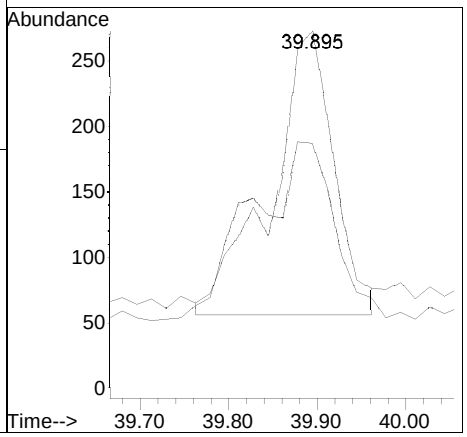


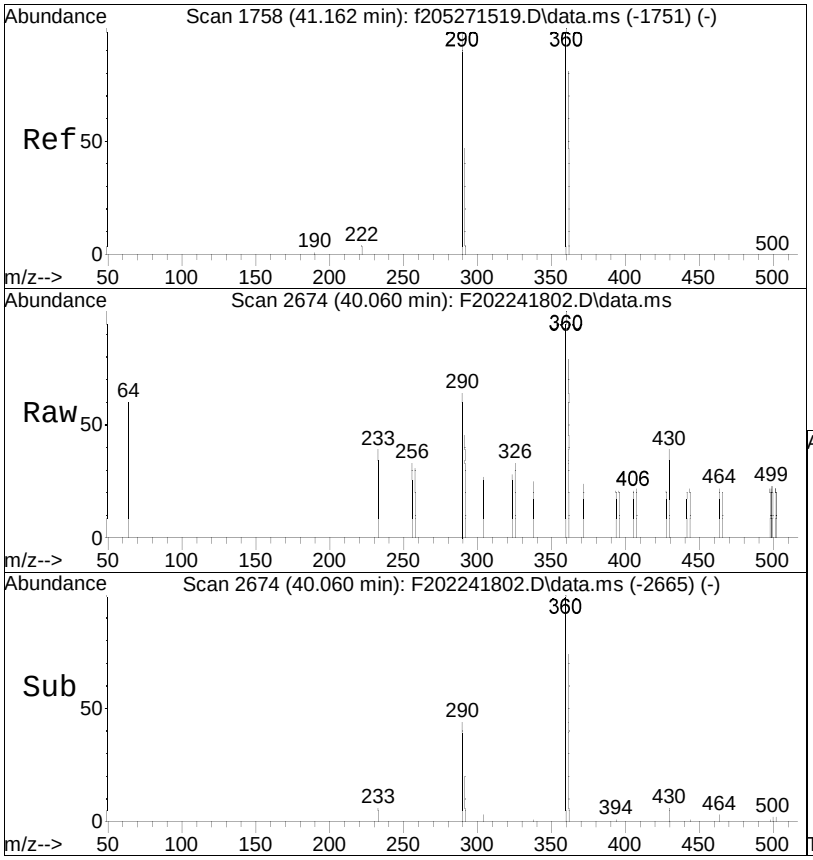


#156
Cl5-BZ#105
Concen: 0.38 ng/mL M4
RT: 39.895 min Scan# 2664
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1062

Ion	Ratio	Lower	Upper
326	100		
324	72.8	49.0	73.4

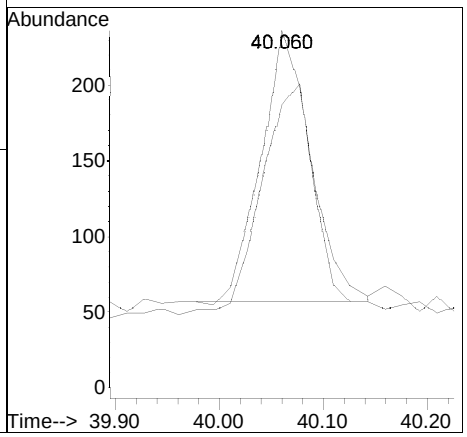


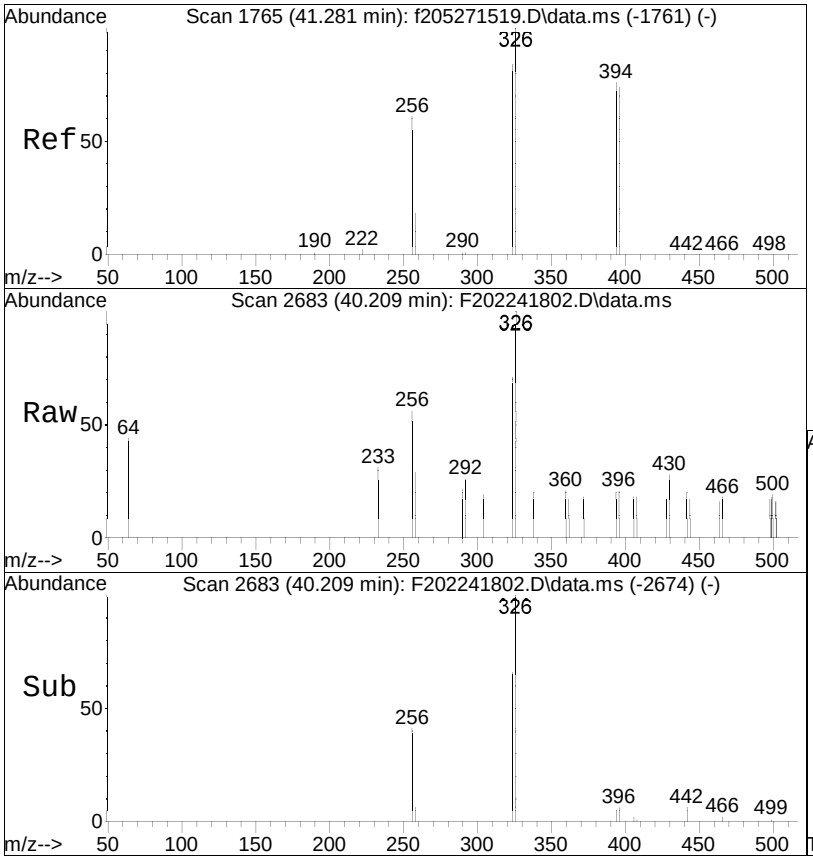


#157
Cl6-BZ#137
Concen: 0.34 ng/mL
RT: 40.060 min Scan# 2674
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 594

Ion	Ratio	Lower	Upper
360	100		
362	94.1	65.7	98.5

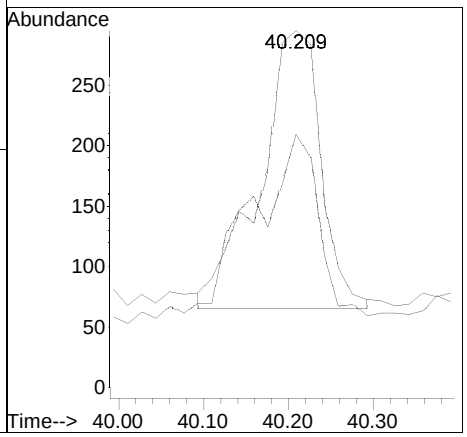


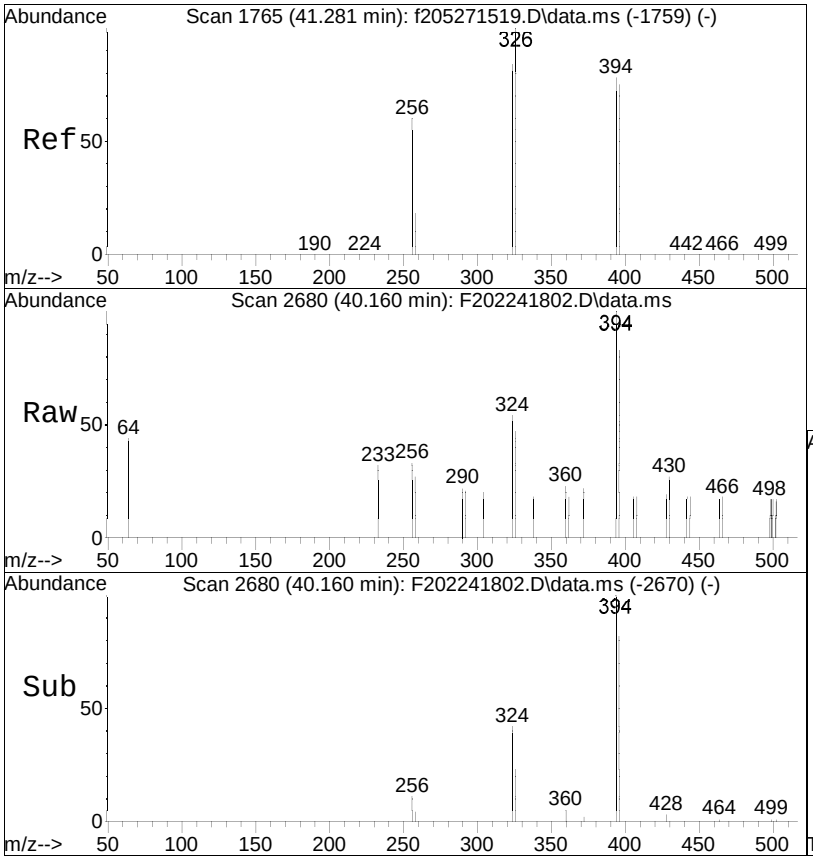


#158
Cl5-BZ#127
Concen: 0.37 ng/mL M4
RT: 40.209 min Scan# 2683
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1146

Ion	Ratio	Lower	Upper
326	100		
324	68.3	49.2	73.8

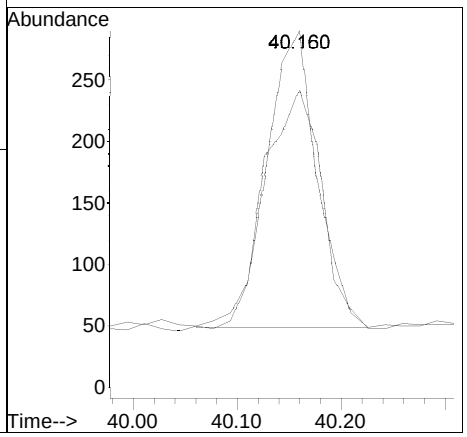


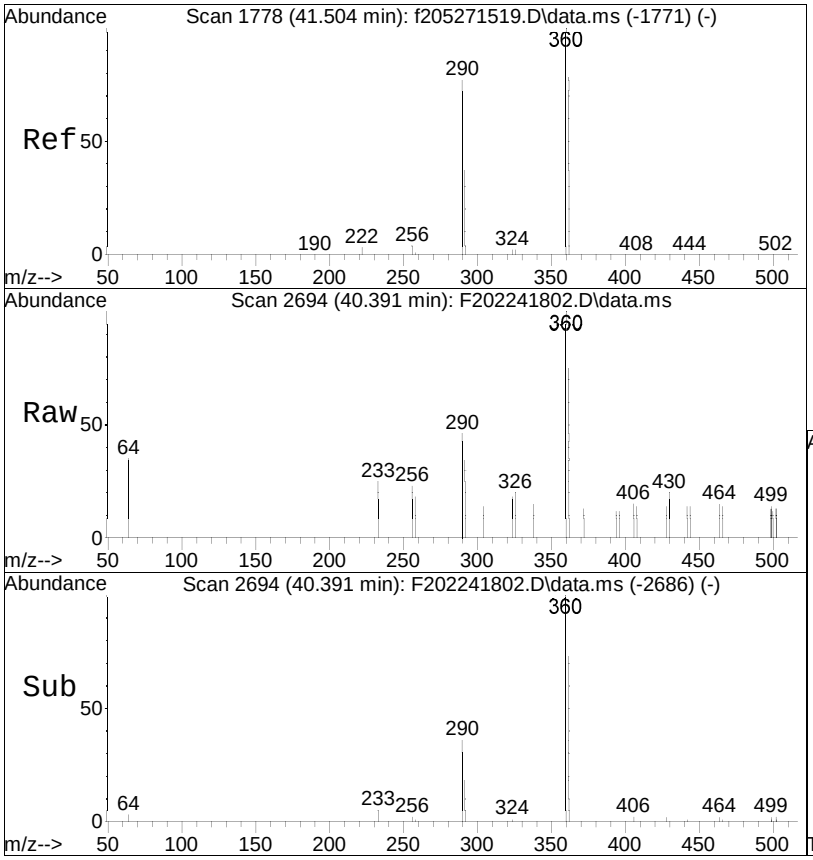


#159
Cl7-BZ#186
Concen: 0.34 ng/mL
RT: 40.160 min Scan# 2680
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 811

Ion	Ratio	Lower	Upper
394	100		
396	93.7	76.7	115.1

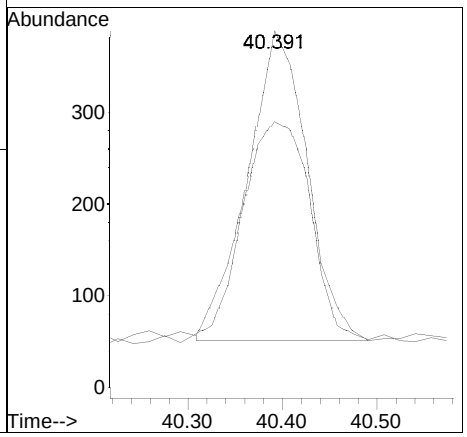


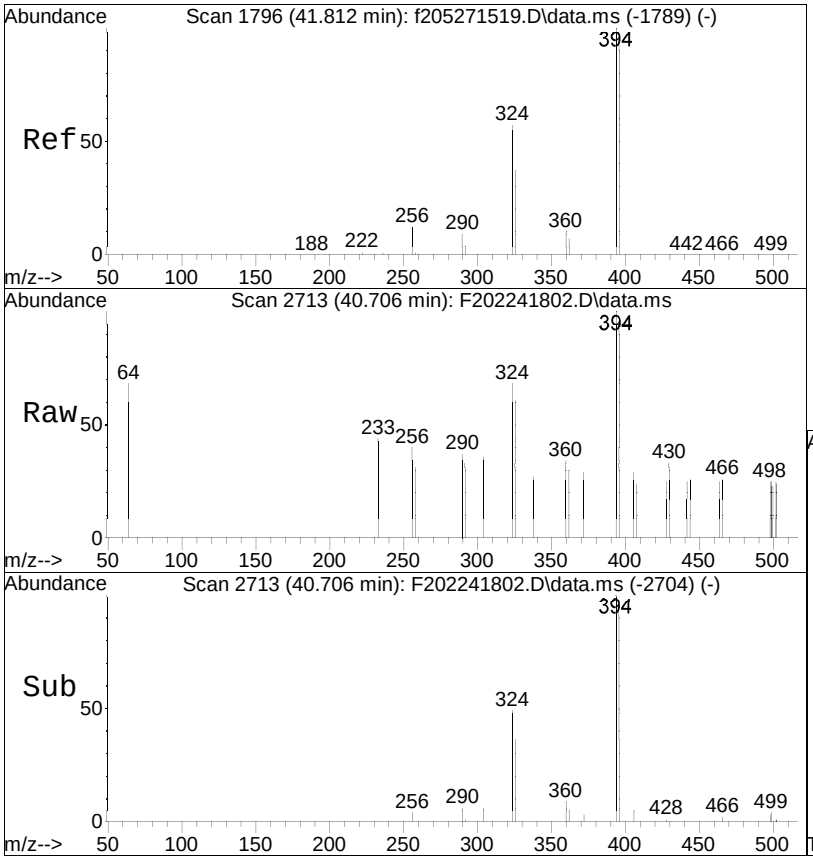


#160
Cl6-BZ#130/#164
Concen: 0.74 ng/mL
RT: 40.391 min Scan# 2694
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1485

Ion	Ratio	Lower	Upper
360	100		
362	78.5	65.6	98.4

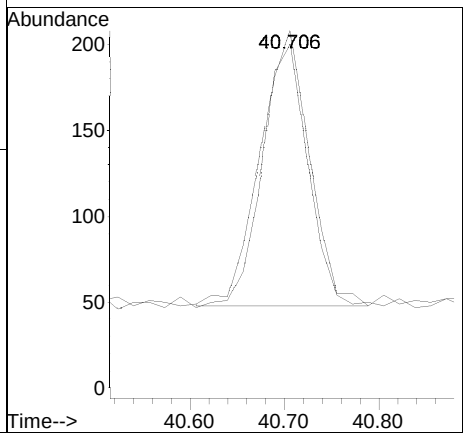


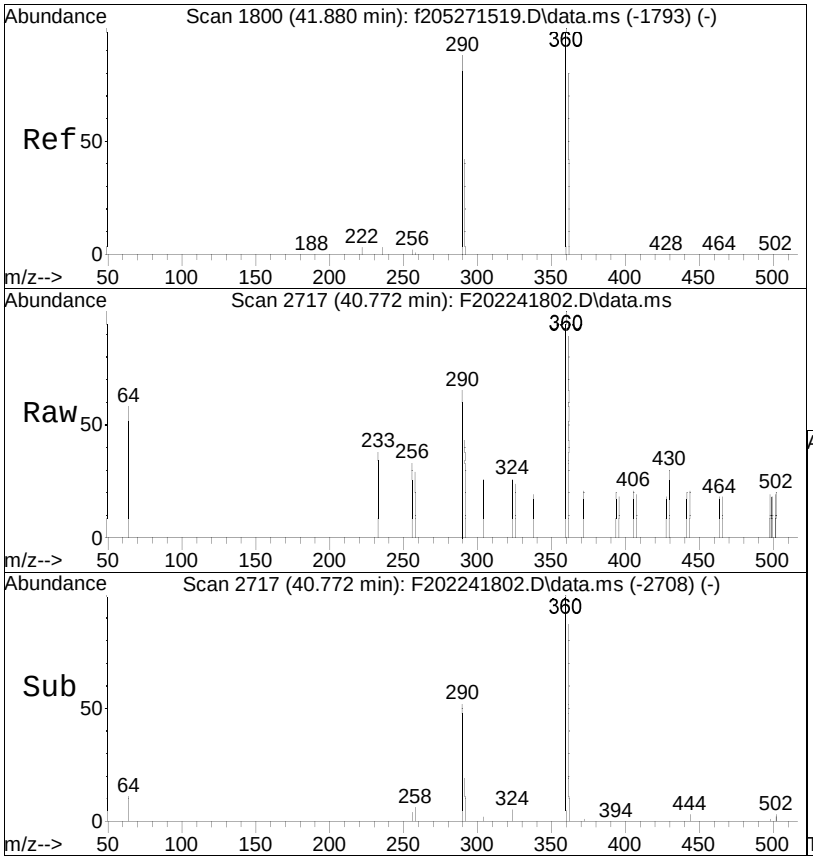


#161
Cl7-BZ#178
Concen: 0.38 ng/mL
RT: 40.706 min Scan# 2713
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 578

Ion	Ratio	Lower	Upper
394	100		
396	90.1	78.0	117.0

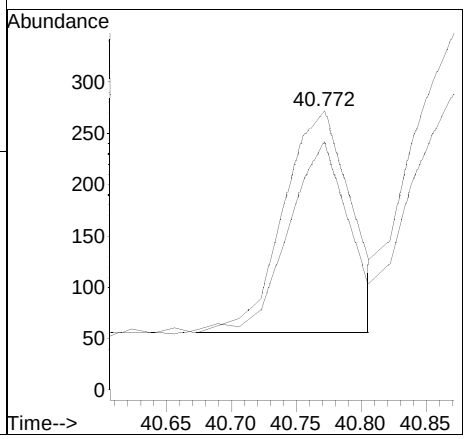


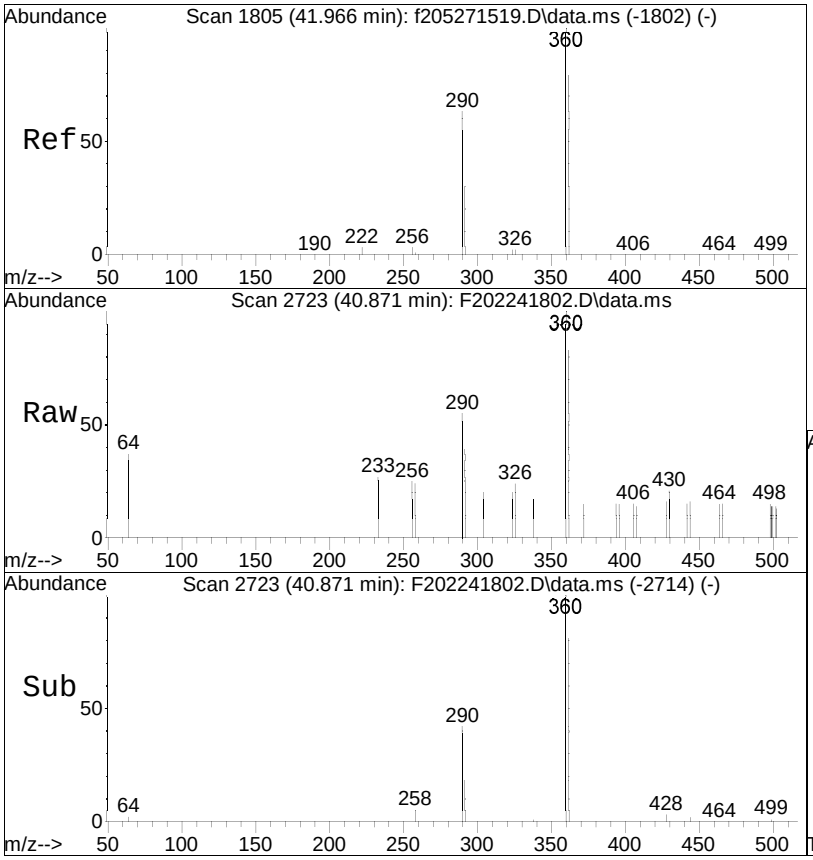


#162
Cl6-BZ#138
Concen: 0.37 ng/mL
RT: 40.772 min Scan# 2717
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 787

Ion	Ratio	Lower	Upper
360	100		
362	74.7	65.3	97.9

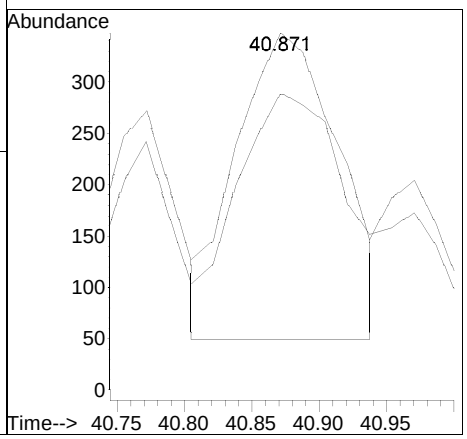


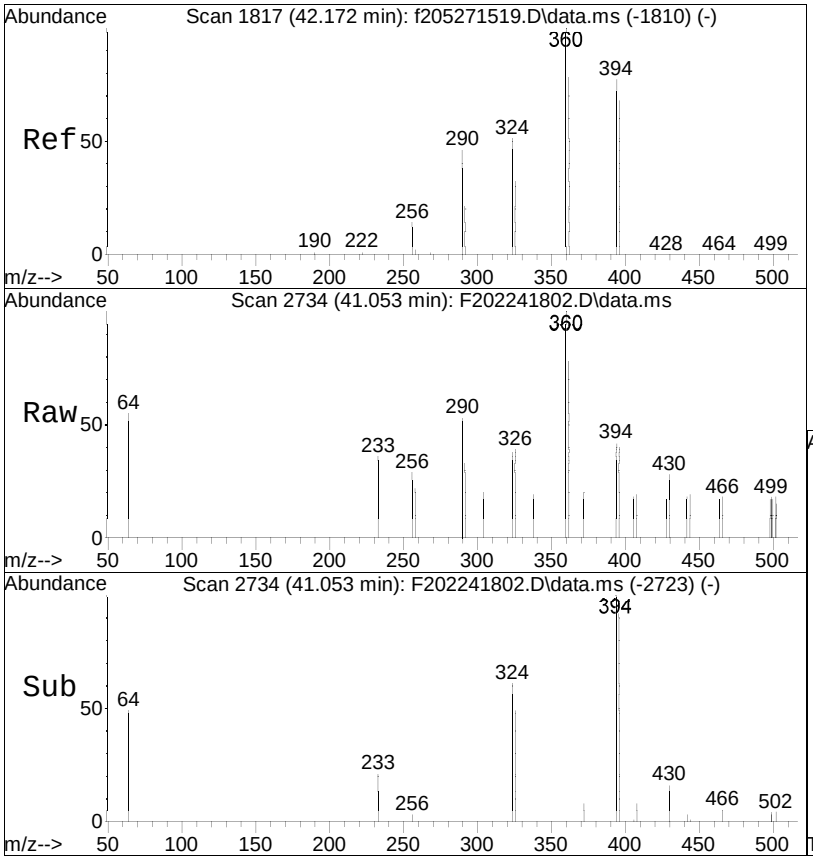


#163
Cl6-BZ#163/#160
Concen: 0.69 ng/mL M4
RT: 40.871 min Scan# 2723
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1591

Ion	Ratio	Lower	Upper
360	100		
362	59.6	64.6	96.8#

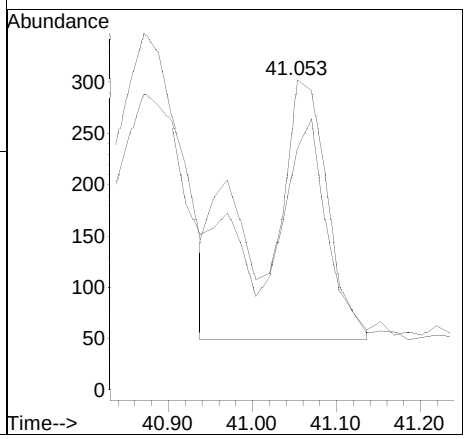


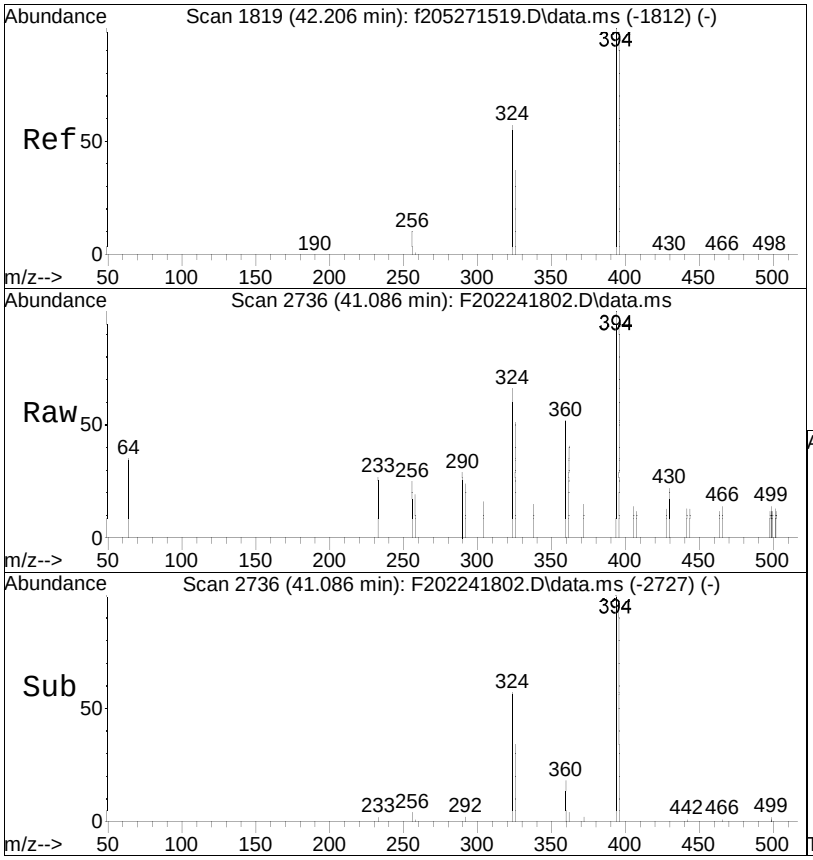


#164
Cl6-BZ#129/#158
Concen: 0.68 ng/mL M1
RT: 41.053 min Scan# 2734
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1391

Ion	Ratio	Lower	Upper
360	100		
362	51.0	64.0	96.0#

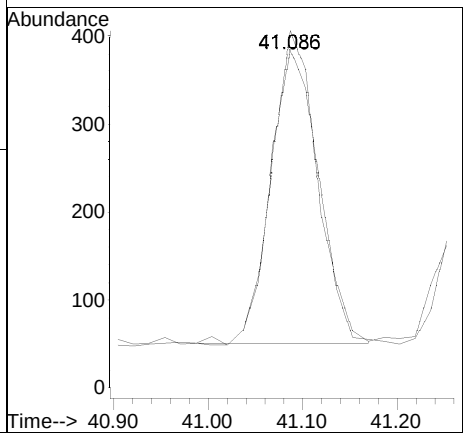


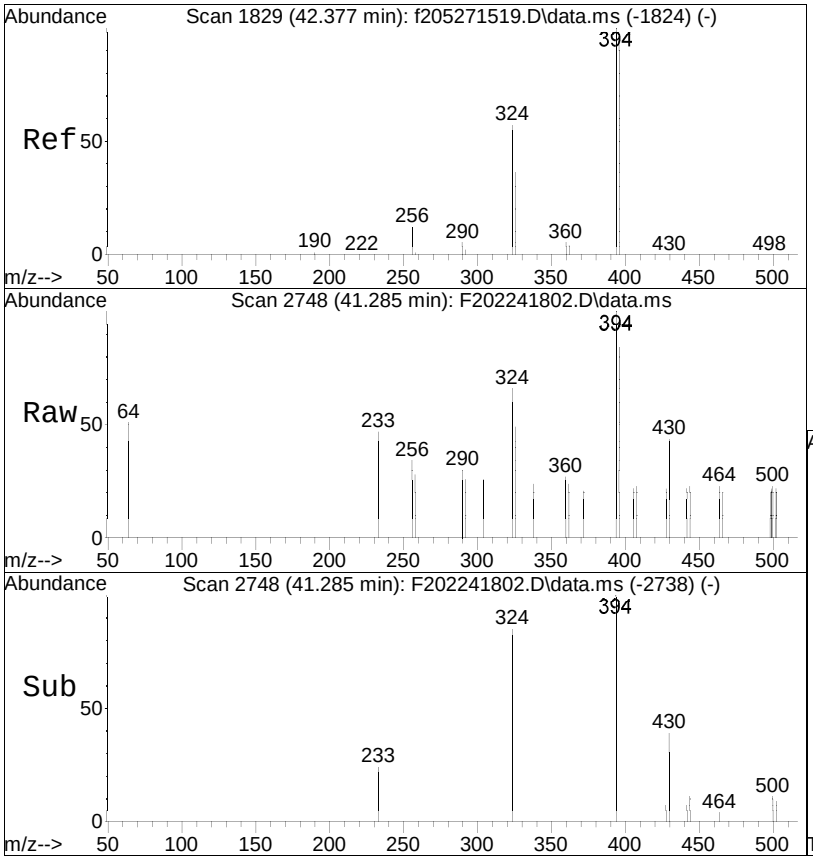


#165
Cl7-BZ#182/#175
Concen: 0.65 ng/mL
RT: 41.086 min Scan# 2736
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 1197

Ion	Ratio	Lower	Upper
394	100		
396	99.2	76.9	115.3

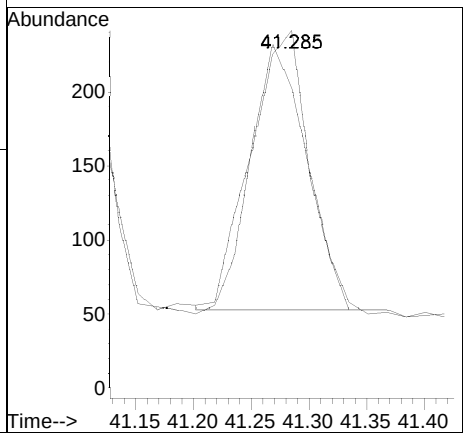


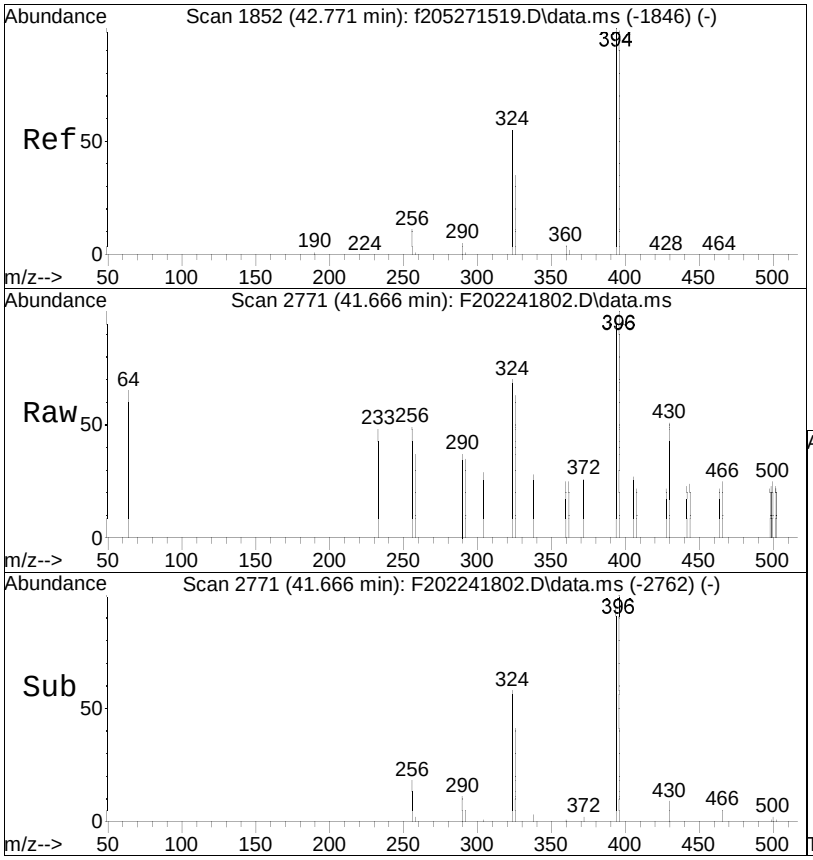


#166
Cl7-BZ#187
Concen: 0.36 ng/mL
RT: 41.285 min Scan# 2748
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 655

Ion	Ratio	Lower	Upper
394	100		
396	96.5	73.7	110.5

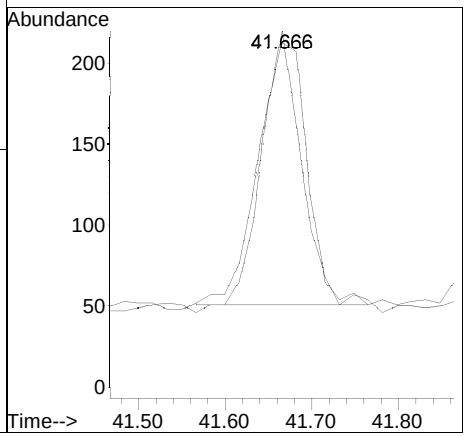


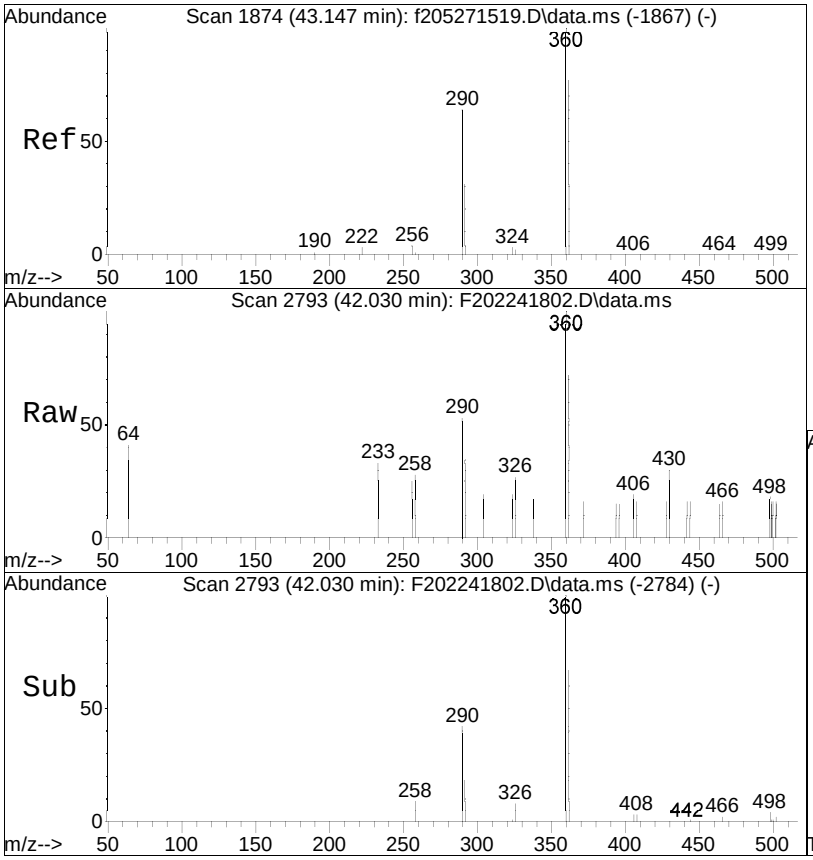


#167
Cl7-BZ#183
Concen: 0.41 ng/mL
RT: 41.666 min Scan# 2771
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 634

Ion	Ratio	Lower	Upper
394	100		
396	93.8	76.2	114.2

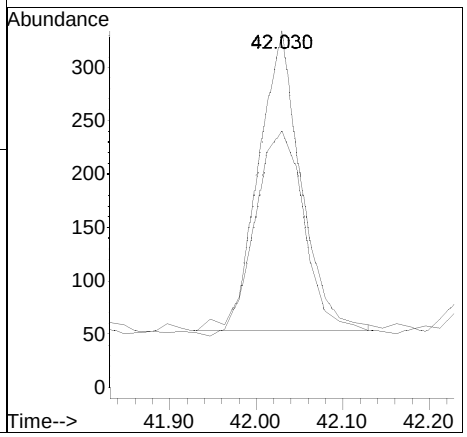


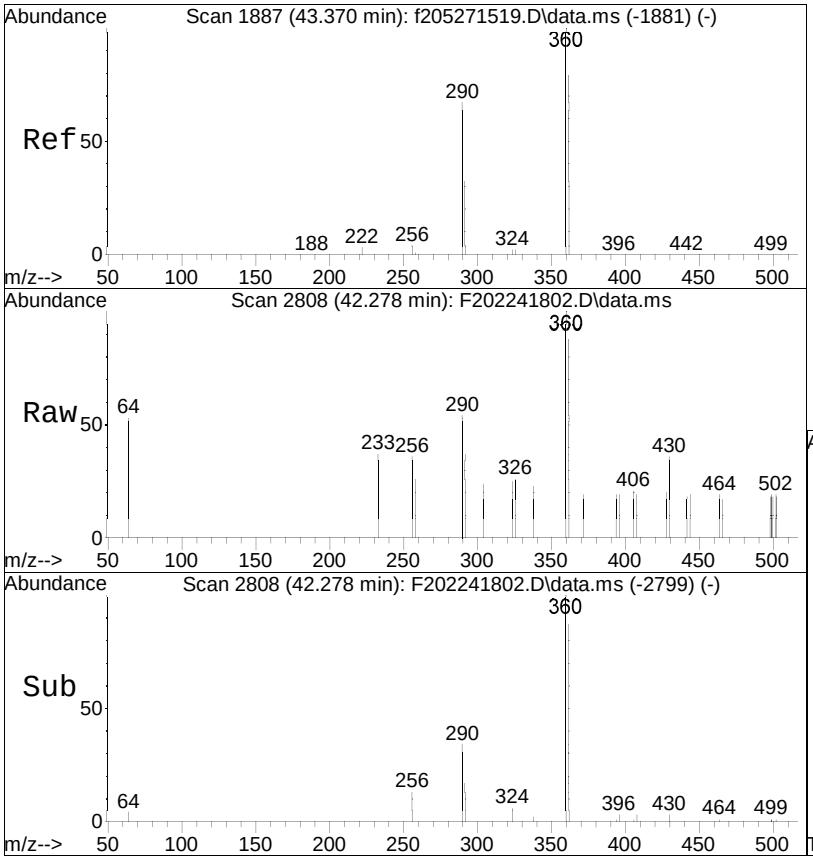


#168
Cl6-BZ#166
Concen: 0.39 ng/mL
RT: 42.030 min Scan# 2793
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 962

Ion	Ratio	Lower	Upper
360	100		
362	81.0	65.8	98.6

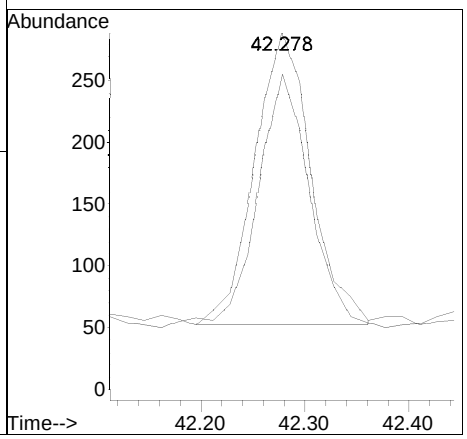


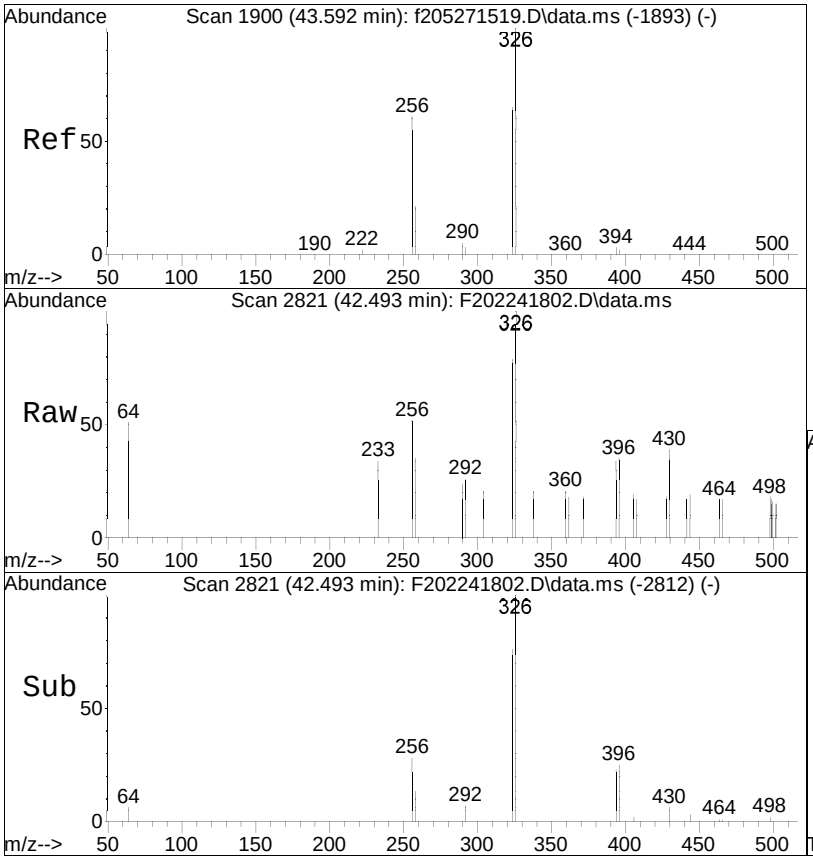


#169
Cl6-BZ#159
Concen: 0.38 ng/mL
RT: 42.278 min Scan# 2808
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 898

Ion	Ratio	Lower	Upper
360	100		
362	80.2	65.0	97.6

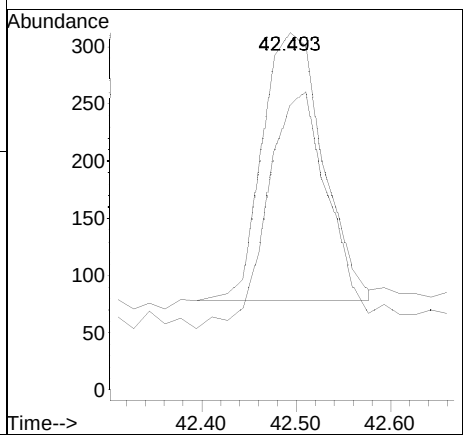


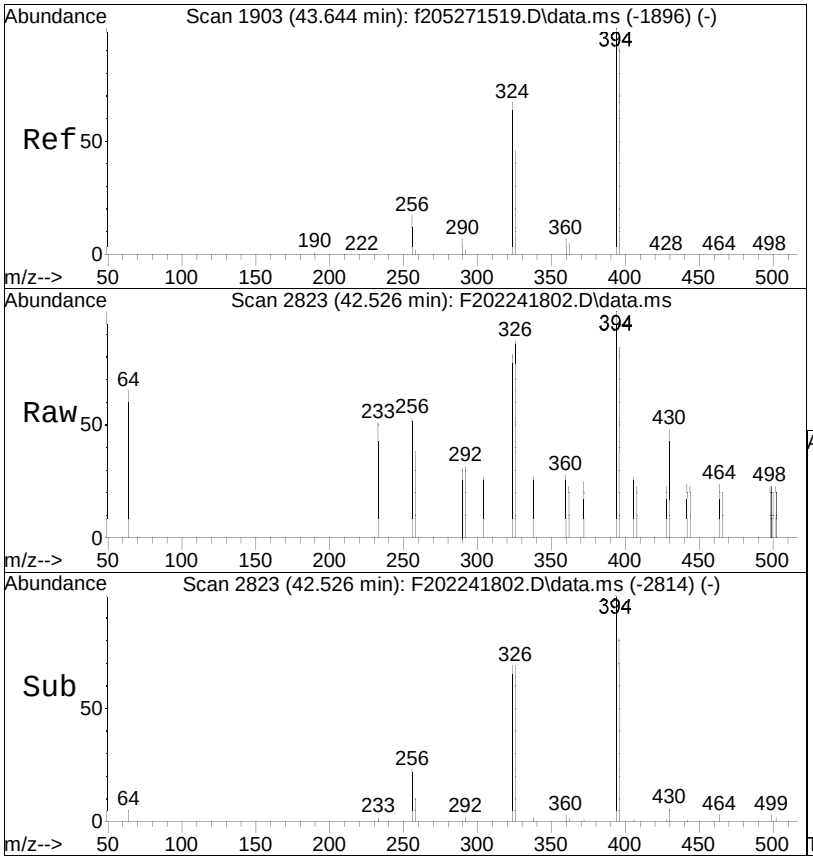


#170
Cl5-BZ#126-RTW
Concen: 0.35 ng/mL
RT: 42.493 min Scan# 2821
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:326 Resp: 1042

Ion	Ratio	Lower	Upper
326	100		
324	88.9	56.5	84.7#

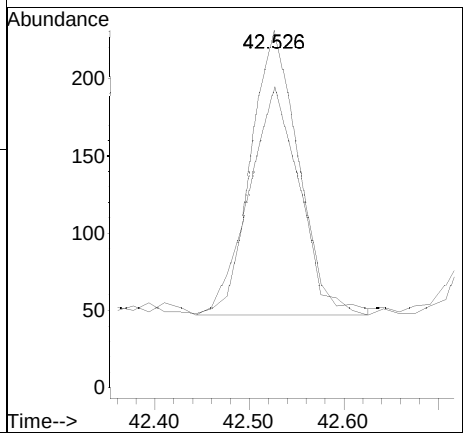


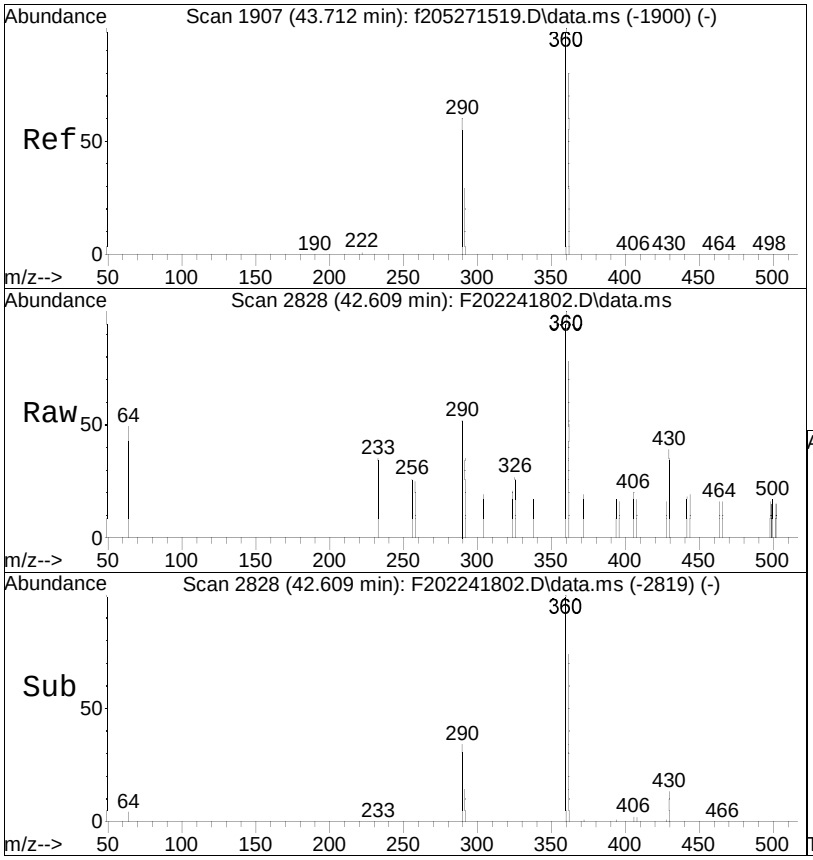


#171
Cl7-BZ#185
Concen: 0.42 ng/mL
RT: 42.526 min Scan# 2823
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 659

Ion	Ratio	Lower	Upper
394	100		
396	80.9	75.9	113.9

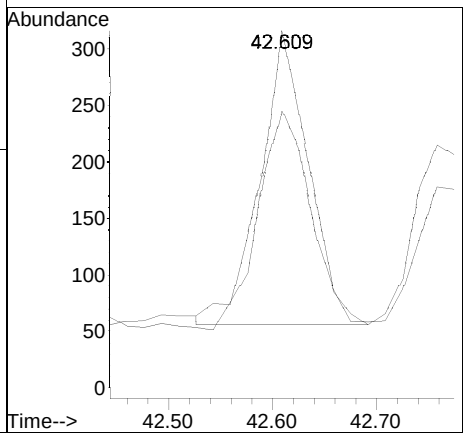


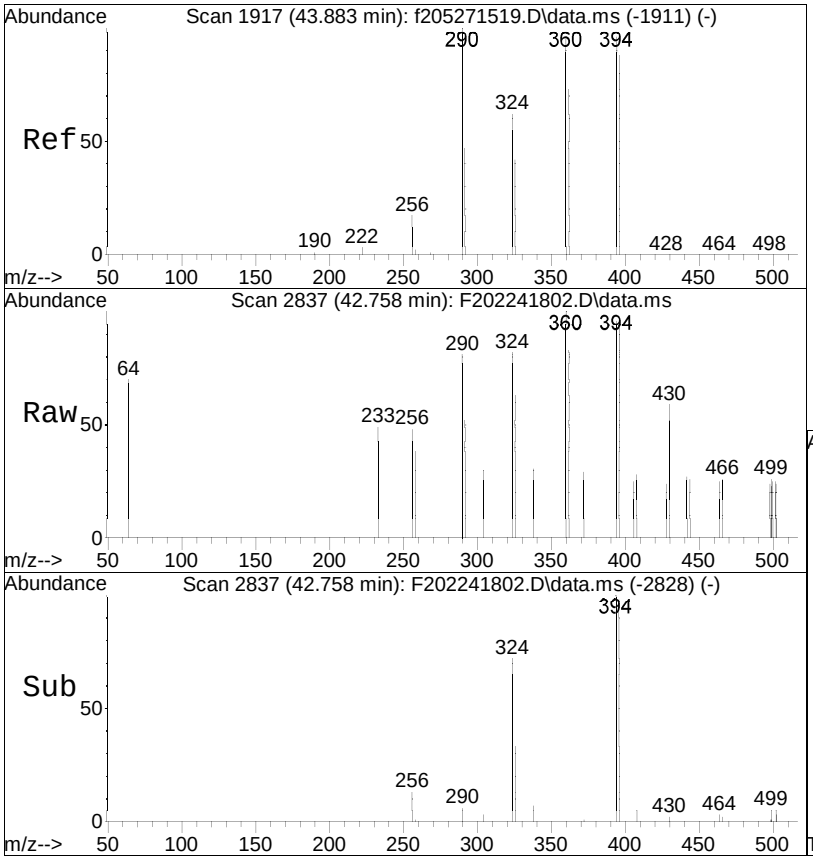


#172
Cl6-BZ#162
Concen: 0.37 ng/mL
RT: 42.609 min Scan# 2828
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 846

Ion	Ratio	Lower	Upper
360	100		
362	79.2	62.8	94.2

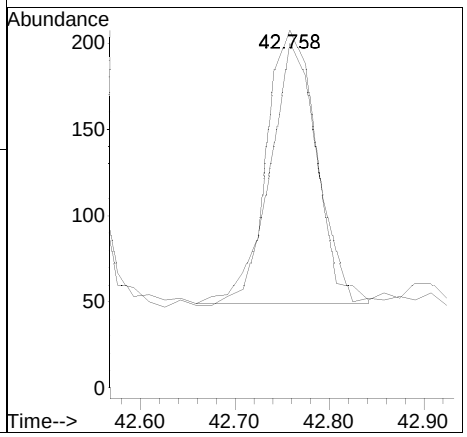


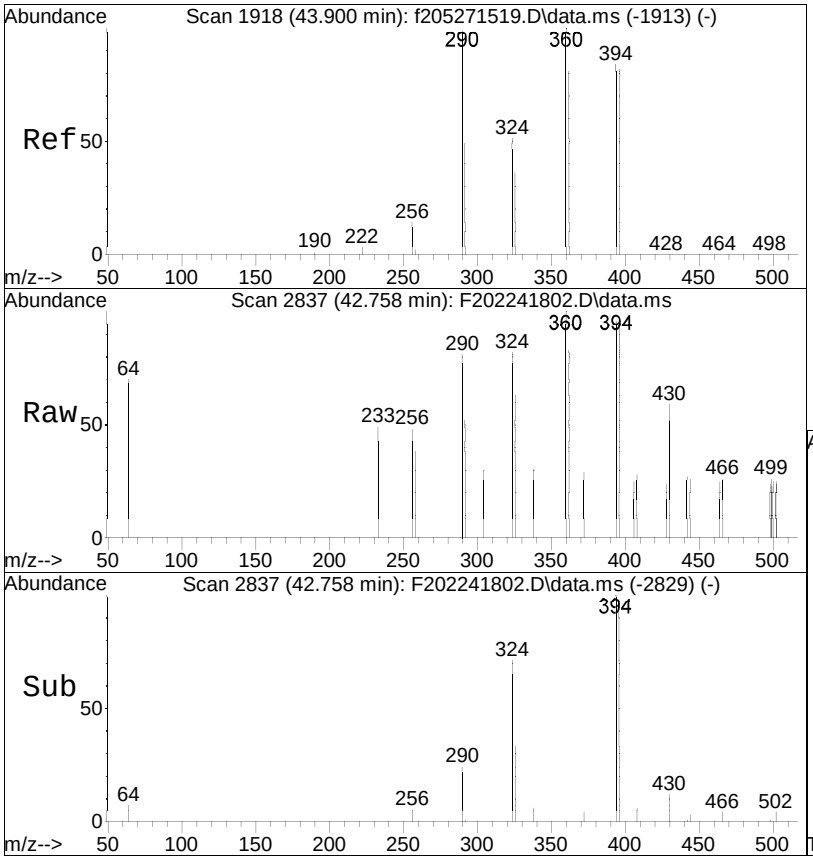


#173
Cl7-BZ#174
Concen: 0.36 ng/mL
RT: 42.758 min Scan# 2837
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 585

Ion	Ratio	Lower	Upper
394	100		
396	91.1	77.1	115.7

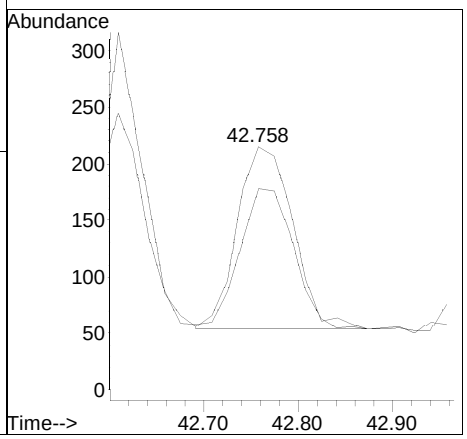


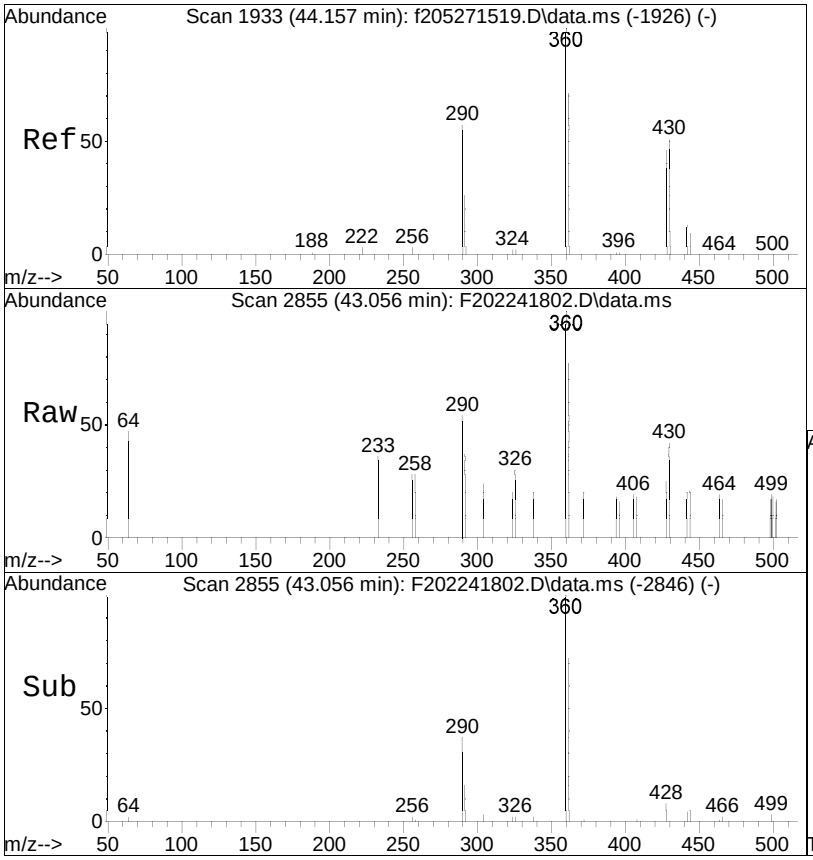


#174
Cl6-BZ#128
Concen: 0.37 ng/mL
RT: 42.758 min Scan# 2837
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 661

Ion	Ratio	Lower	Upper
360	100		
362	74.4	64.4	96.6

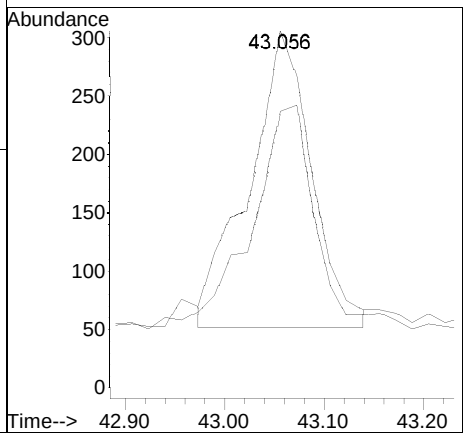


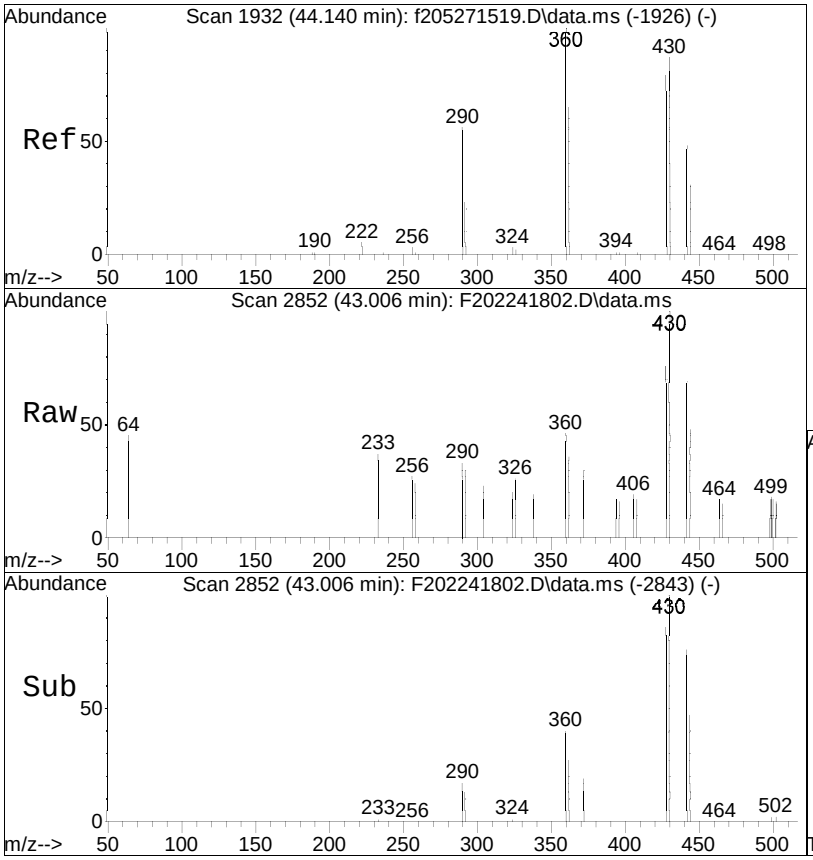


#175
Cl6-BZ#167
Concen: 0.37 ng/mL M4
RT: 43.056 min Scan# 2855
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 1106

Ion	Ratio	Lower	Upper
360	100		
362	66.8	63.0	94.4

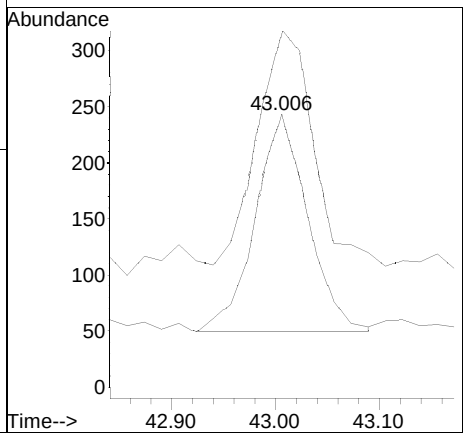


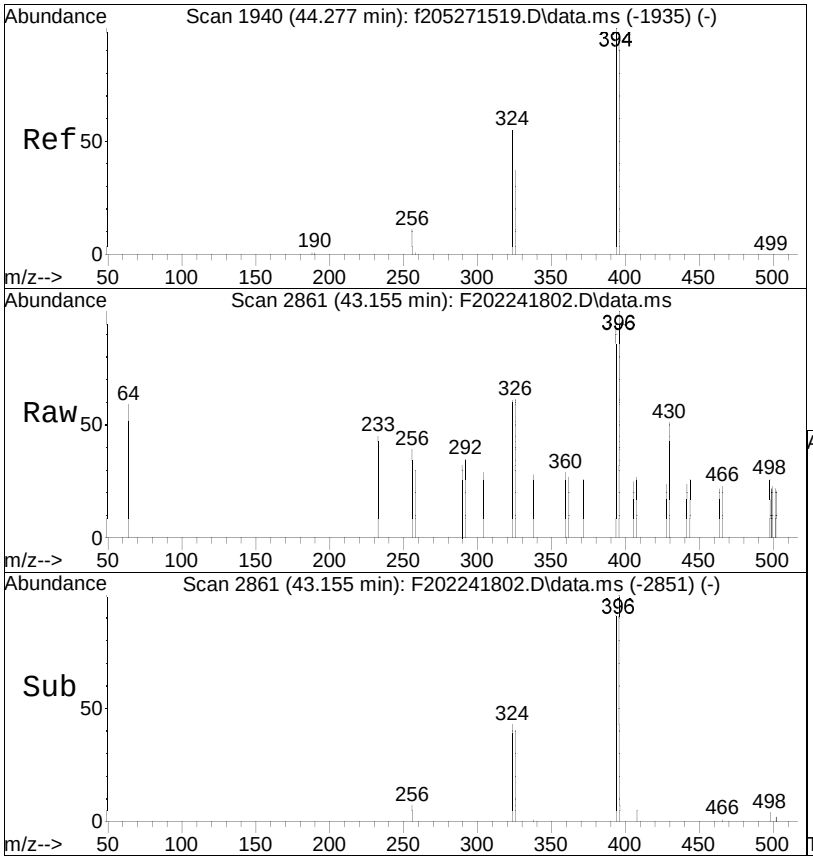


#176
Cl8-BZ#202-RTW
Concen: 0.38 ng/mL
RT: 43.006 min Scan# 2852
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 686

Ion	Ratio	Lower	Upper
428	100		
430	114.3	89.4	134.2

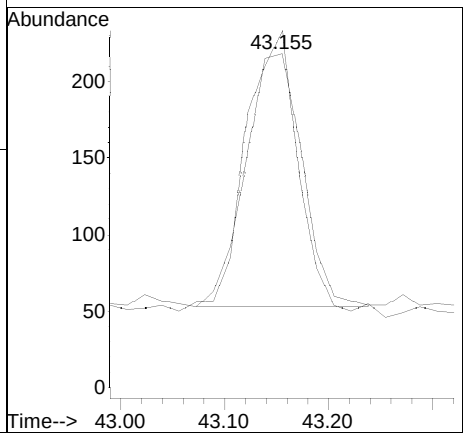


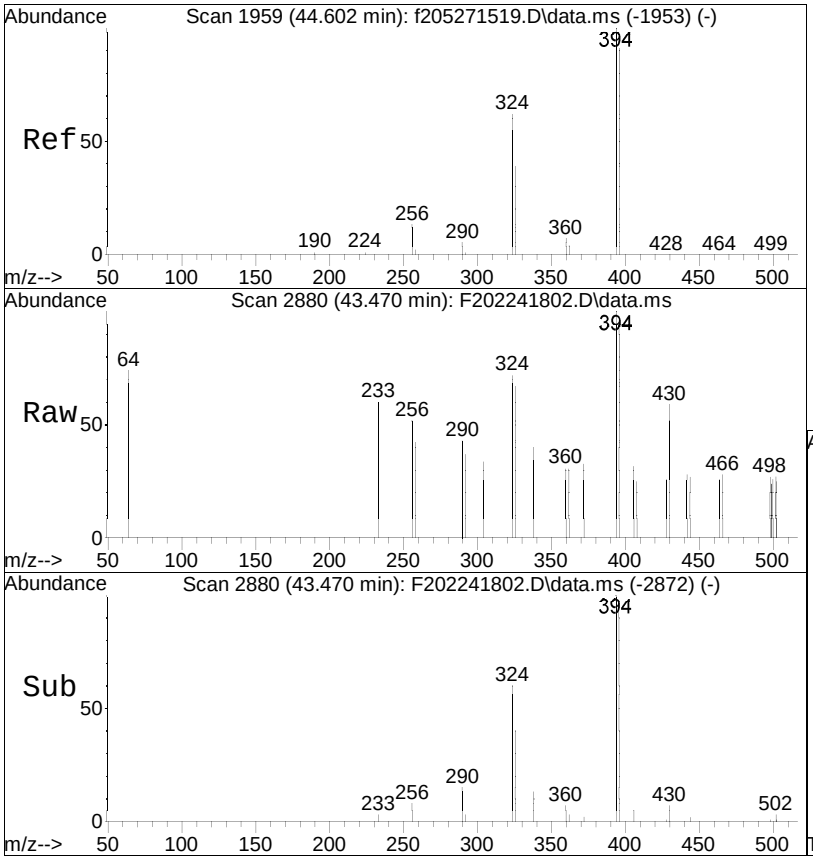


#178
Cl7-BZ#181
Concen: 0.35 ng/mL
RT: 43.155 min Scan# 2861
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 626

Ion	Ratio	Lower	Upper
394	100		
396	101.6	75.3	112.9

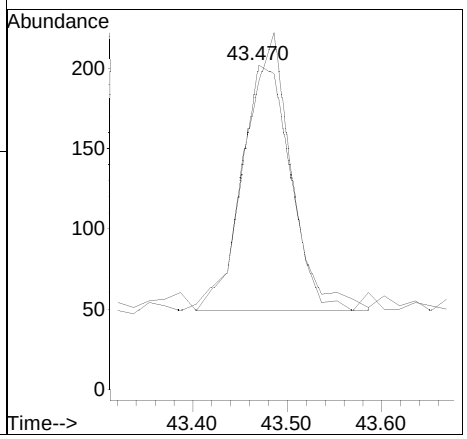


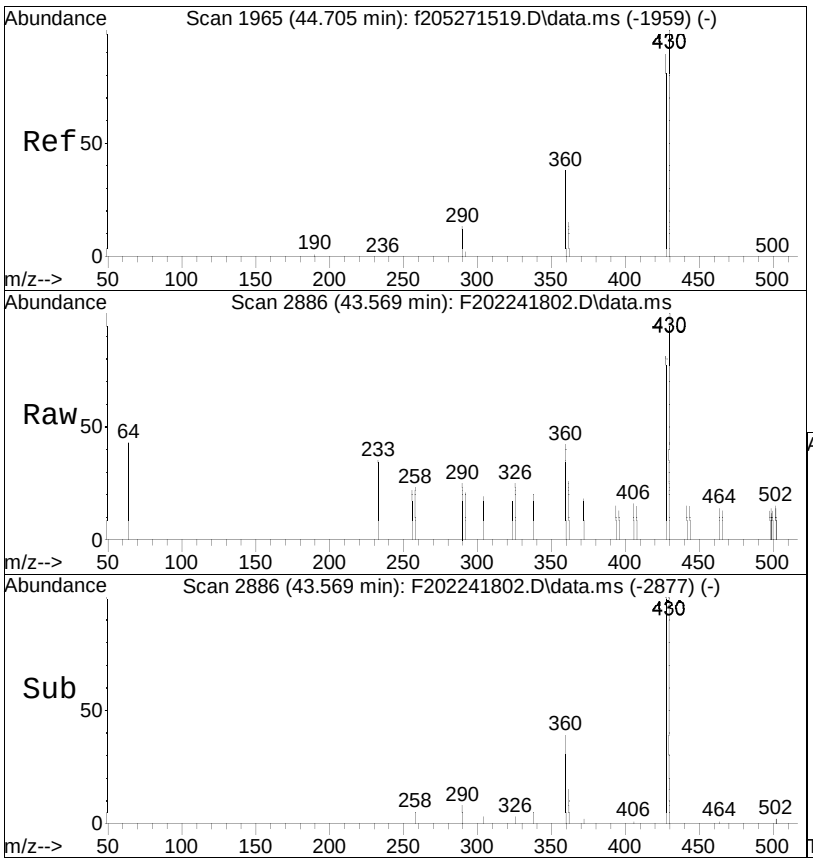


#179
Cl7-BZ#177
Concen: 0.38 ng/mL
RT: 43.470 min Scan# 2880
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 571

Ion	Ratio	Lower	Upper
394	100		
396	101.6	77.8	116.6

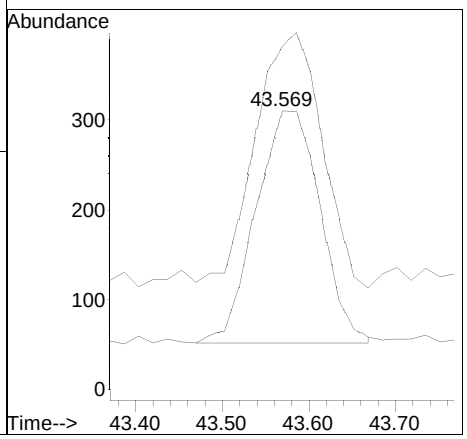


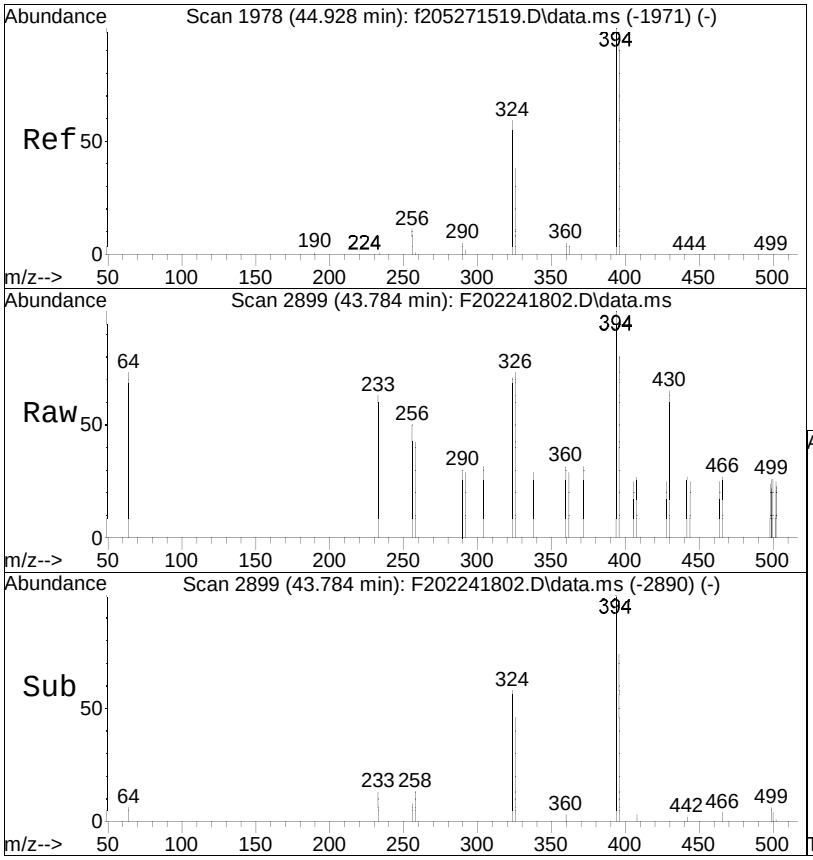


#180
Cl8-BZ#204/#200-Cal
Concen: 0.73 ng/mL
RT: 43.569 min Scan# 2886
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 1325

Ion	Ratio	Lower	Upper
428	100		
430	113.8	89.8	134.6

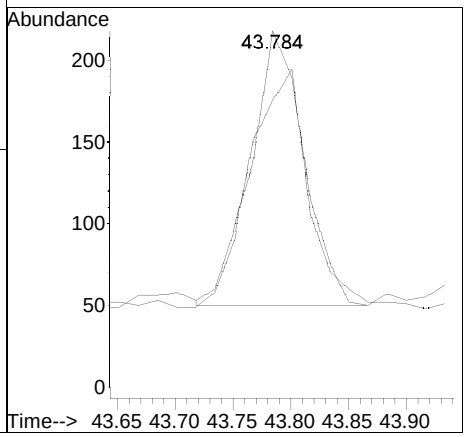


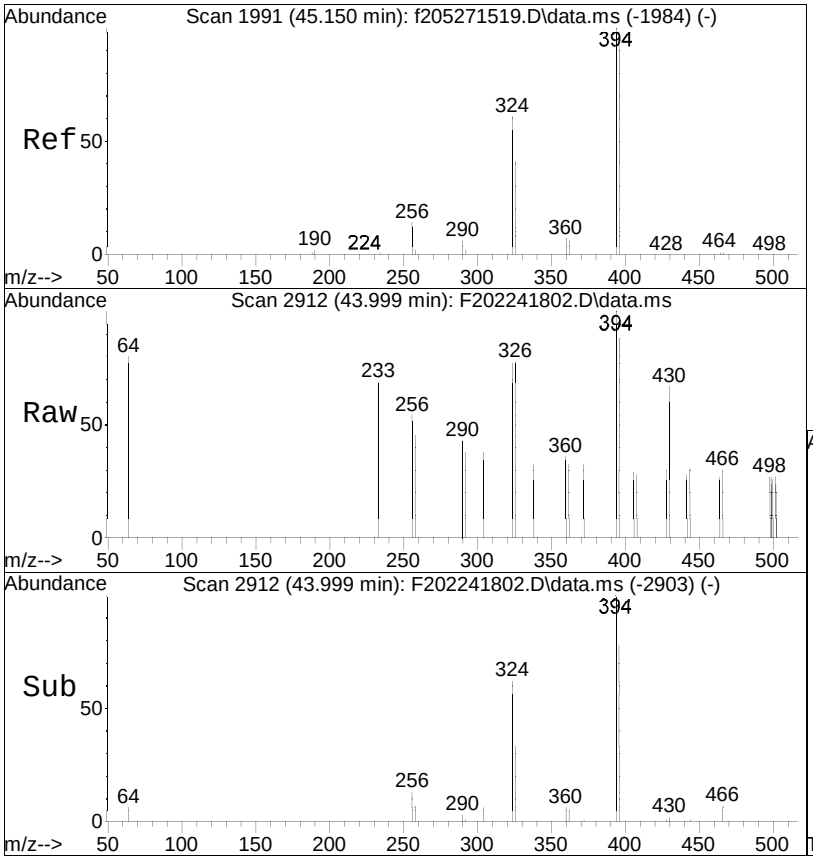


#183
Cl7-BZ#171
Concen: 0.39 ng/mL
RT: 43.784 min Scan# 2899
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 539

Ion	Ratio	Lower	Upper
394	100		
396	94.6	75.4	113.0

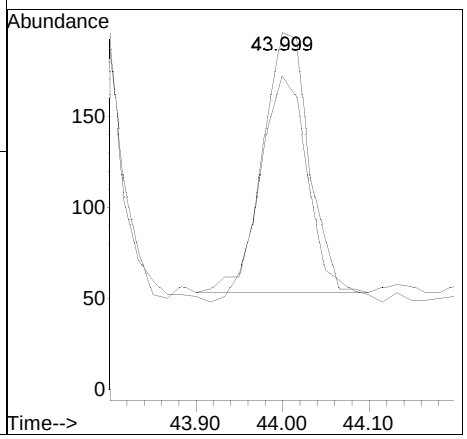


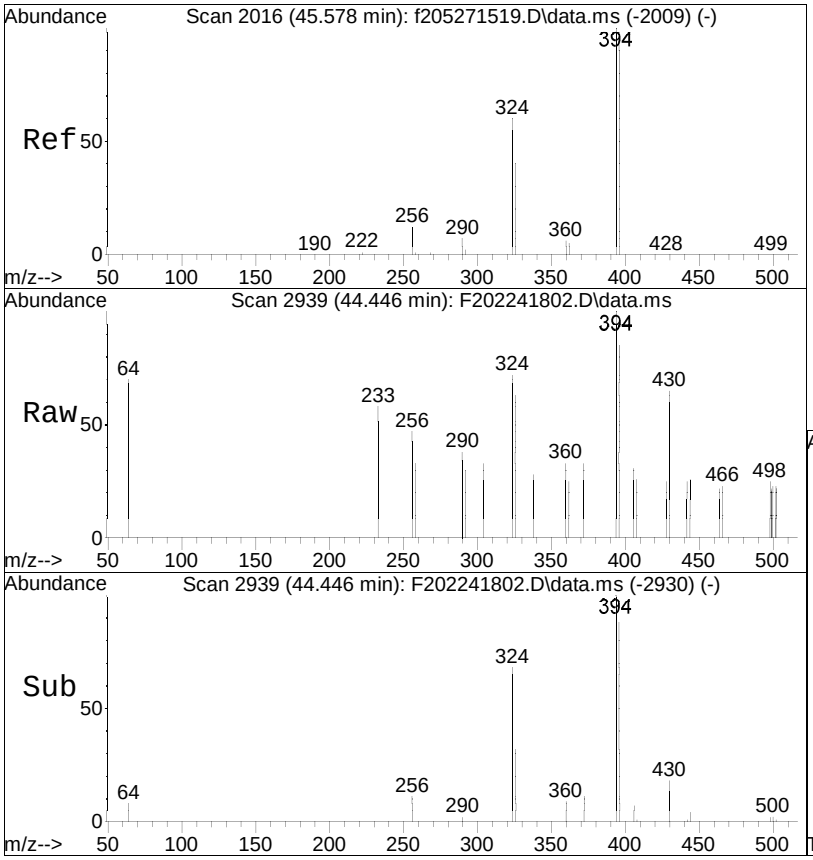


#184
Cl7-BZ#173
Concen: 0.37 ng/mL
RT: 43.999 min Scan# 2912
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 535

Ion	Ratio	Lower	Upper
394	100		
396	92.1	76.3	114.5

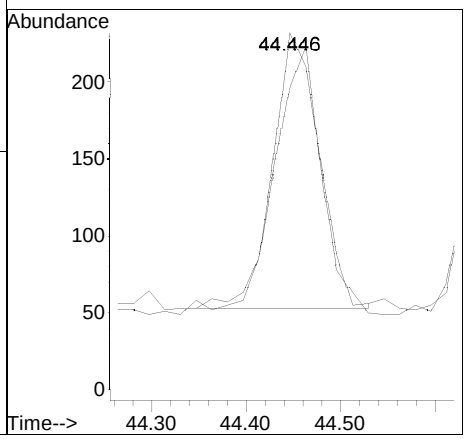


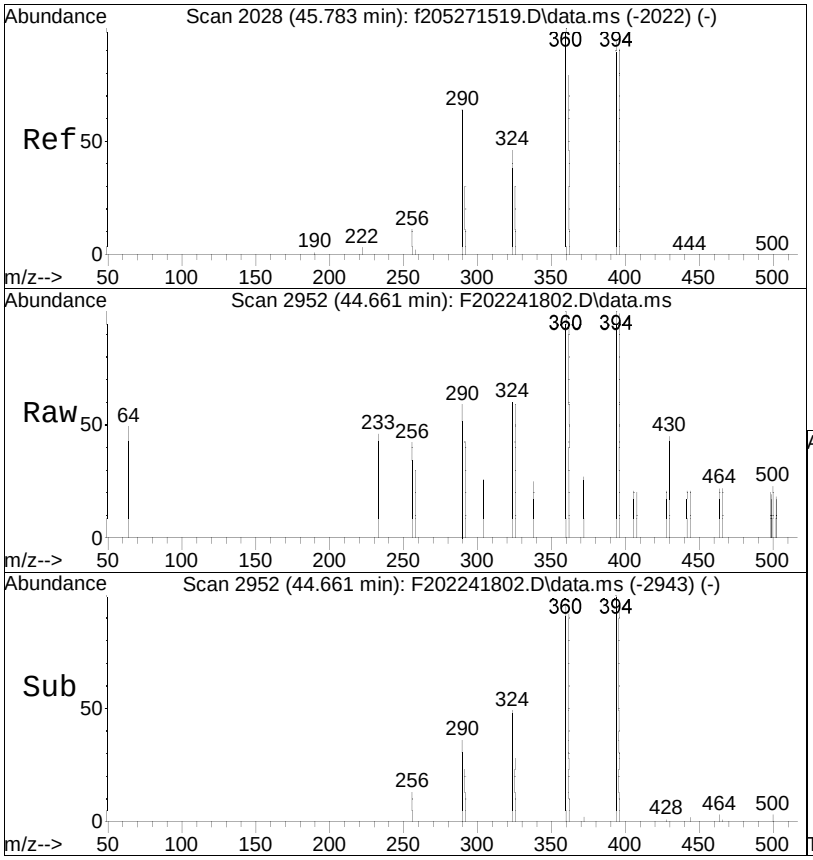


#185
Cl7-BZ#172
Concen: 0.40 ng/mL
RT: 44.446 min Scan# 2939
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 614

Ion	Ratio	Lower	Upper
394	100		
396	97.6	75.4	113.2

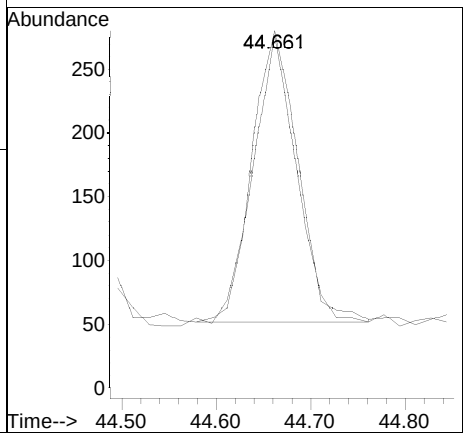


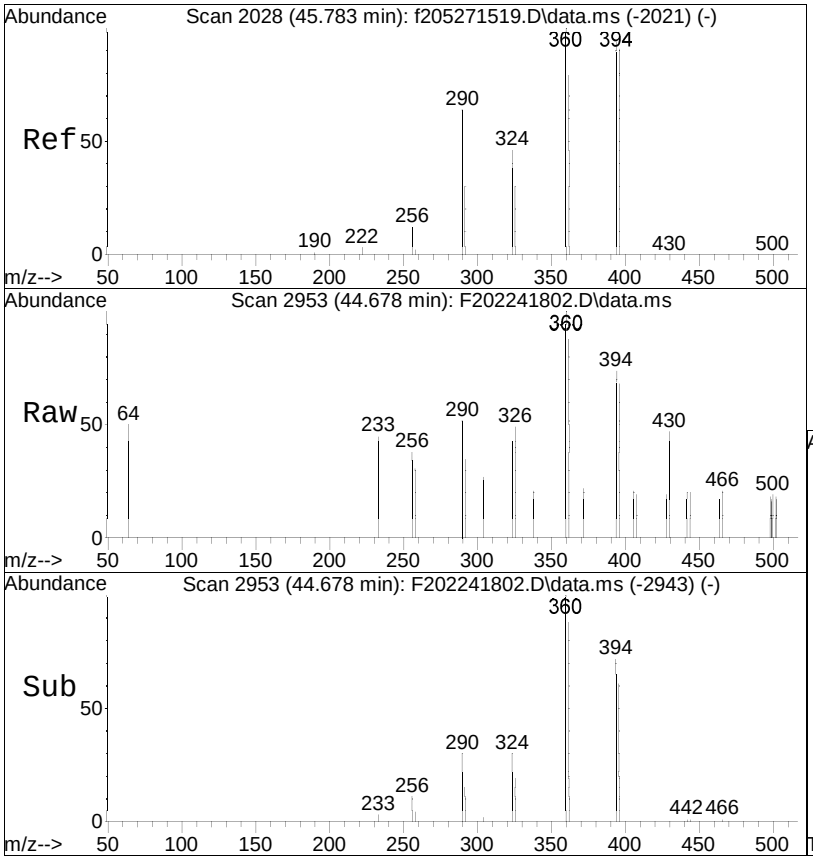


#186
Cl7-BZ#192
Concen: 0.36 ng/mL
RT: 44.661 min Scan# 2952
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 770

Ion	Ratio	Lower	Upper
394	100		
396	97.0	76.9	115.3

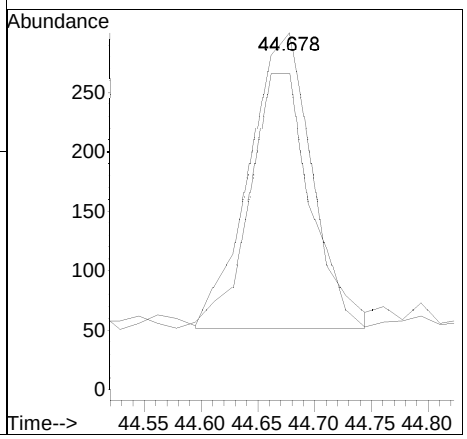


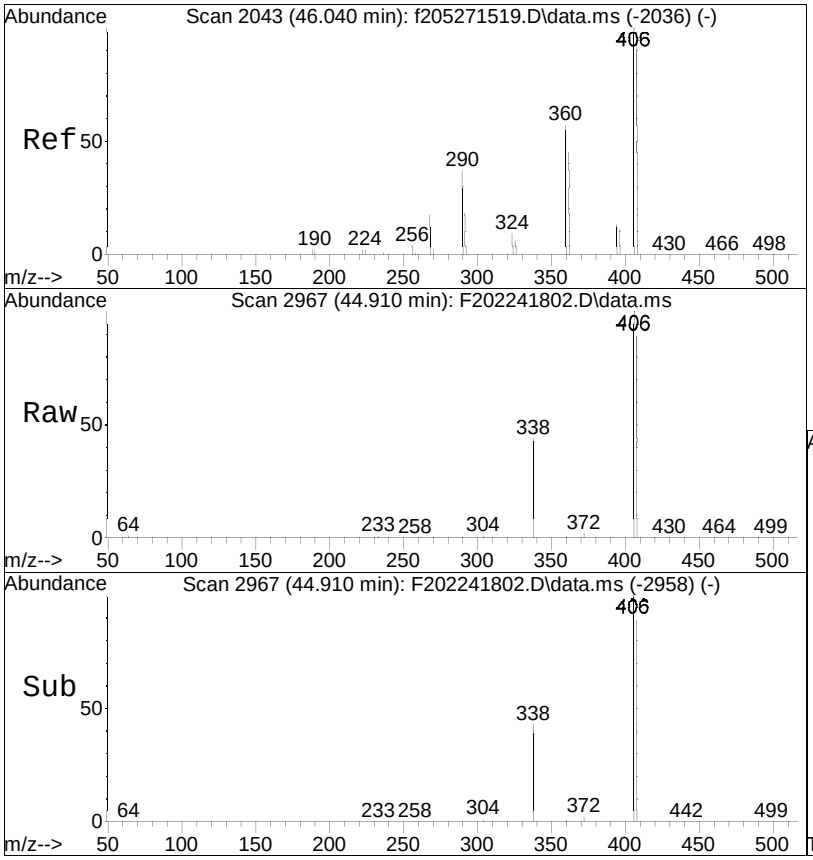


#187
Cl6-BZ#156
Concen: 0.41 ng/mL M4
RT: 44.678 min Scan# 2953
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 959

Ion	Ratio	Lower	Upper
360	100		
362	82.2	63.4	95.2

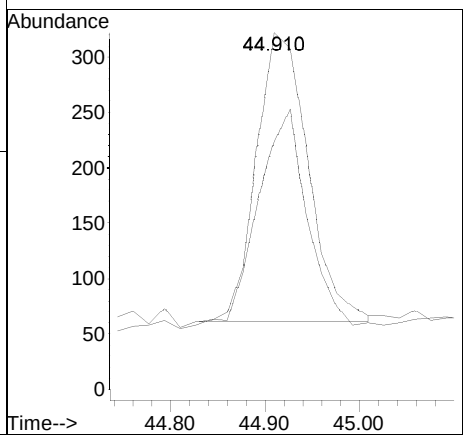


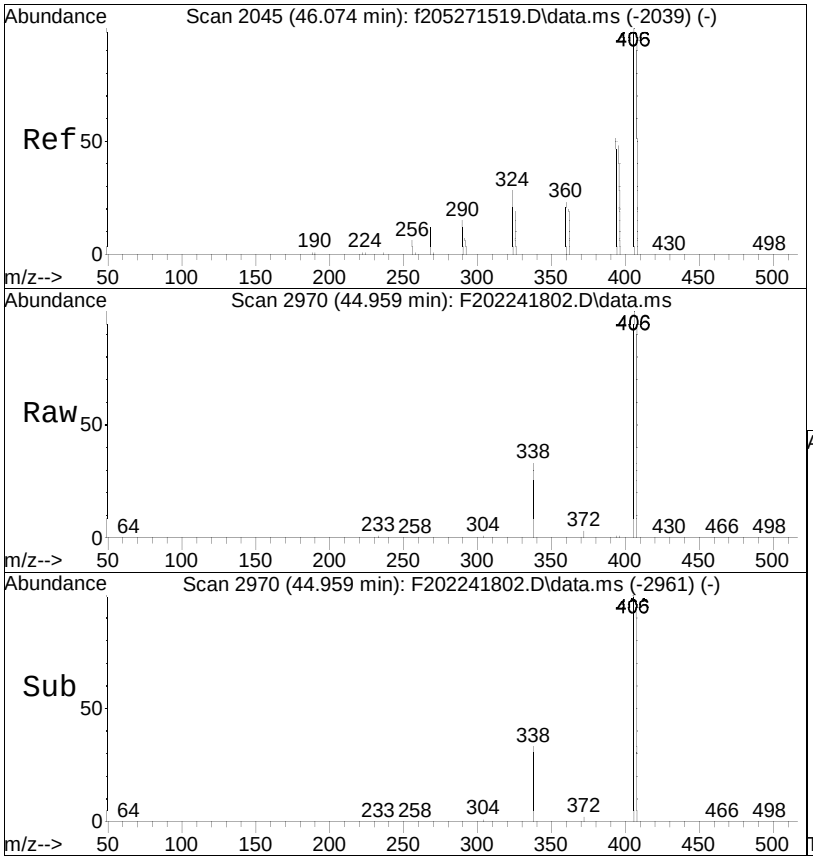


#188
Cl6-BZ#157
Concen: 0.41 ng/mL
RT: 44.910 min Scan# 2967
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 993

Ion	Ratio	Lower	Upper
360	100		
362	73.1	62.6	93.8

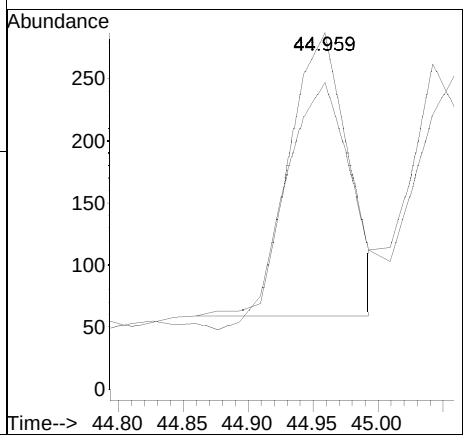


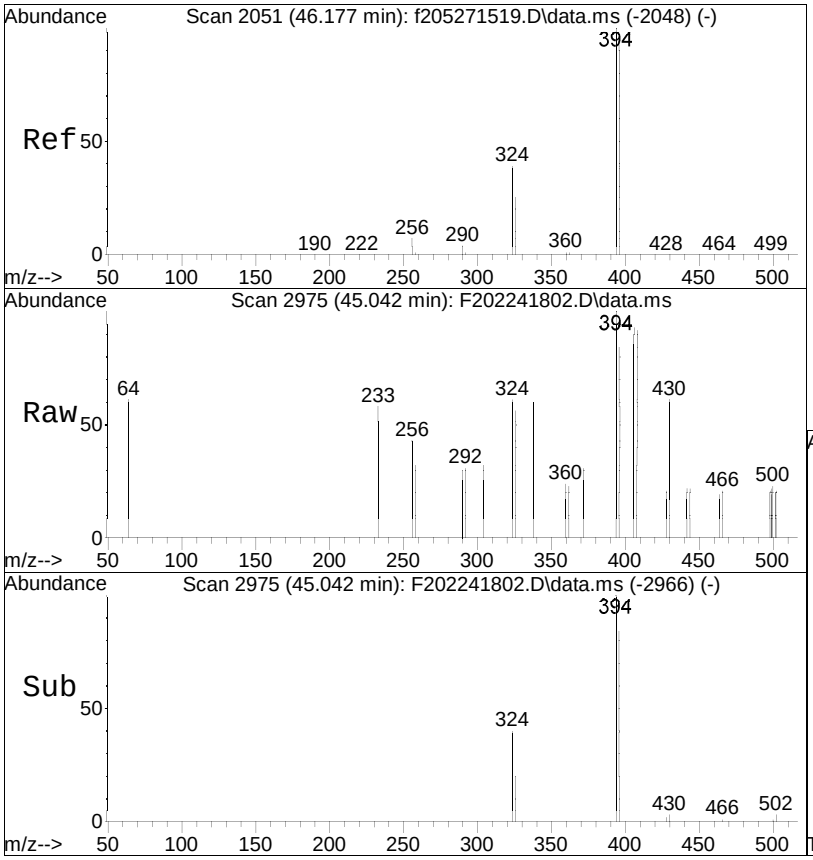


#189
Cl7-BZ#180
Concen: 0.35 ng/mL
RT: 44.959 min Scan# 2970
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 721

Ion	Ratio	Lower	Upper
394	100		
396	106.7	74.2	111.2

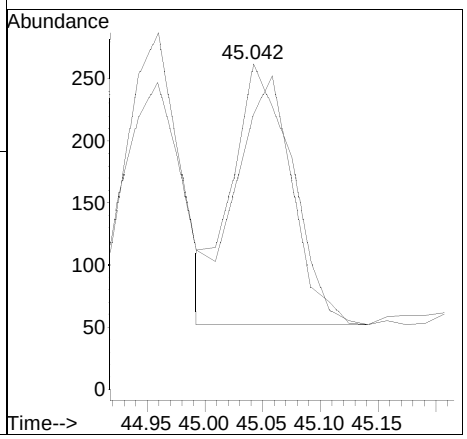


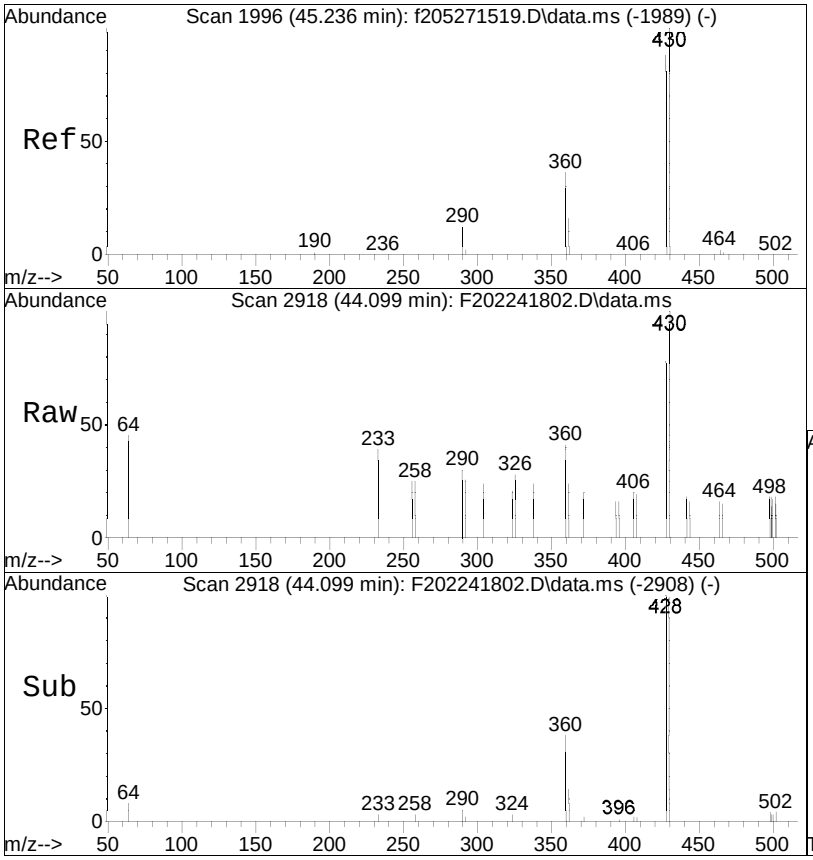


#190
Cl7-BZ#193
Concen: 0.32 ng/mL
RT: 45.042 min Scan# 2975
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 761

Ion	Ratio	Lower	Upper
394	100		
396	83.7	76.3	114.5

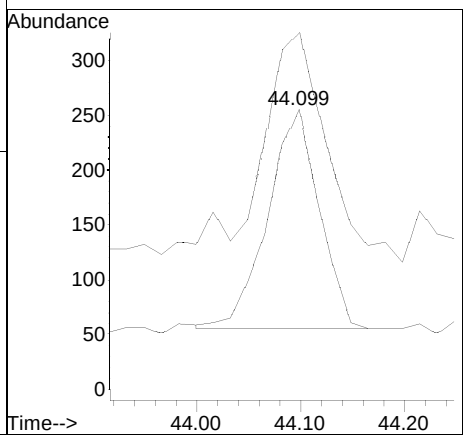


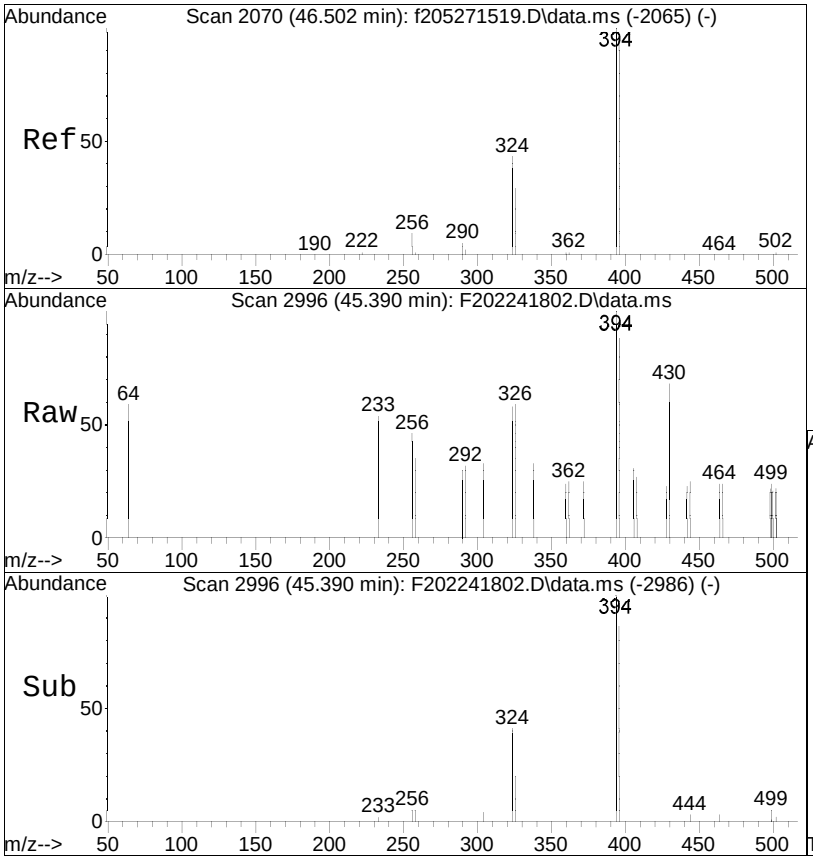


#191
Cl8-BZ#197
Concen: 0.38 ng/mL
RT: 44.099 min Scan# 2918
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 682

Ion	Ratio	Lower	Upper
428	100		
430	107.9	88.4	132.6

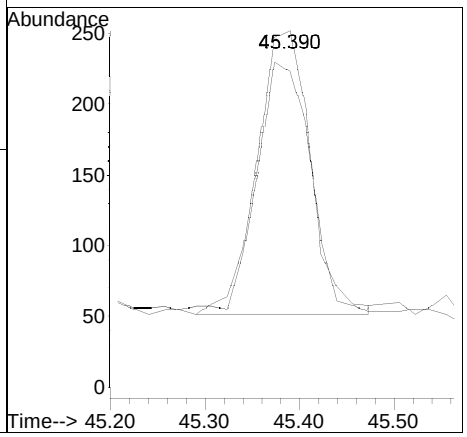


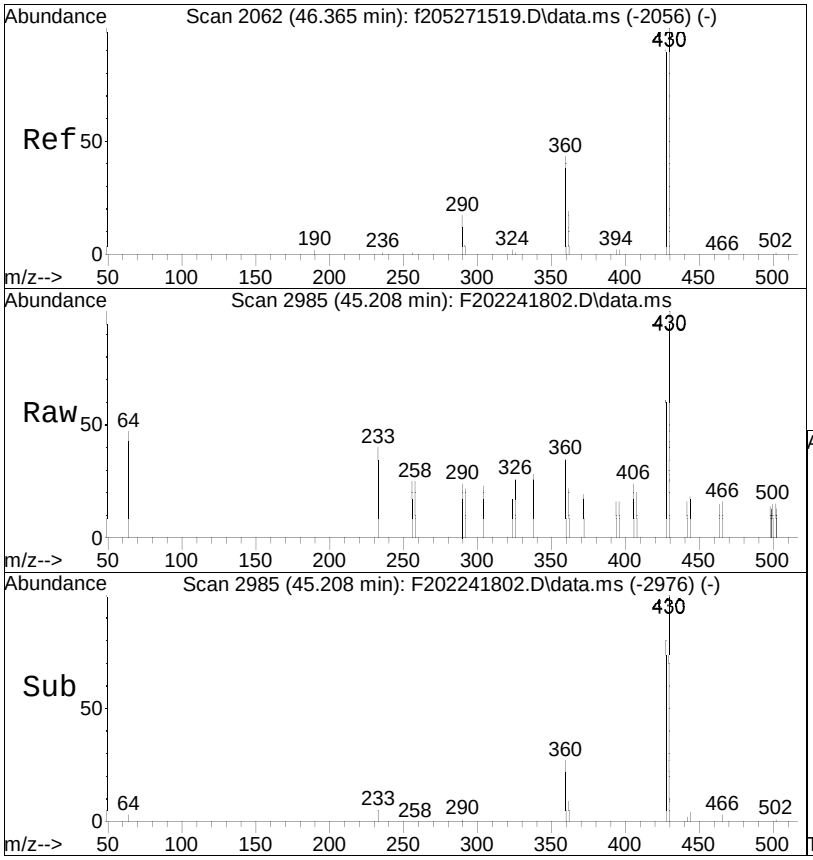


#192
Cl7-BZ#191
Concen: 0.41 ng/mL
RT: 45.390 min Scan# 2996
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 796

Ion	Ratio	Lower	Upper
394	100		
396	86.9	74.6	111.8

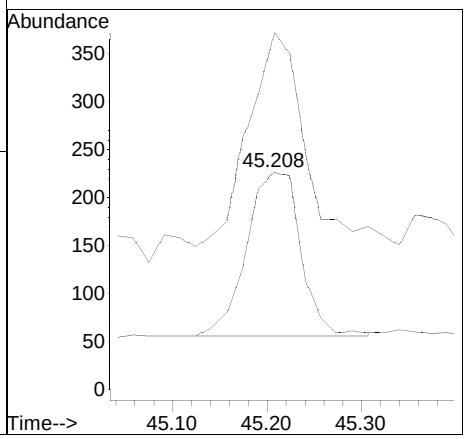


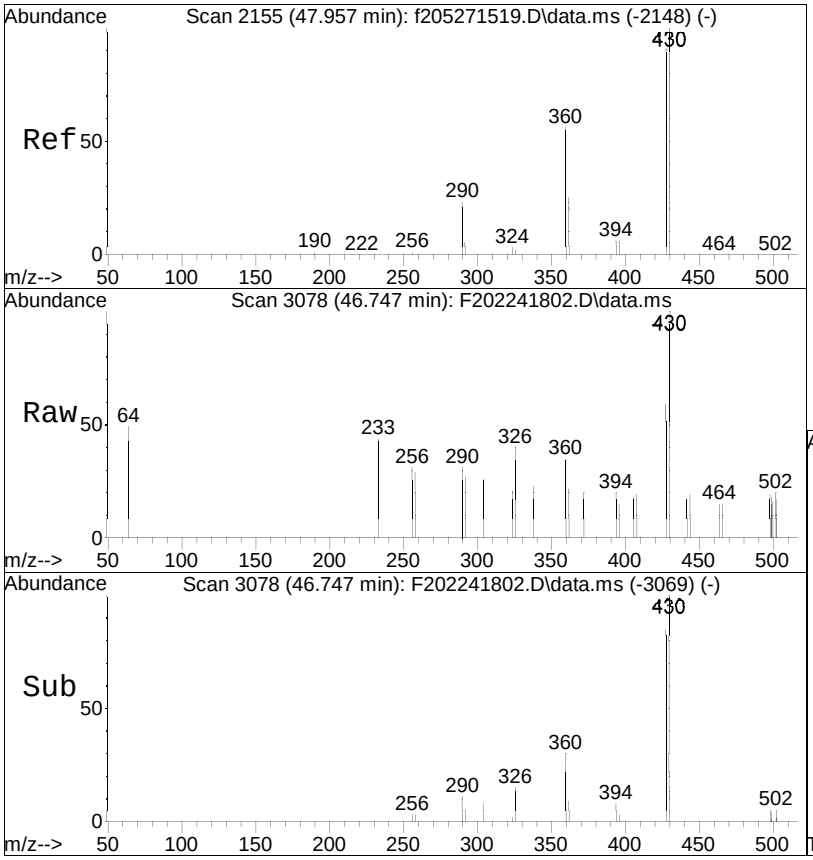


#193
Cl8-BZ#199
Concen: 0.39 ng/mL
RT: 45.208 min Scan# 2985
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 680

Ion	Ratio	Lower	Upper
428	100		
430	131.8	90.5	135.7

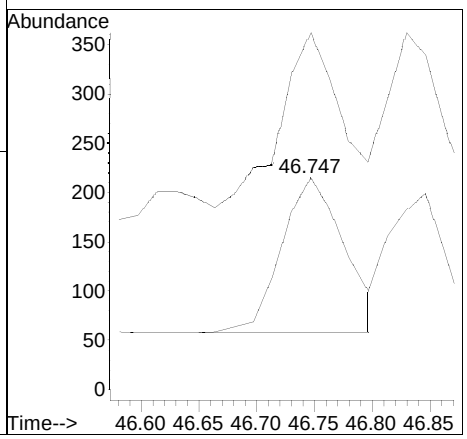


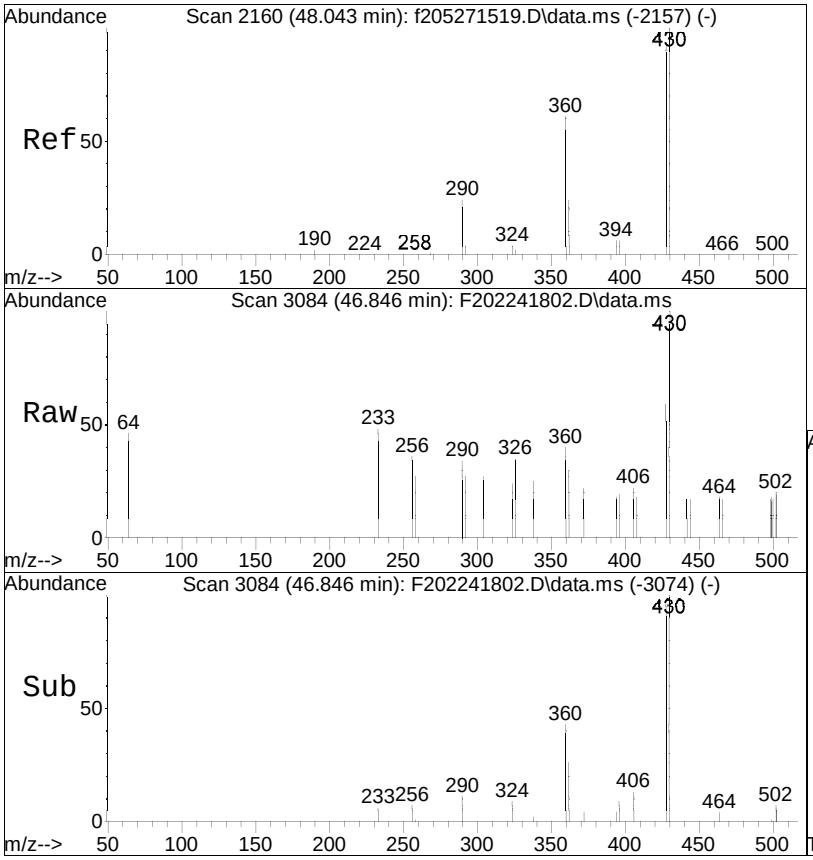


#194
Cl8-BZ#198
Concen: 0.45 ng/mL
RT: 46.747 min Scan# 3078
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 602

Ion	Ratio	Lower	Upper
428	100		
430	107.6	90.0	135.0

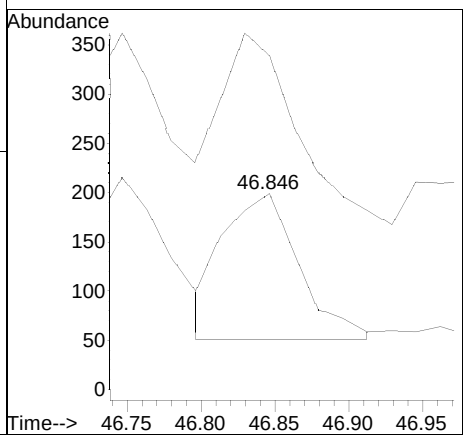


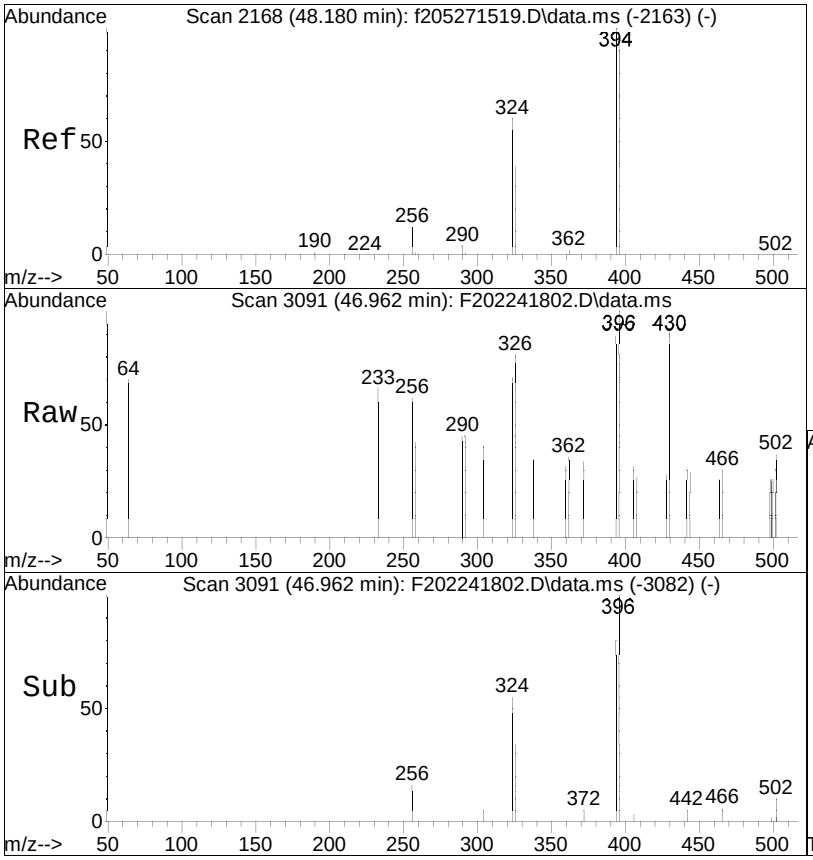


#195
Cl8-BZ#201
Concen: 0.40 ng/mL M4
RT: 46.846 min Scan# 3084
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 528

Ion	Ratio	Lower	Upper
428	100		
430	44.3	91.3	136.9#

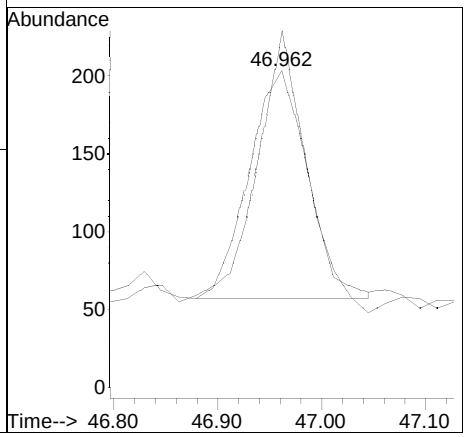


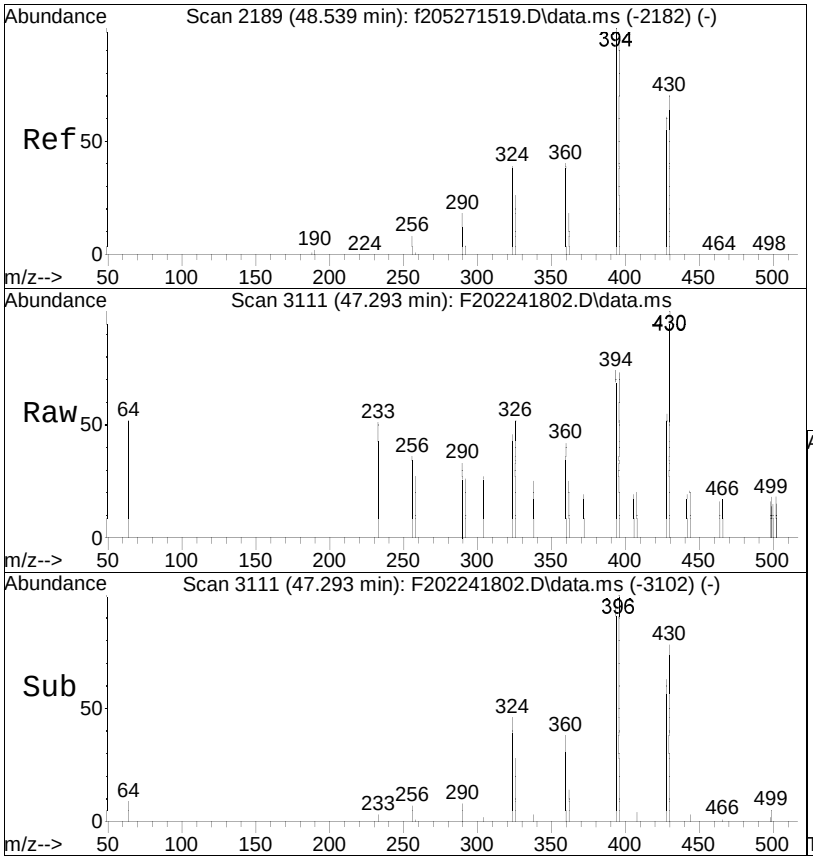


#196
Cl7-BZ#170
Concen: 0.44 ng/mL
RT: 46.962 min Scan# 3091
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 573

Ion	Ratio	Lower	Upper
394	100		
396	110.3	80.2	120.4

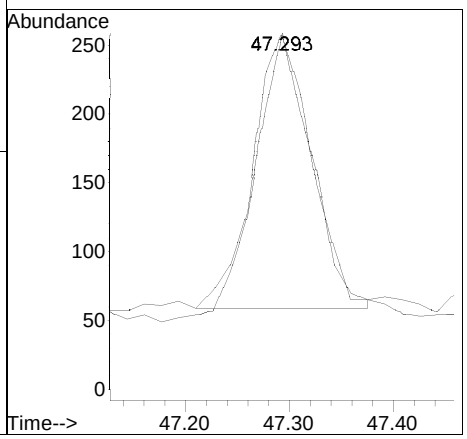


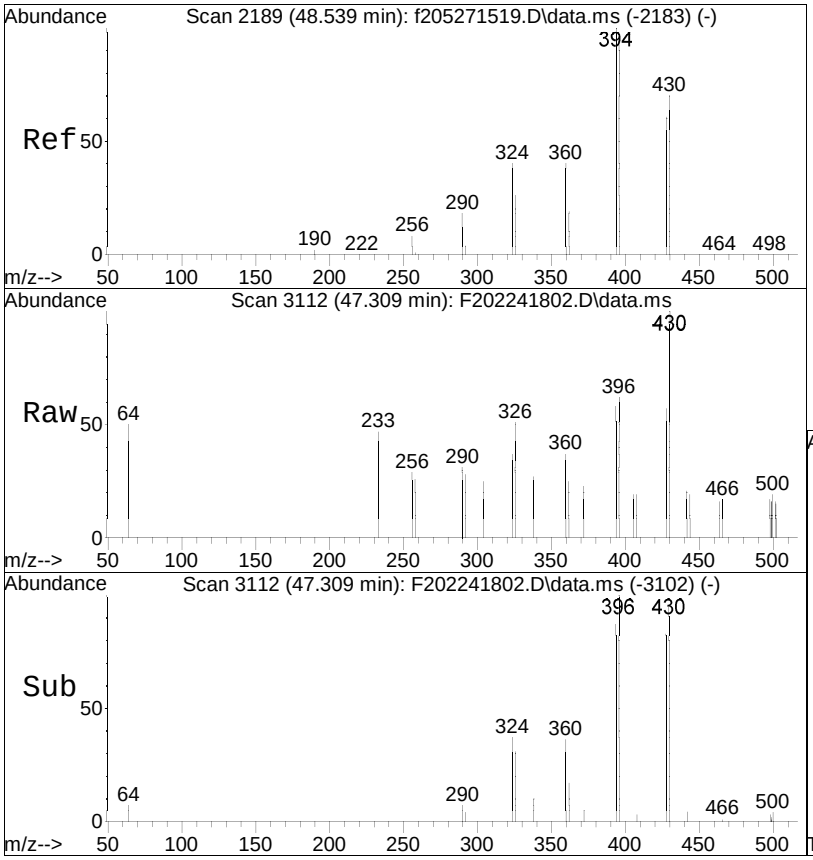


#197
Cl7-BZ#190
Concen: 0.36 ng/mL
RT: 47.293 min Scan# 3111
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 771

Ion	Ratio	Lower	Upper
394	100		
396	105.4	78.9	118.3

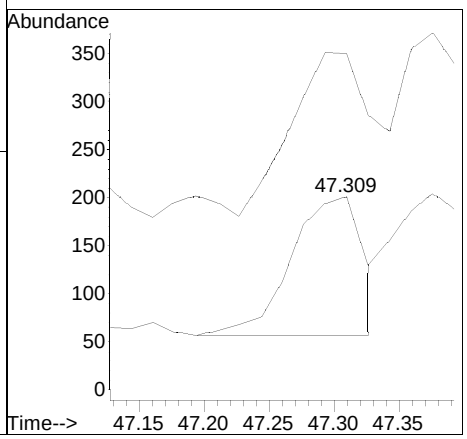


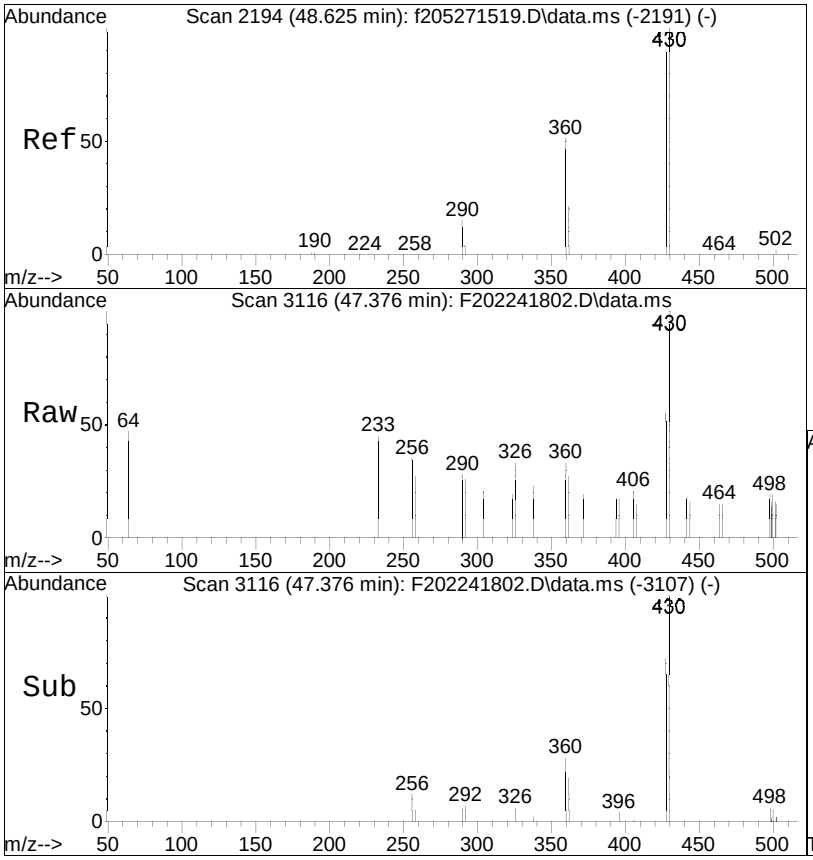


#198
Cl8-BZ#196
Concen: 0.41 ng/mL
RT: 47.309 min Scan# 3112
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 563

Ion	Ratio	Lower	Upper
428	100		
430	134.6	90.2	135.2

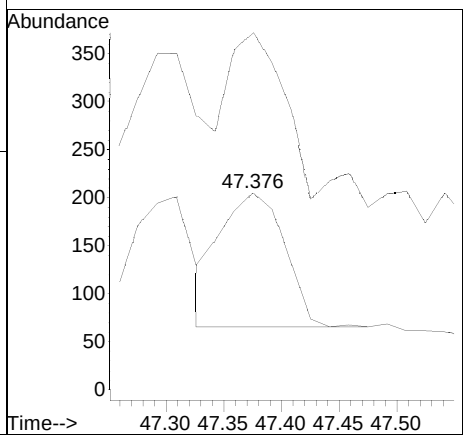


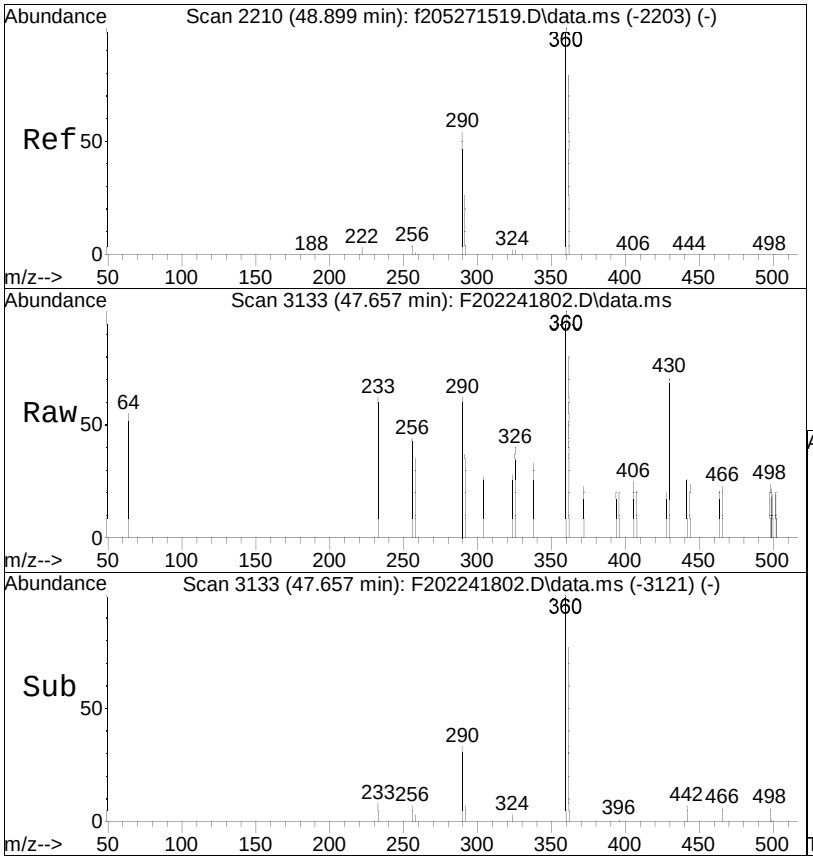


#199
Cl8-BZ#203
Concen: 0.38 ng/mL
RT: 47.376 min Scan# 3116
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 541

Ion	Ratio	Lower	Upper
428	100		
430	122.9	90.0	135.0

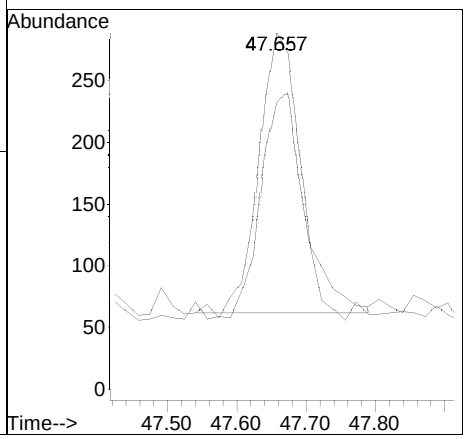


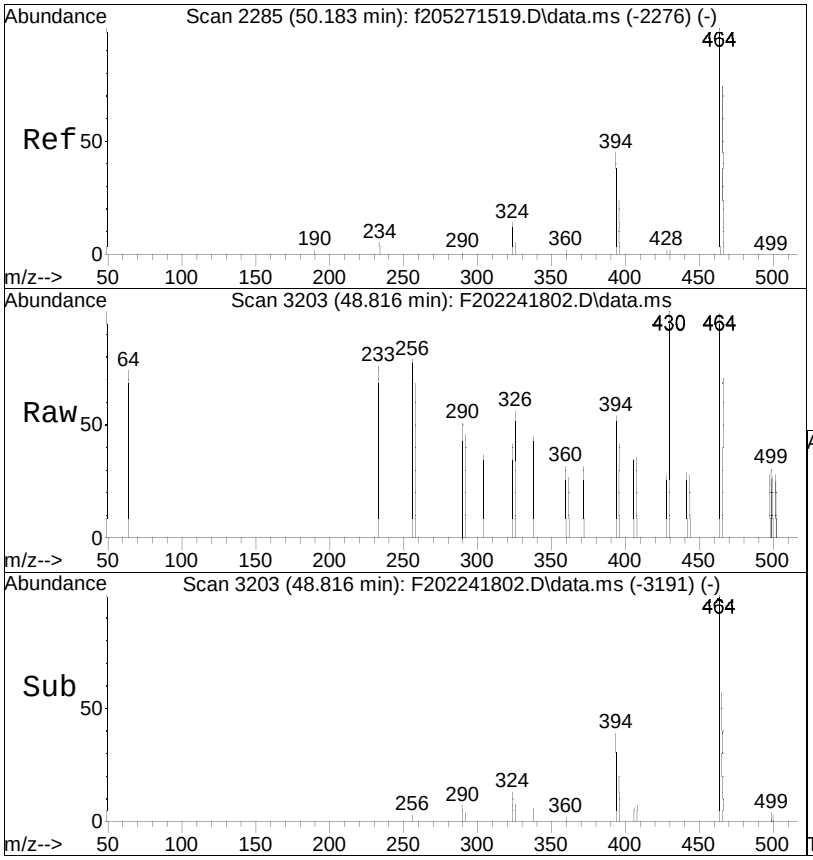


#200
Cl6-BZ#169-RTW
Concen: 0.42 ng/mL
RT: 47.657 min Scan# 3133
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:360 Resp: 979

Ion	Ratio	Lower	Upper
360	100		
362	77.3	65.0	97.4

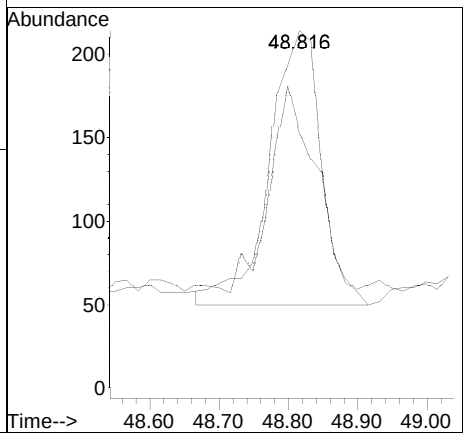


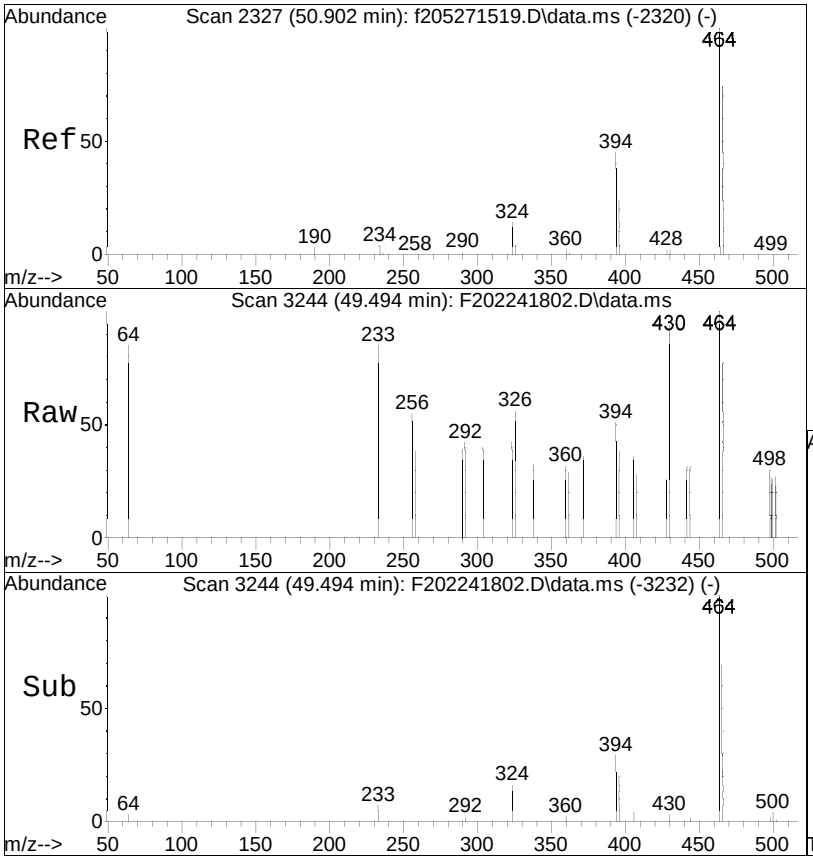


#201
Cl9-BZ#208-RTW
Concen: 0.48 ng/mL
RT: 48.816 min Scan# 3203
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:464 Resp: 849

Ion	Ratio	Lower	Upper
464	100		
466	64.1	60.3	90.5

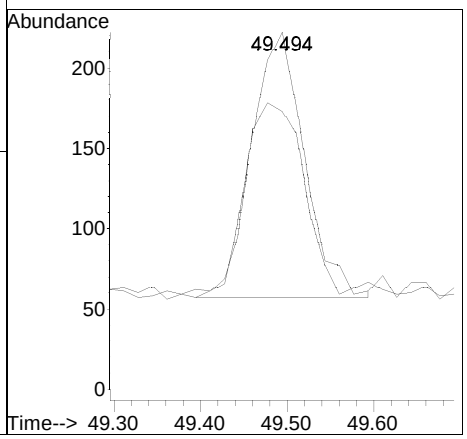


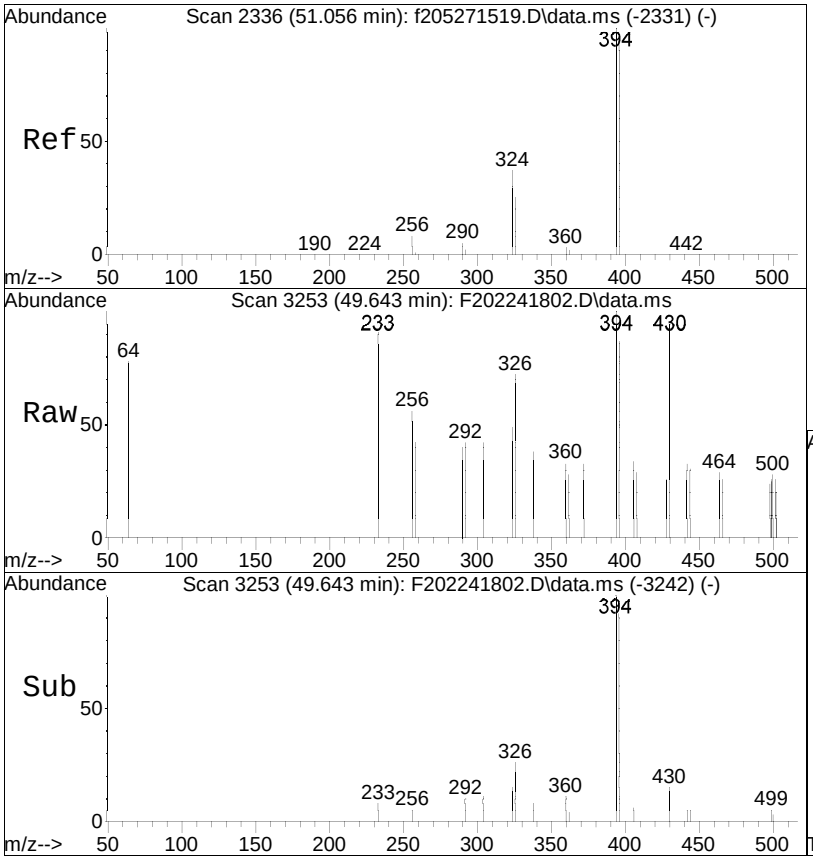


#202
Cl9-BZ#207
Concen: 0.39 ng/mL
RT: 49.494 min Scan# 3244
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:464 Resp: 705

Ion	Ratio	Lower	Upper
464	100		
466	81.1	61.9	92.9

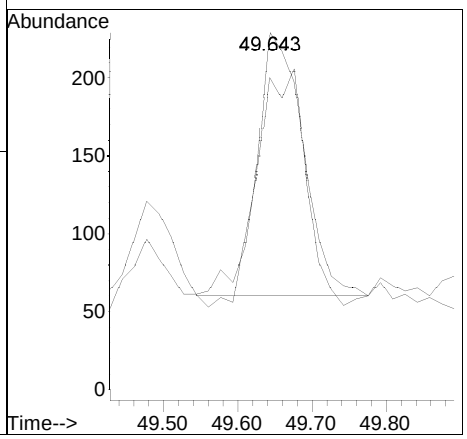


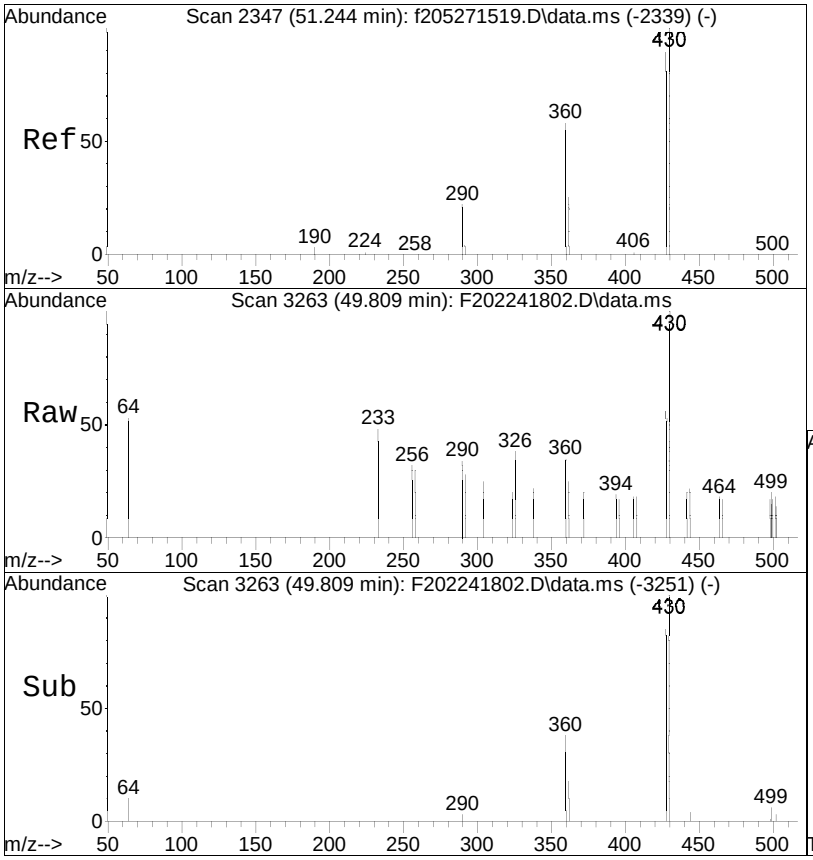


#203
Cl7-BZ#189-RTW
Concen: 0.42 ng/mL
RT: 49.643 min Scan# 3253
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:394 Resp: 742

Ion	Ratio	Lower	Upper
394	100		
396	0.0	76.4	114.6#

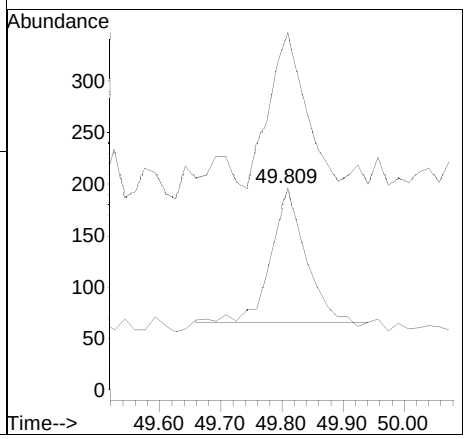


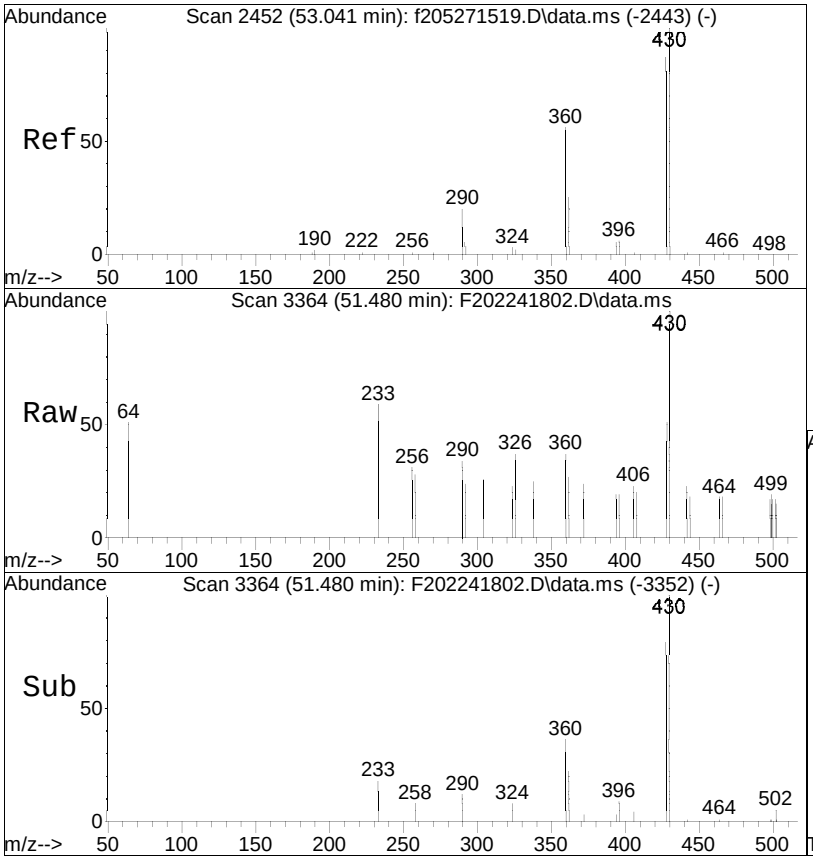


#204
Cl8-BZ#195
Concen: 0.40 ng/mL
RT: 49.809 min Scan# 3263
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 507

Ion	Ratio	Lower	Upper
428	100		
430	127.8	93.8	140.8

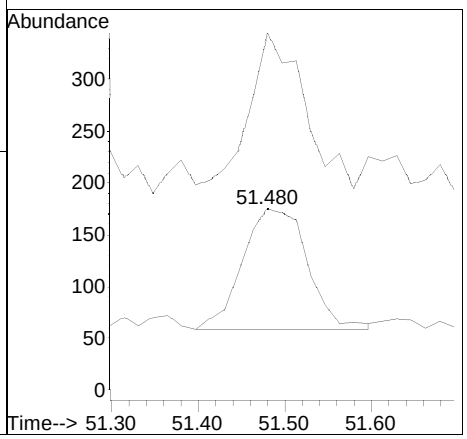


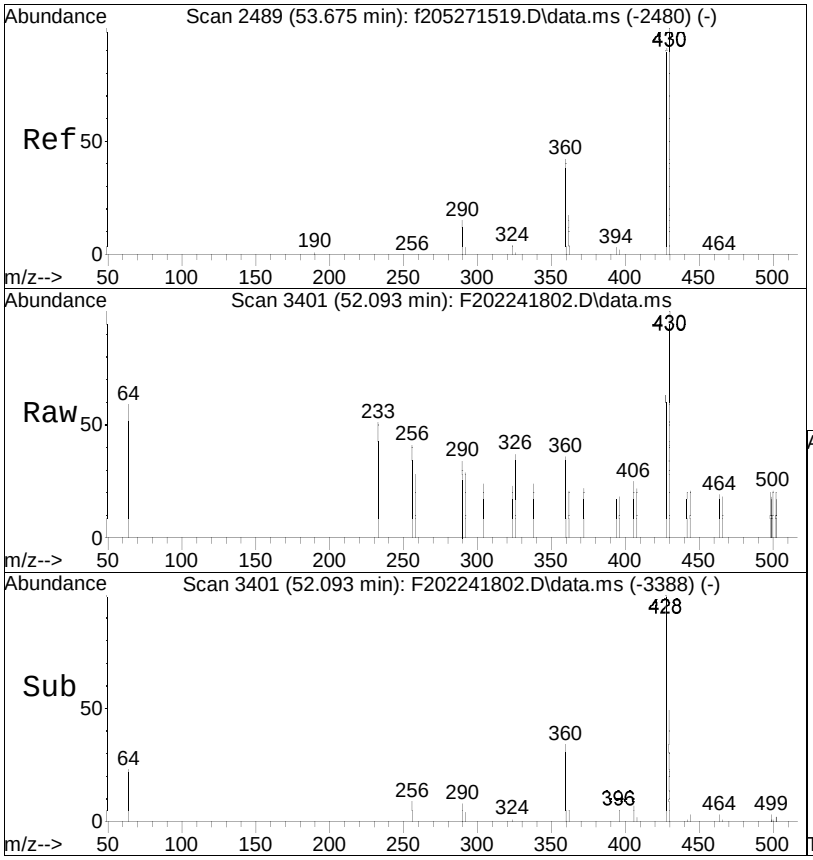


#205
Cl8-BZ#194
Concen: 0.46 ng/mL
RT: 51.480 min Scan# 3364
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 601

Ion	Ratio	Lower	Upper
428	100		
430	109.8	92.2	138.2

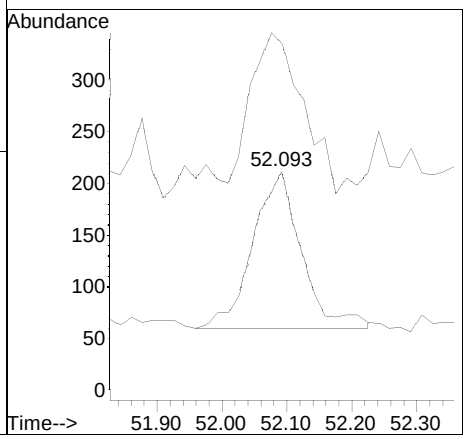


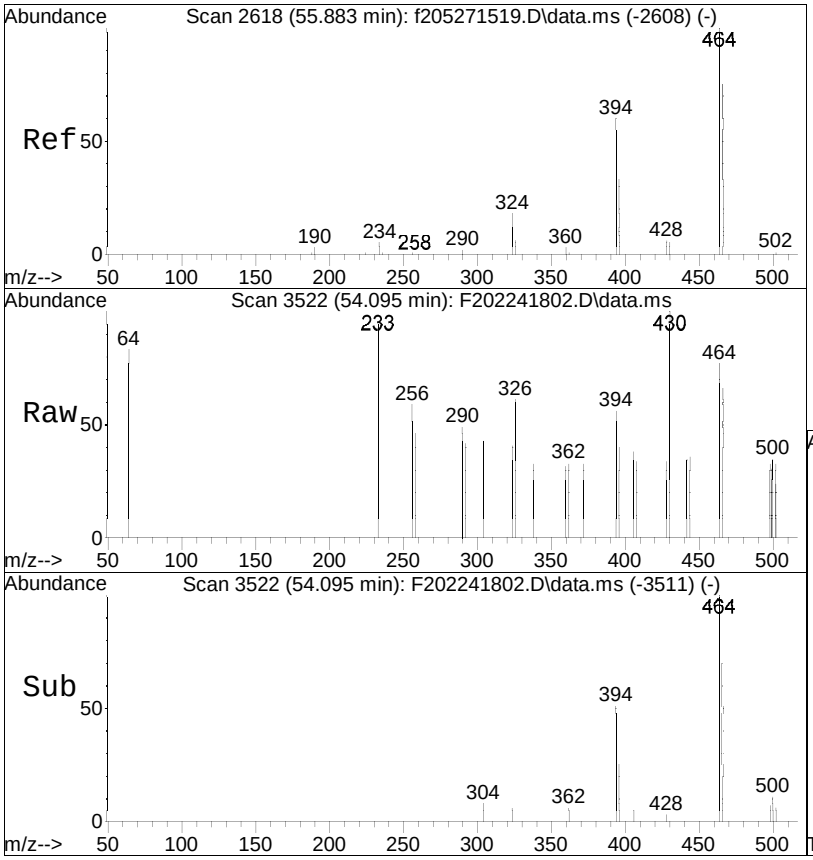


#206
Cl8-BZ#205-RTW
Concen: 0.51 ng/mL
RT: 52.093 min Scan# 3401
Delta R.T. 0.017 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:428 Resp: 781

Ion	Ratio	Lower	Upper
428	100		
430	102.3	91.3	136.9

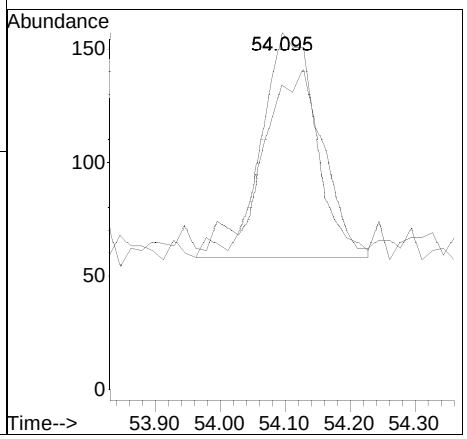


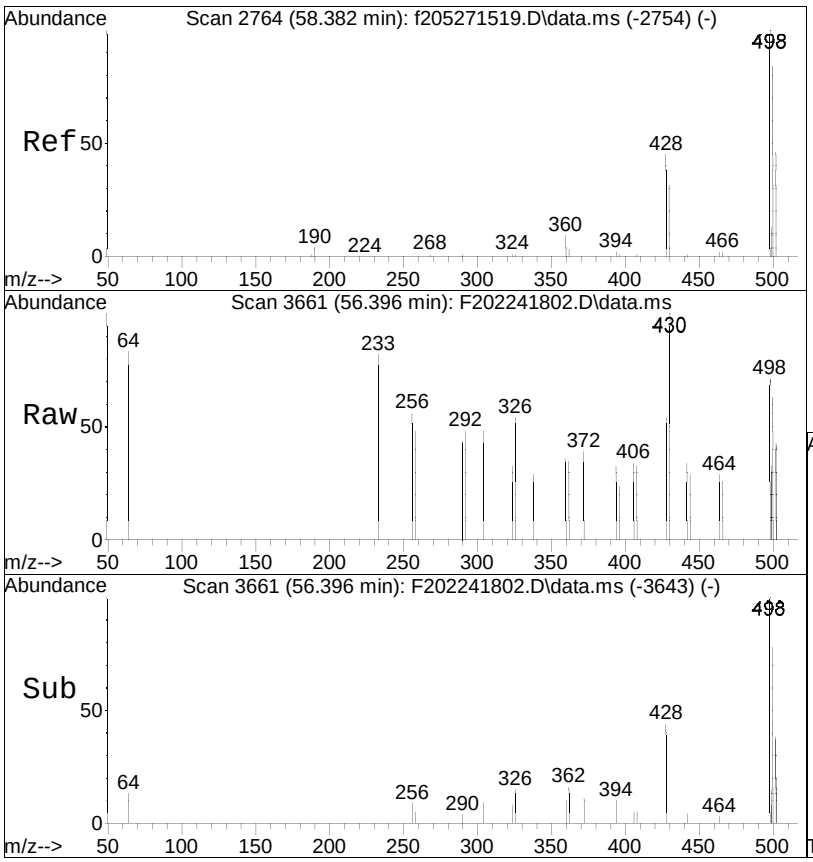


#207
Cl9-BZ#206-Cal/RTW
Concen: 0.45 ng/mL
RT: 54.095 min Scan# 3522
Delta R.T. -0.016 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:464 Resp: 612

Ion	Ratio	Lower	Upper
464	100		
466	0.0	60.2	90.2#

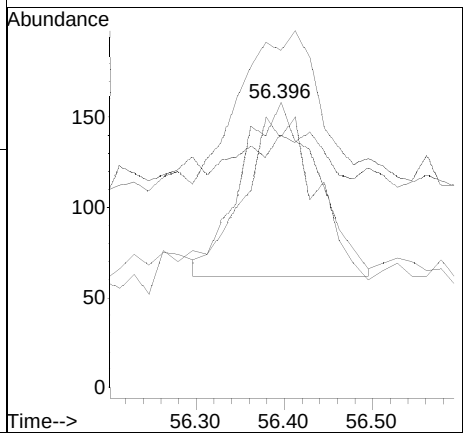




#210
Cl10-BZ#209-Cal/RTW
Concen: 0.41 ng/mL M4
RT: 56.396 min Scan# 3661
Delta R.T. 0.000 min
Lab File: F202241802.D
Acq: 24 Feb 2018 10:14 am

Tgt Ion:498 Resp: 575

Ion	Ratio	Lower	Upper
498	100		
500	110.4	66.9	100.3#
499	0.0	10.8	16.2#
502	0.0	38.5	57.7#

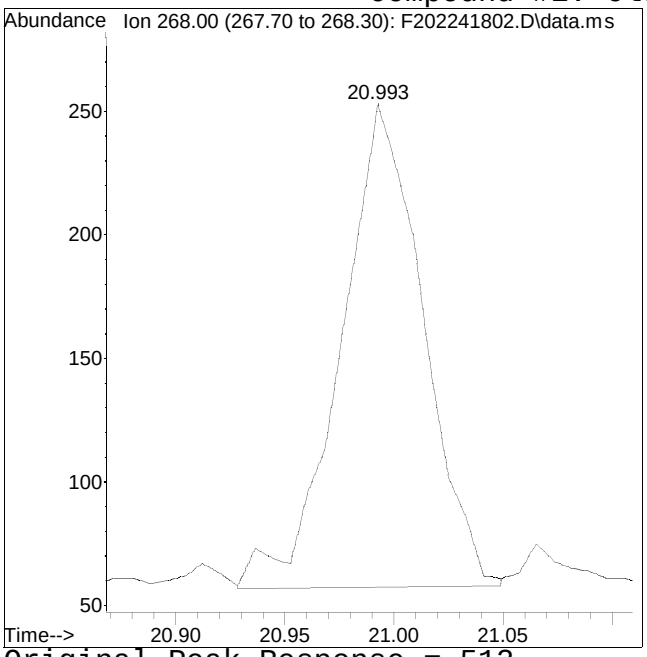


Manual Integration/Negative Proof Report

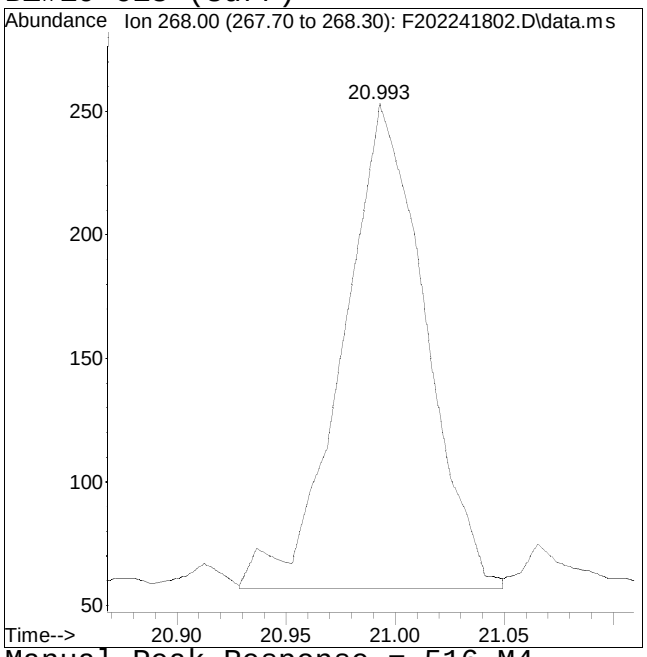
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #2: Cl3-BZ#19-C13 (surr)



Original Peak Response = 512



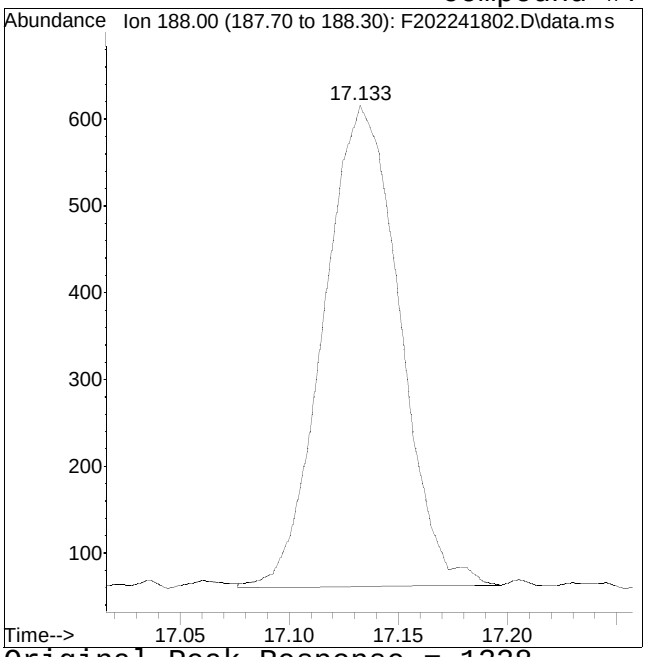
Manual Peak Response = 516 M4

M4 = Poor automated baseline construction.

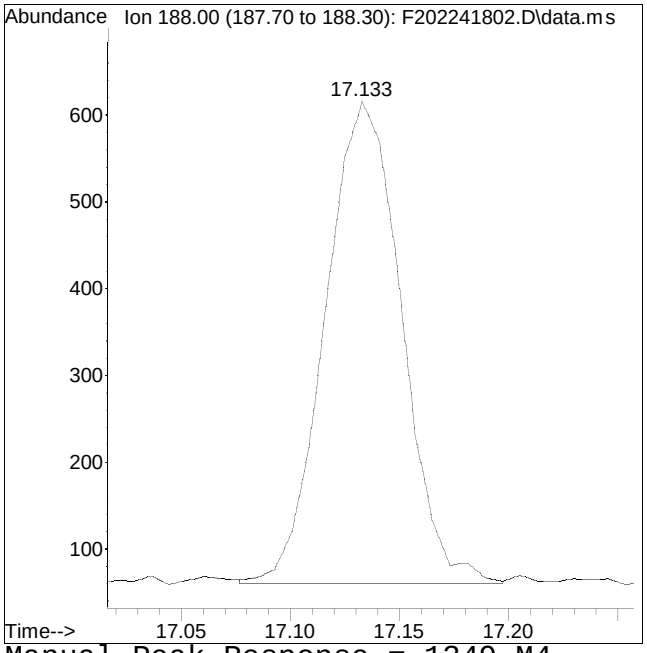
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #7: Cl1-BZ#3-RTW



Original Peak Response = 1338



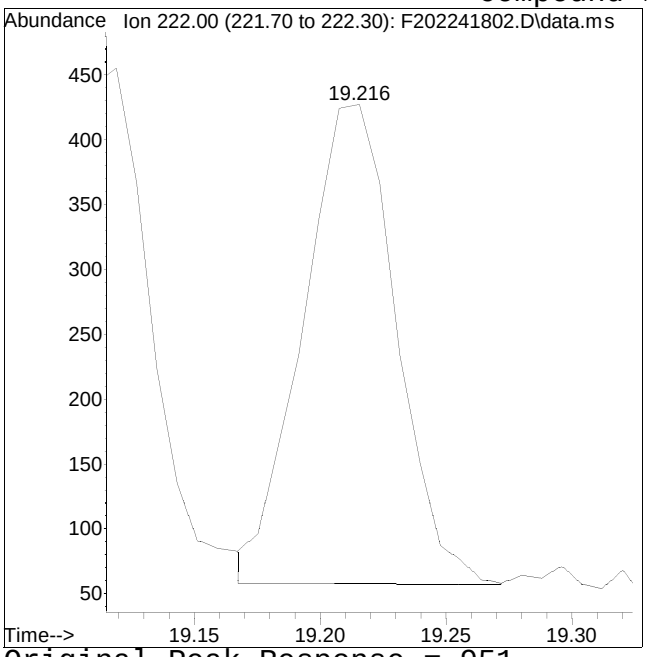
Manual Peak Response = 1349 M4

M4 = Poor automated baseline construction.

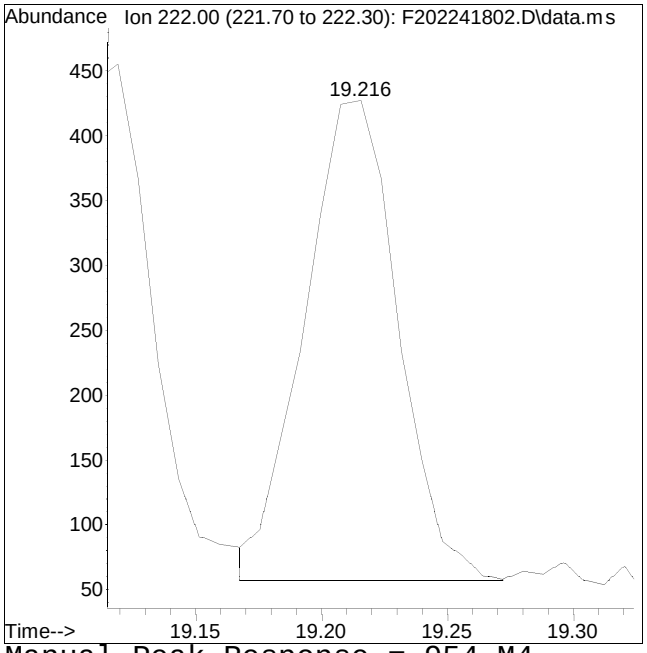
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #10: Cl2-BZ#7



Original Peak Response = 951



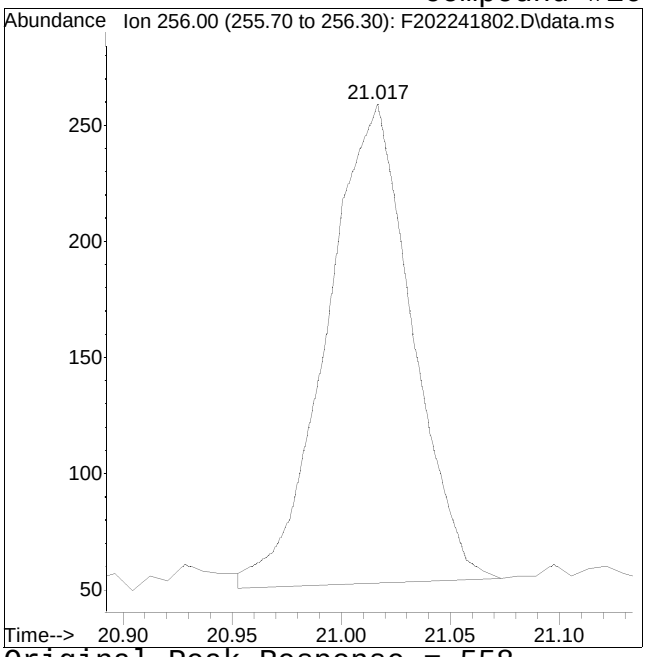
Manual Peak Response = 954 M4

M4 = Poor automated baseline construction.

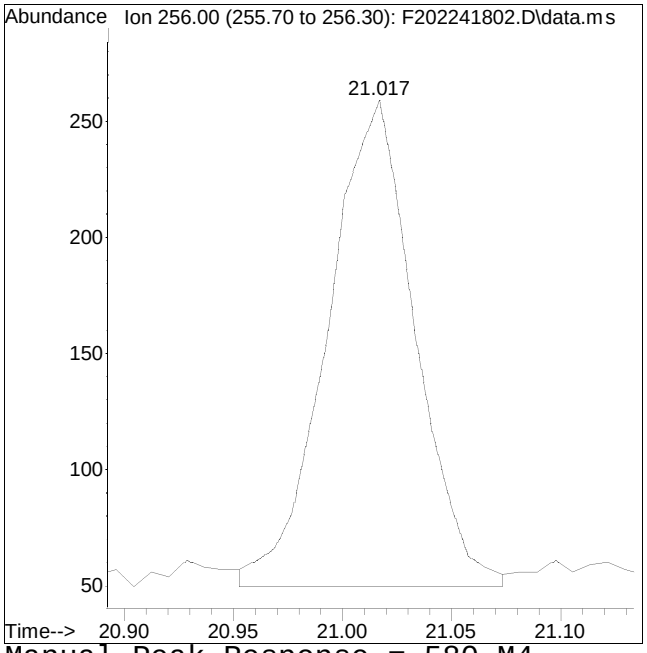
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #16: Cl3-BZ#19-RTW



Original Peak Response = 558



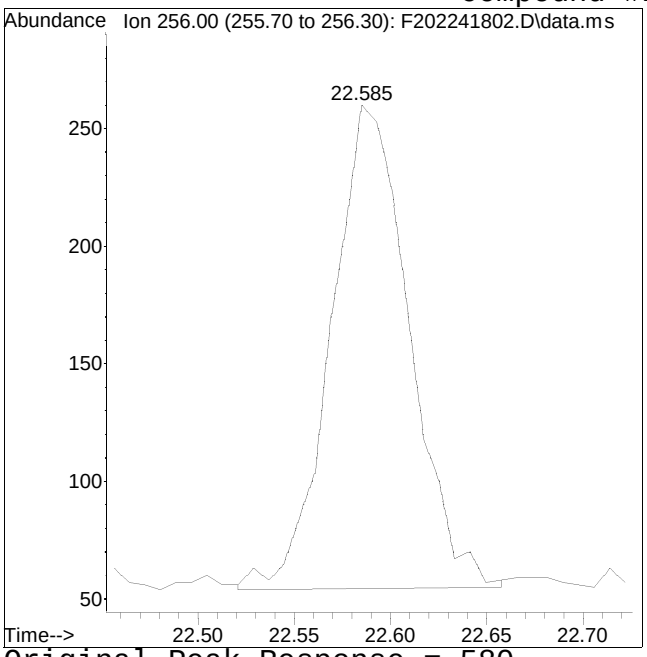
Manual Peak Response = 580 M4

M4 = Poor automated baseline construction.

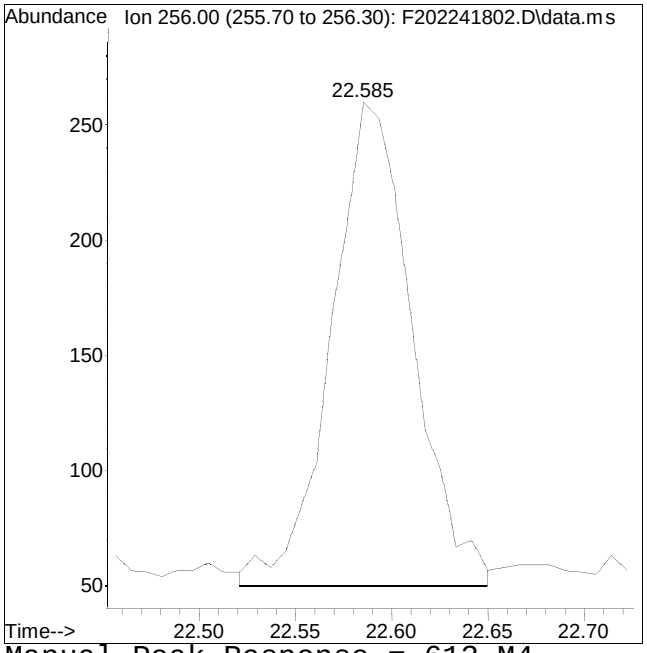
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #21: Cl3-BZ#17



Original Peak Response = 580



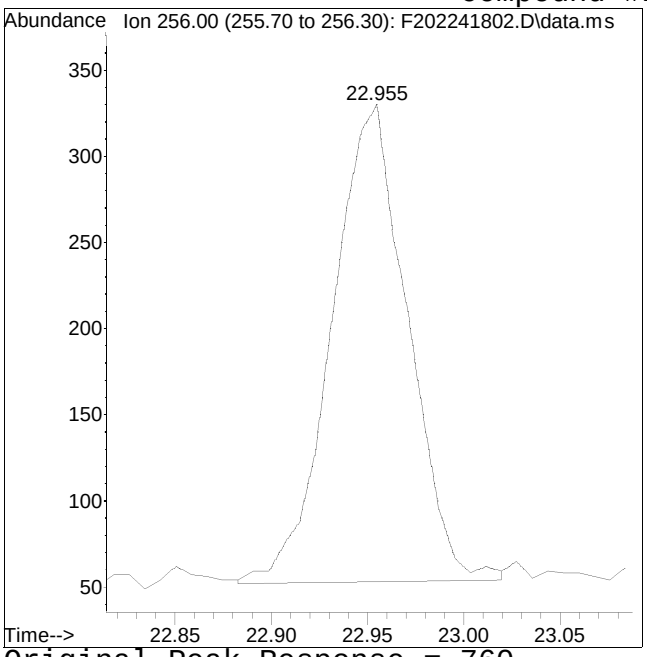
Manual Peak Response = 613 M4

M4 = Poor automated baseline construction.

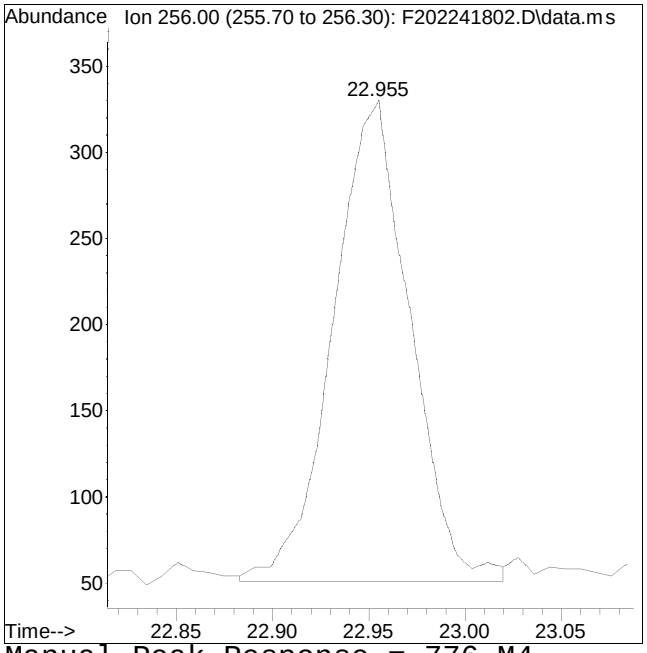
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #23: Cl3-BZ#27



Original Peak Response = 760



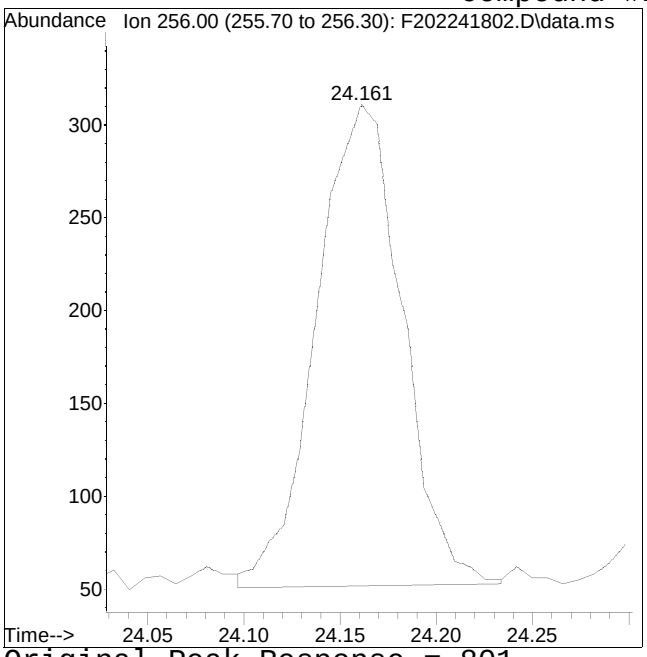
Manual Peak Response = 776 M4

M4 = Poor automated baseline construction.

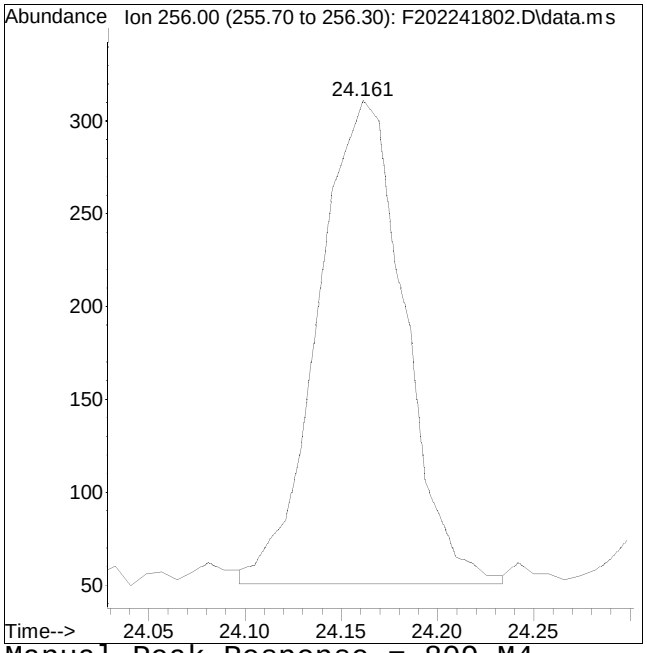
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #29: Cl3-BZ#34



Original Peak Response = 801



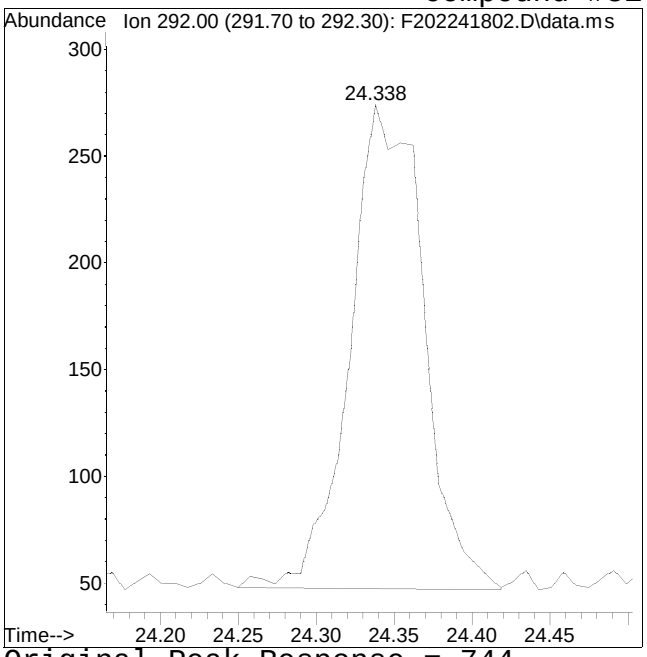
Manual Peak Response = 809 M4

M4 = Poor automated baseline construction.

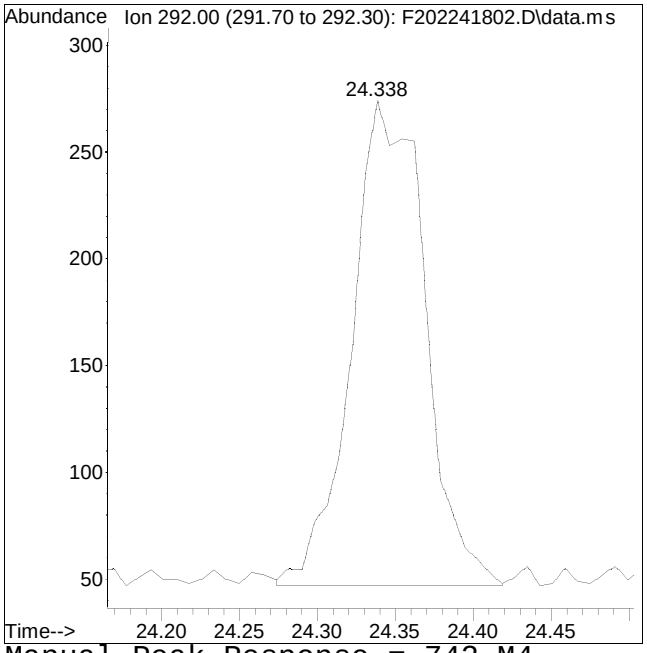
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #31: Cl4-BZ#54-RTW



Original Peak Response = 744



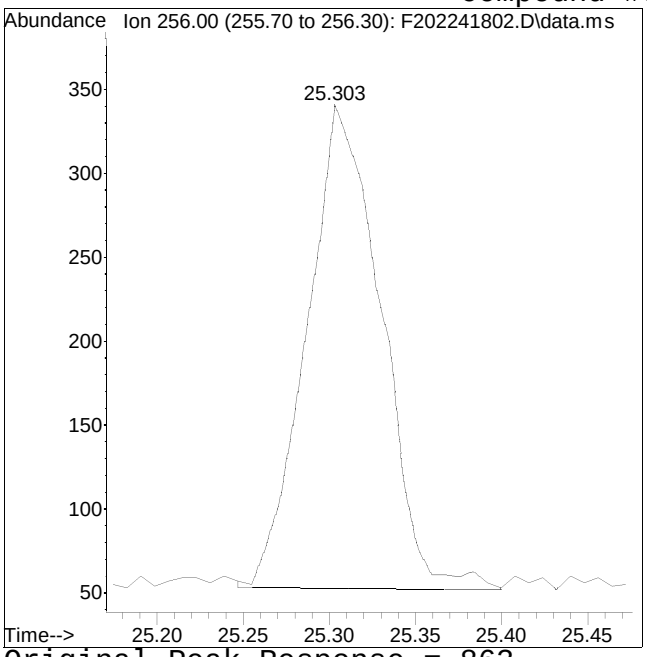
Manual Peak Response = 742 M4

M4 = Poor automated baseline construction.

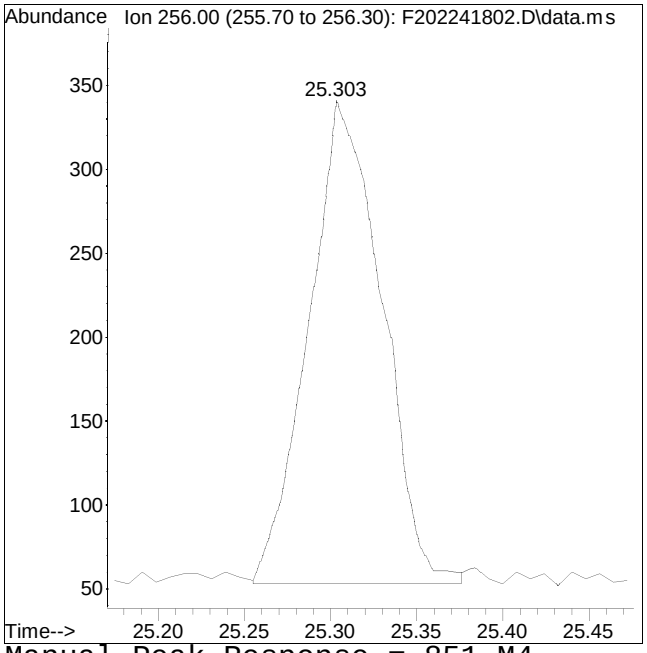
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #39: Cl3-BZ#25



Original Peak Response = 863



Manual Peak Response = 851 M4

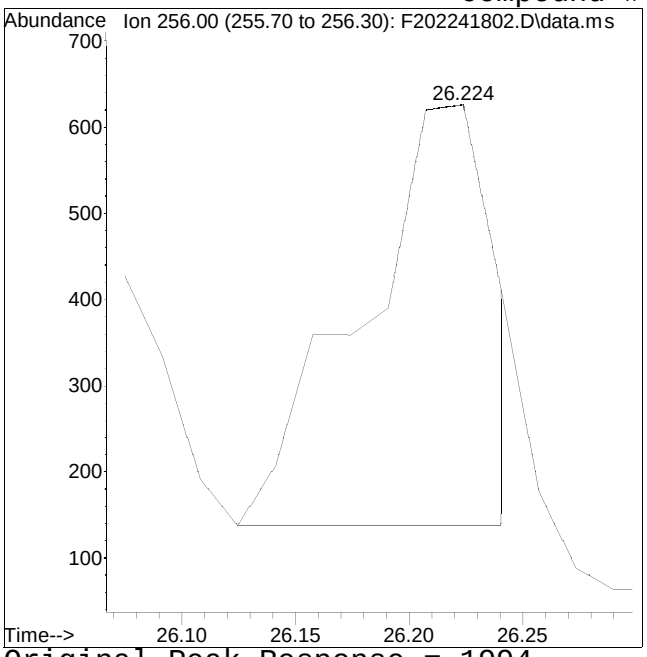
M4 = Poor automated baseline construction.

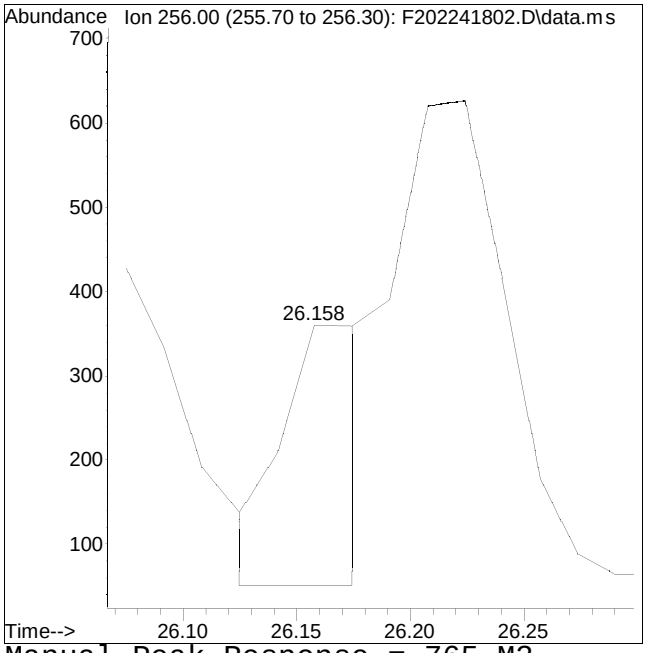
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #43: Cl3-BZ#33





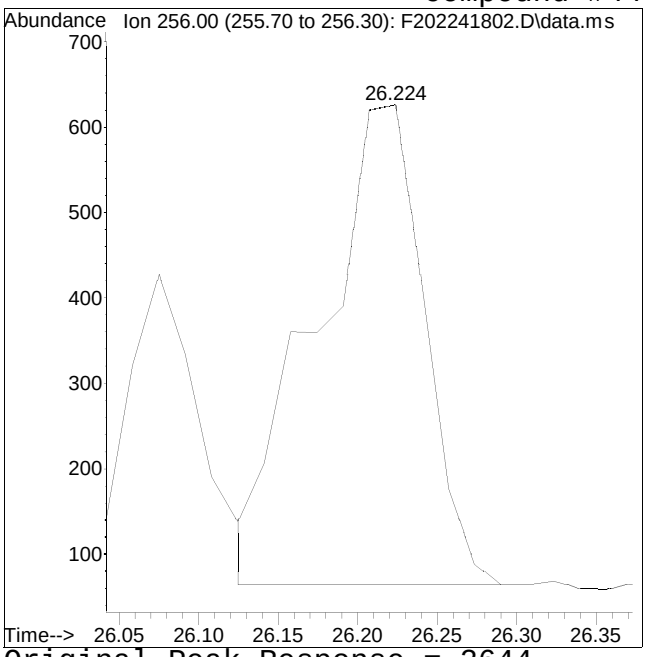
Original Peak Response = 1994 Manual Peak Response = 765 M3

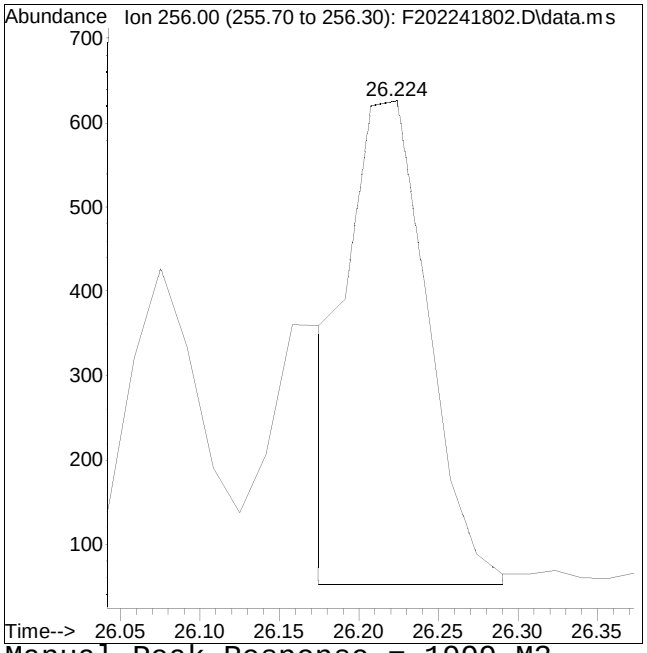
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #44: Cl3-BZ#21/#20





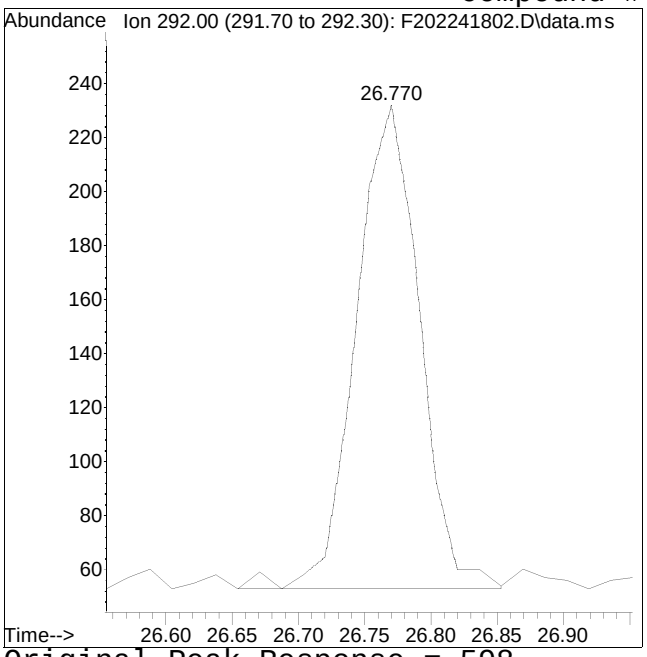
Original Peak Response = 2644 Manual Peak Response = 1999 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

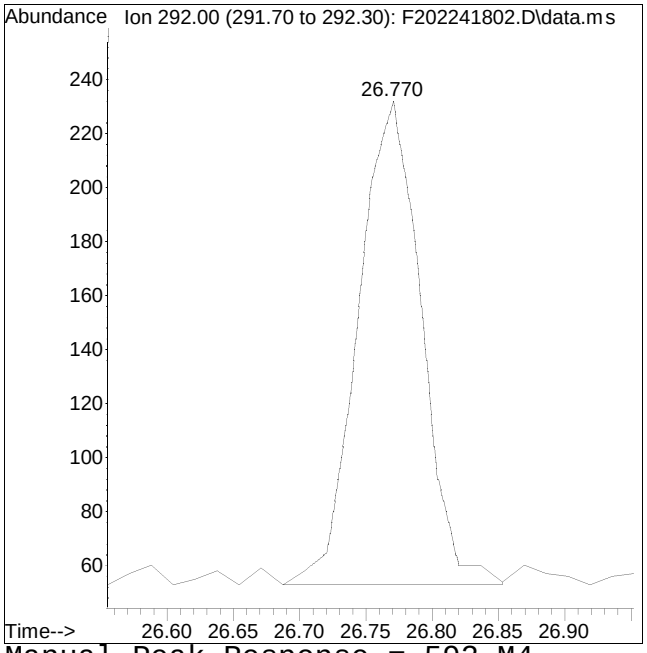
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #46: Cl4-BZ#45



Original Peak Response = 598



Manual Peak Response = 592 M4

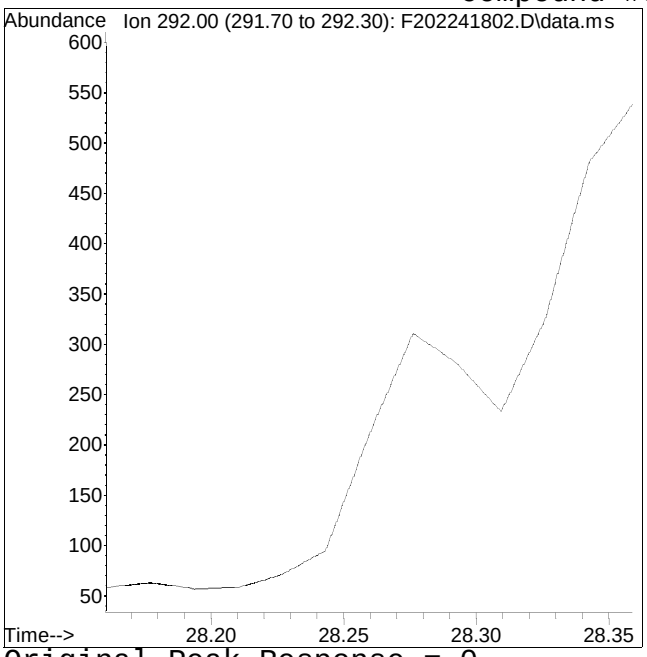
M4 = Poor automated baseline construction.

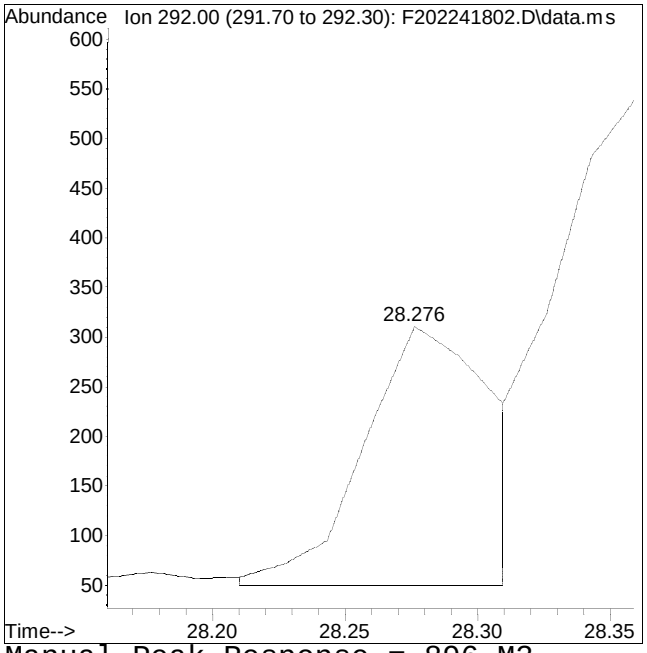
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #56: Cl4-BZ#47





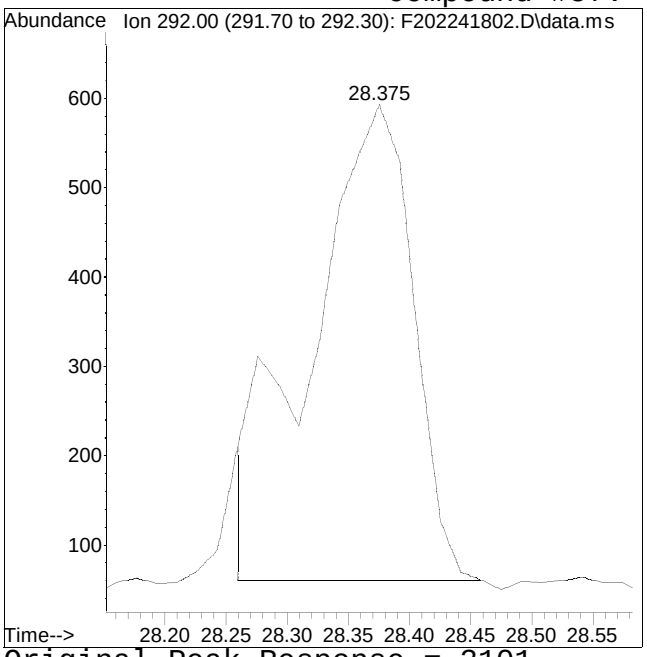
Original Peak Response = 0 Manual Peak Response = 896 M3

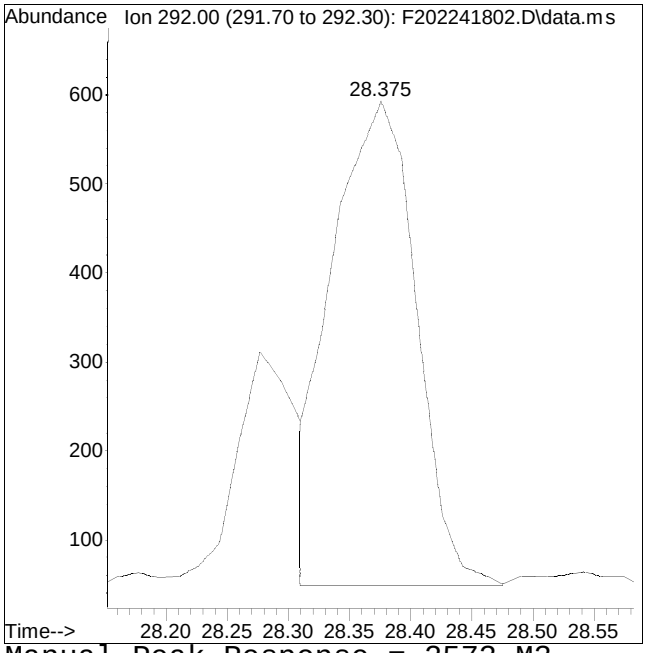
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #57: Cl4-BZ#65/#75/#62





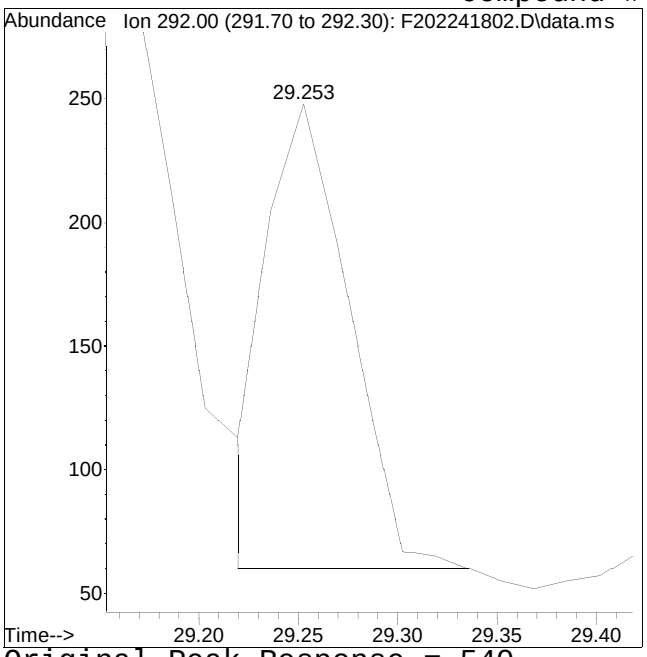
Original Peak Response = 3101 Manual Peak Response = 2573 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

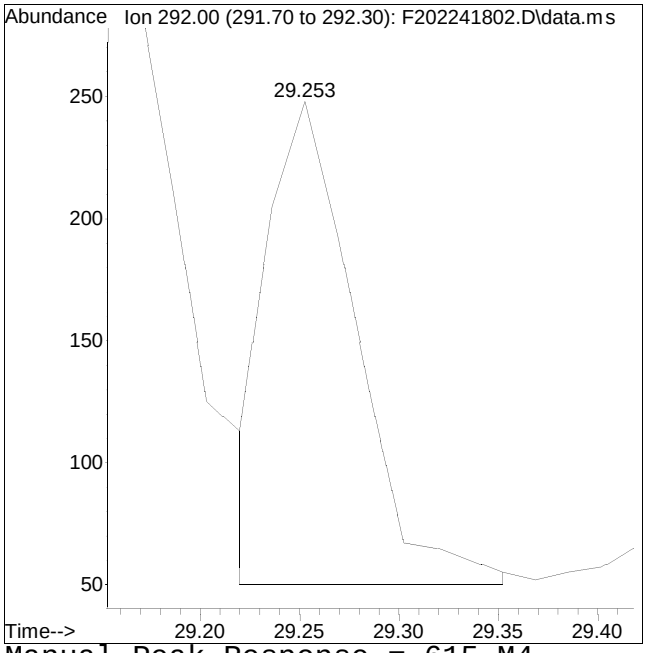
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #62: Cl4-BZ#42



Original Peak Response = 540



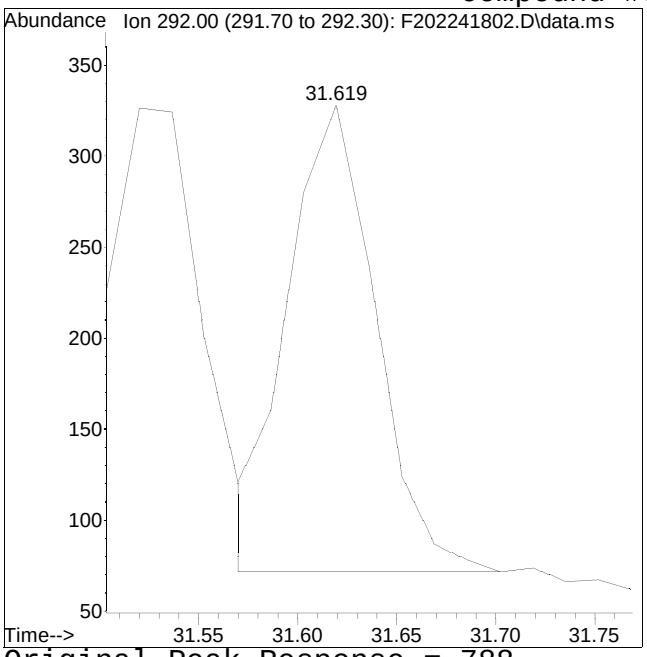
Manual Peak Response = 615 M4

M4 = Poor automated baseline construction.

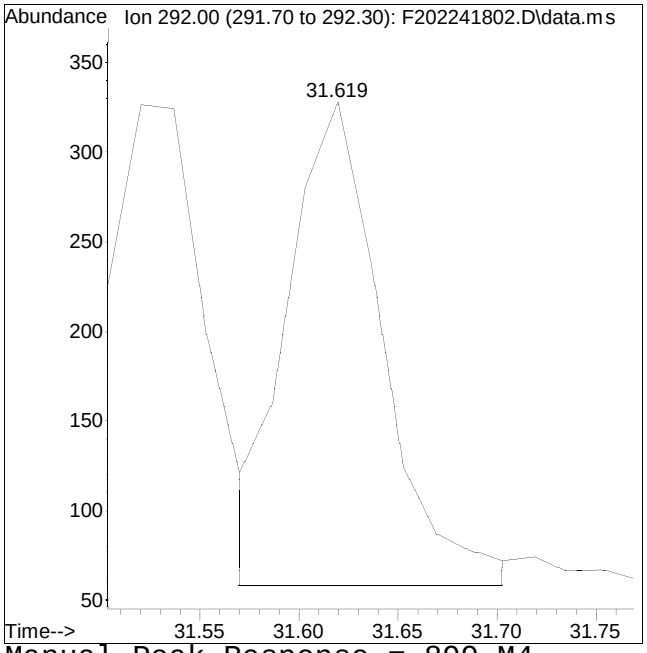
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #81: Cl4-BZ#63



Original Peak Response = 788



Manual Peak Response = 899 M4

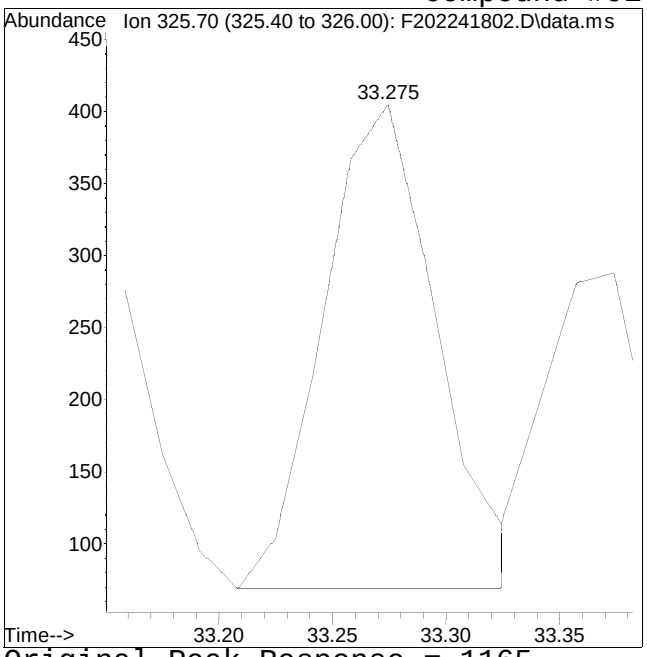
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

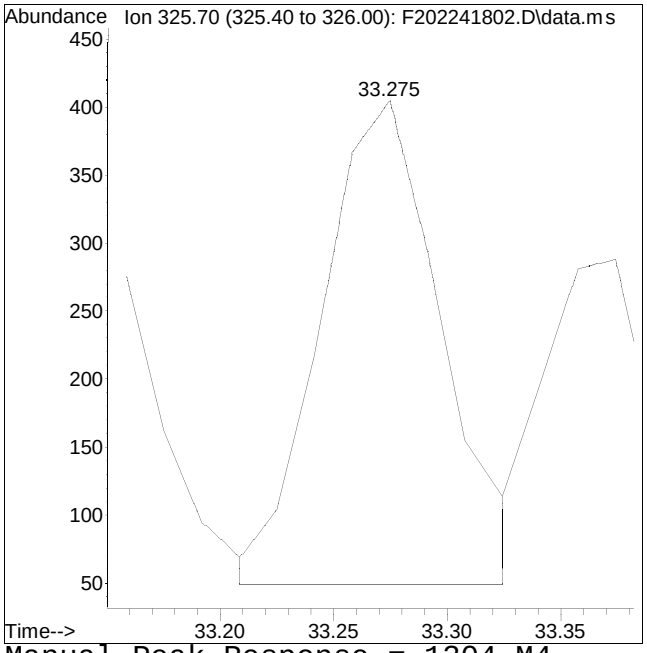
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 1165



Manual Peak Response = 1304 M4

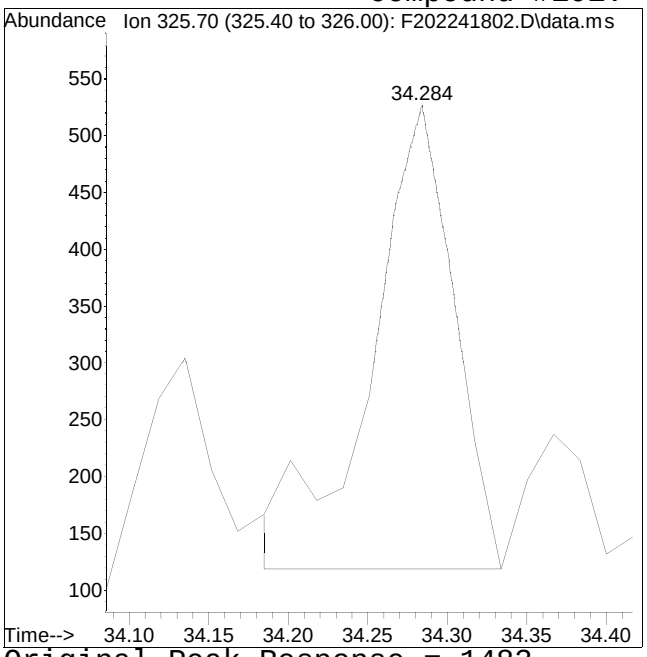
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

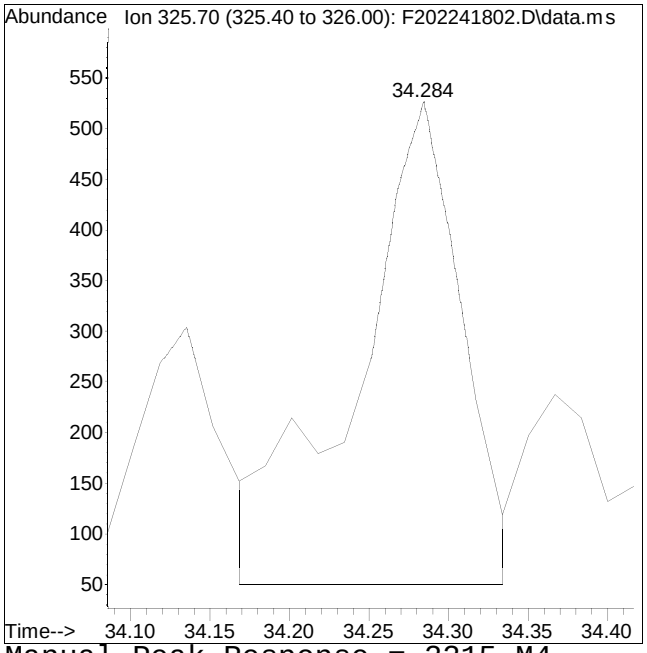
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 1483



Manual Peak Response = 2215 M4

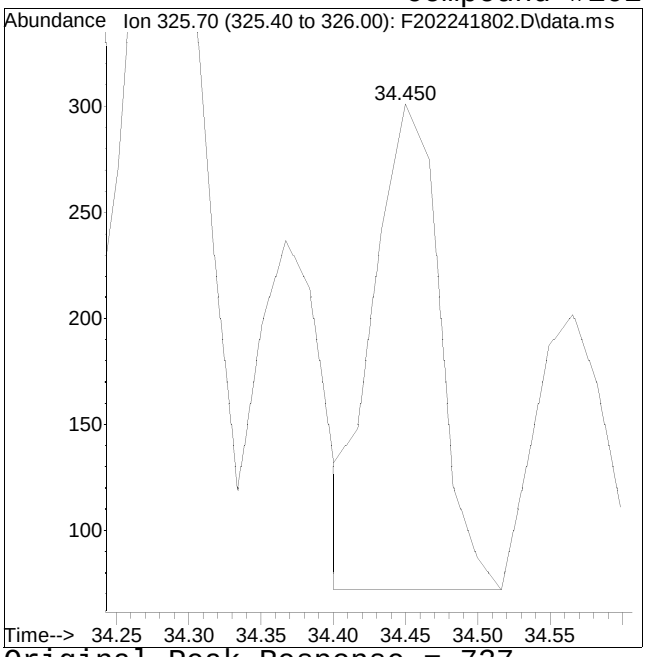
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

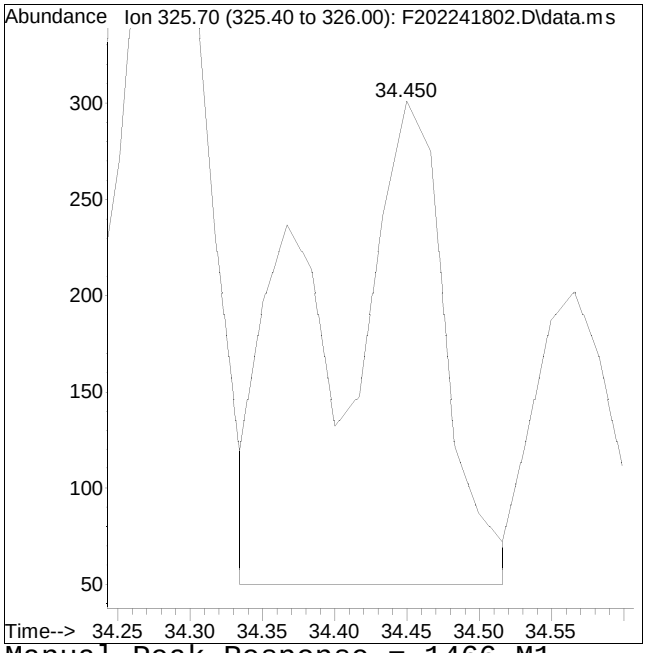
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 737



Manual Peak Response = 1466 M1

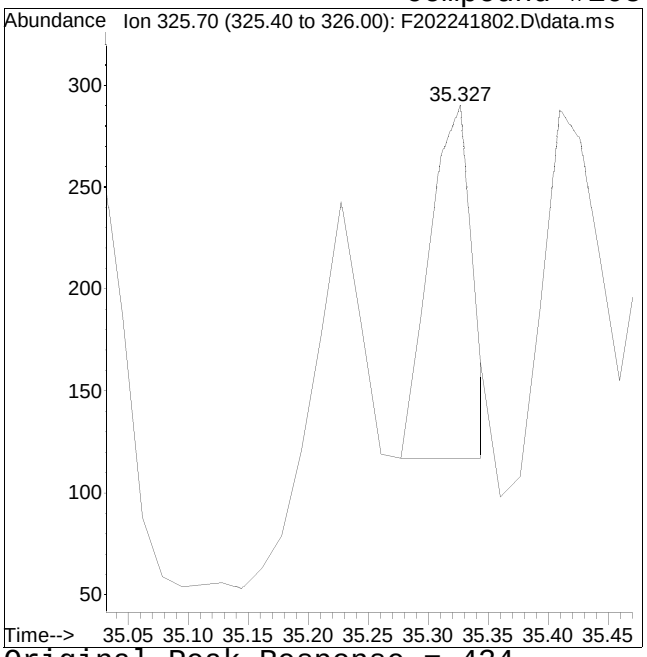
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

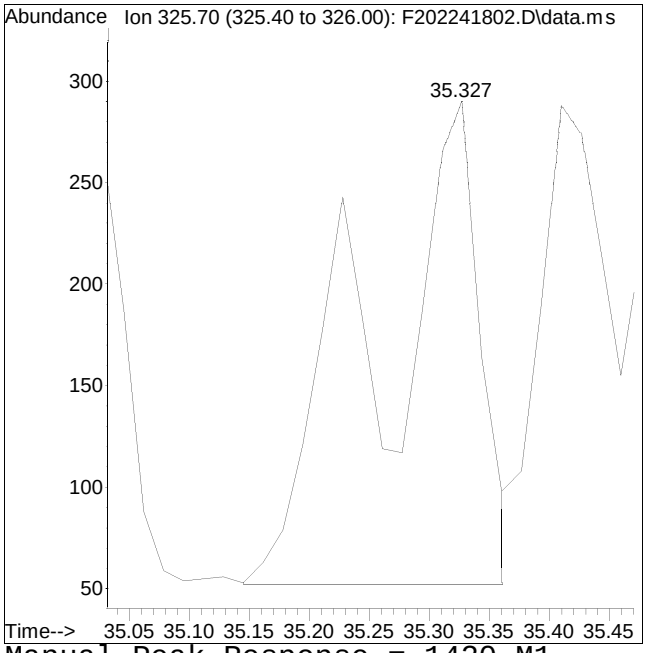
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 434



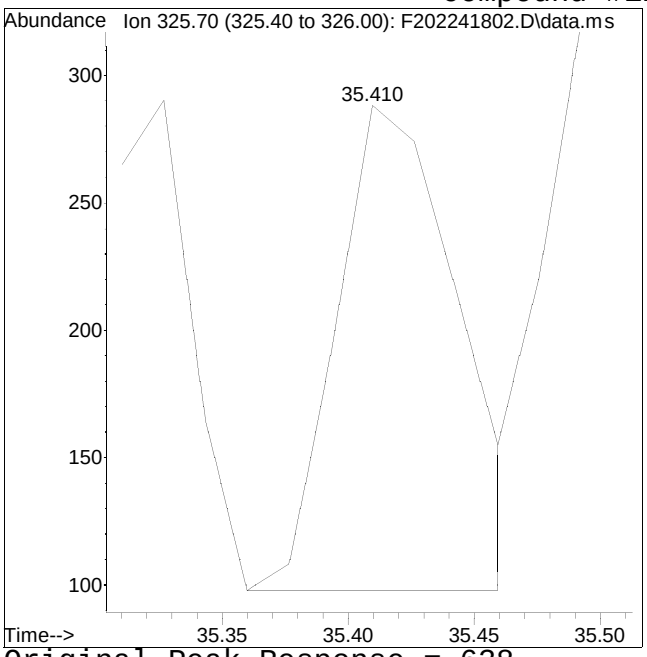
Manual Peak Response = 1420 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

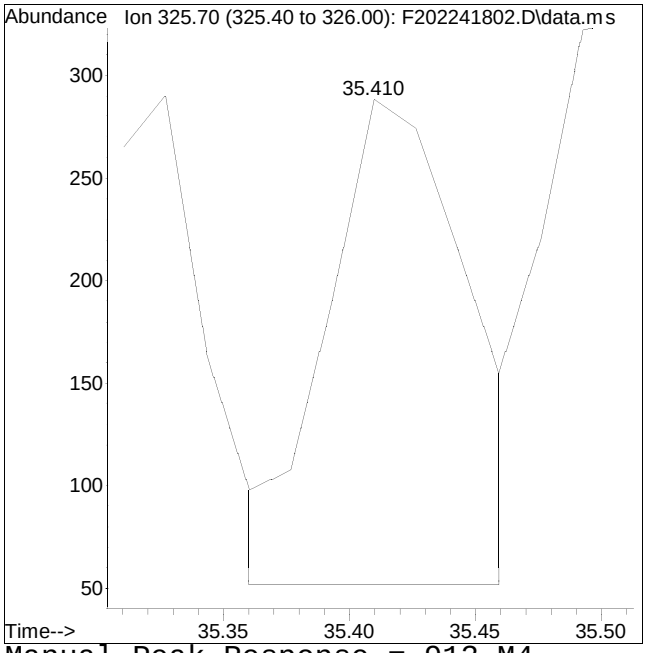
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #116: Cl5-BZ#117



Original Peak Response = 638



Manual Peak Response = 913 M4

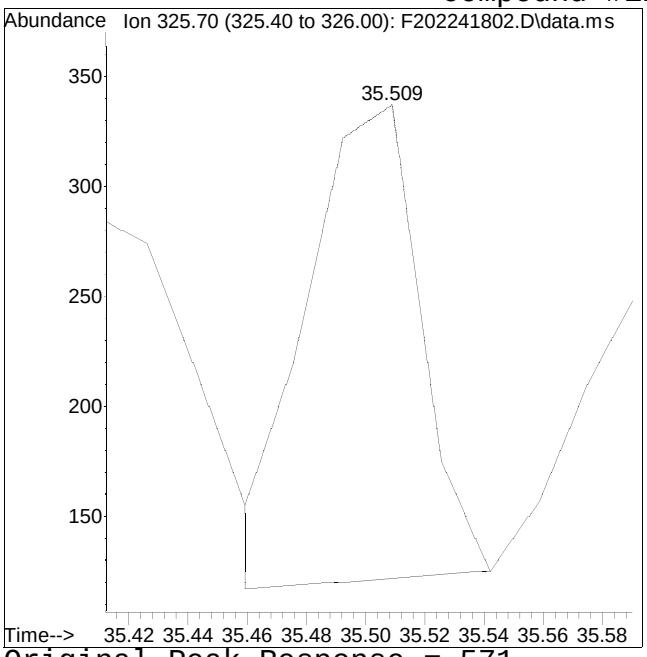
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

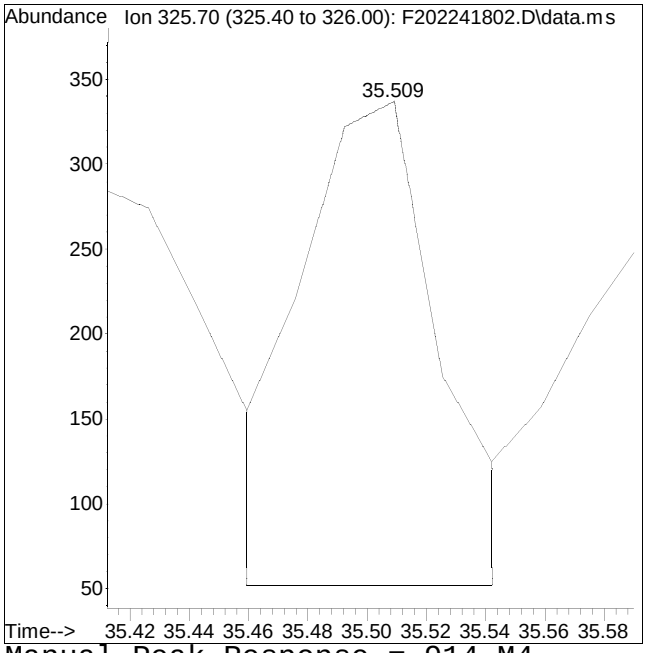
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #117: Cl5-BZ#115



Original Peak Response = 571



Manual Peak Response = 914 M4

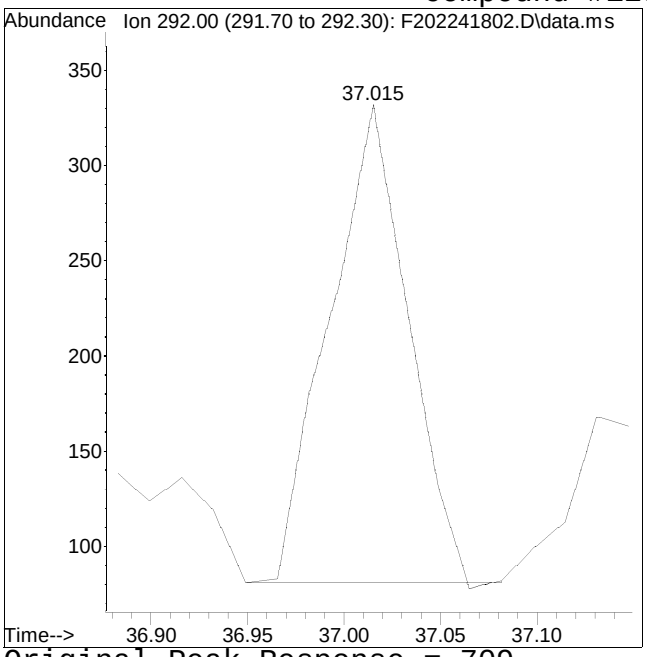
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

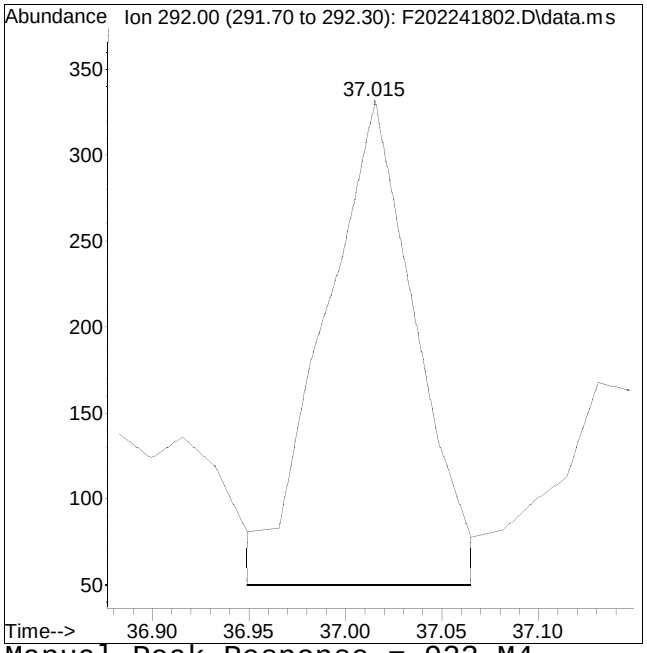
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 709



Manual Peak Response = 923 M4

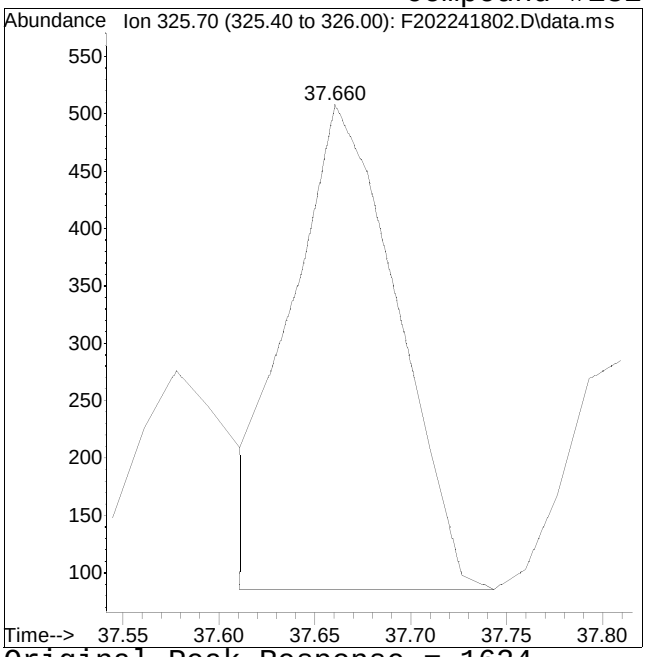
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

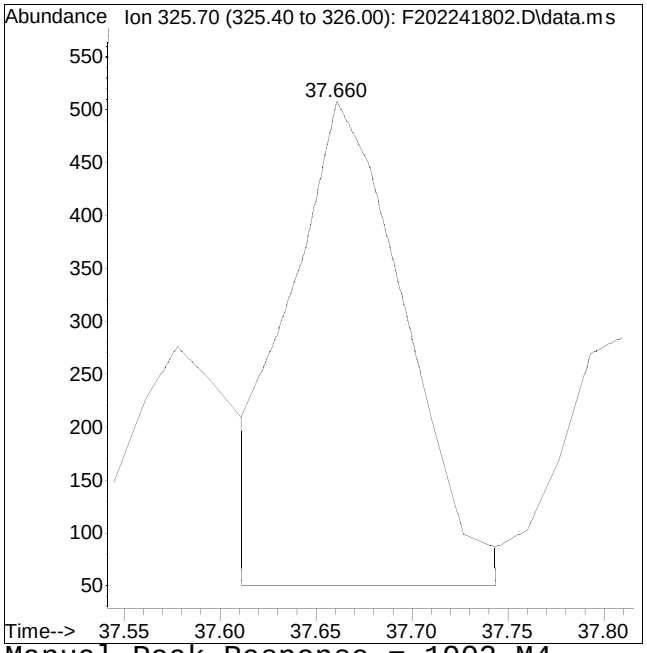
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 1624



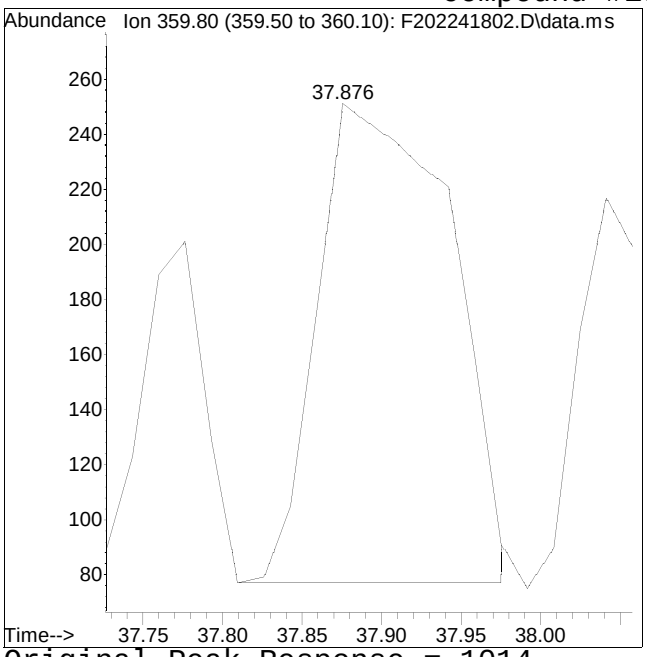
Manual Peak Response = 1902 M4

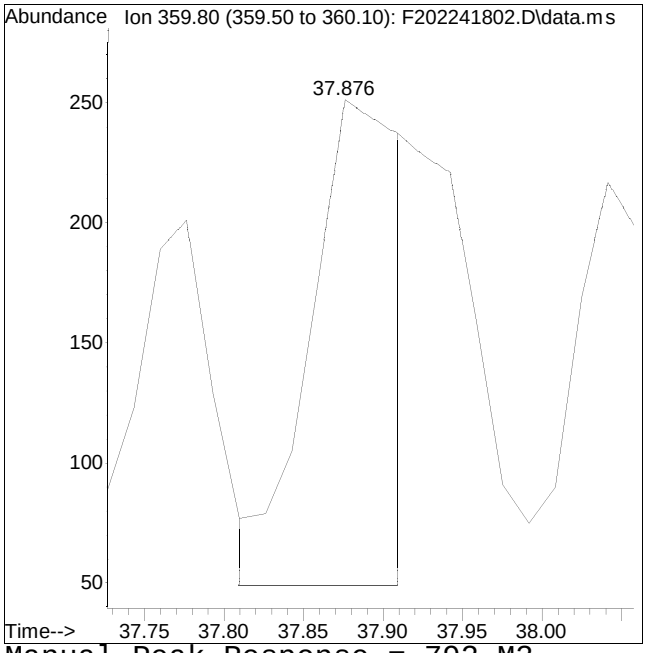
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #139: Cl6-BZ#133





Original Peak Response = 1014 Manual Peak Response = 792 M3

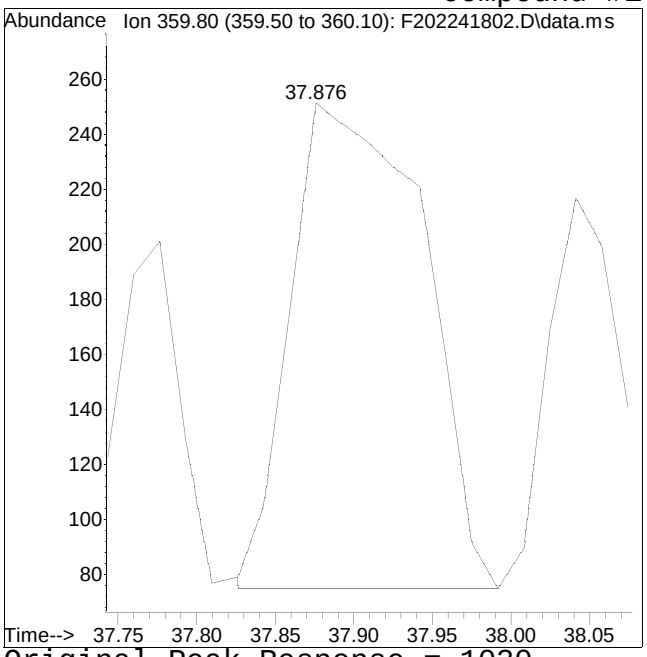
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

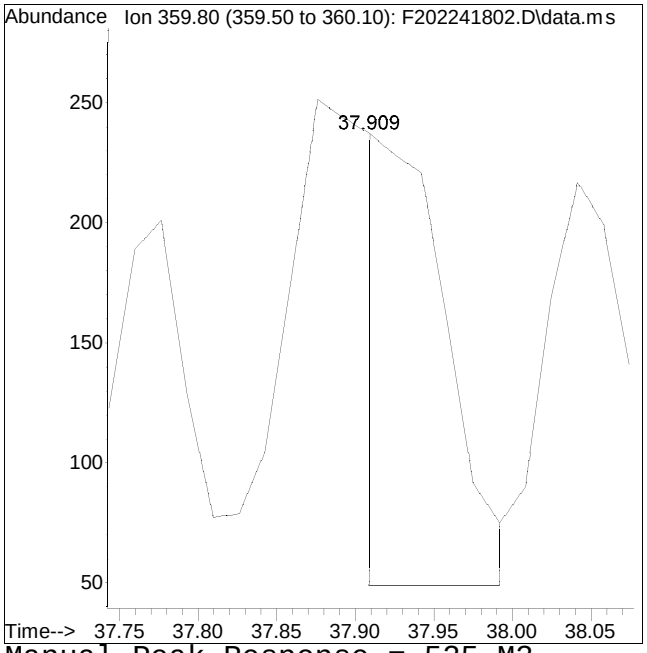
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #140: Cl6-BZ#142





Original Peak Response = 1030 Manual Peak Response = 525 M3

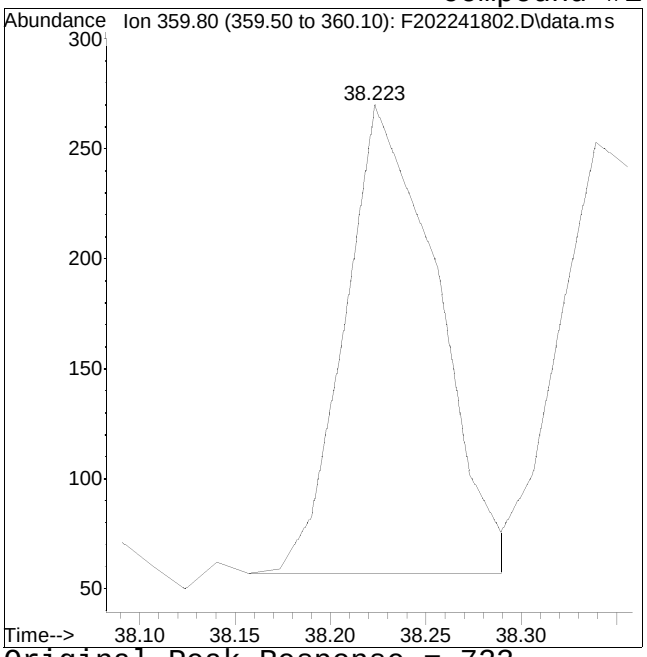
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

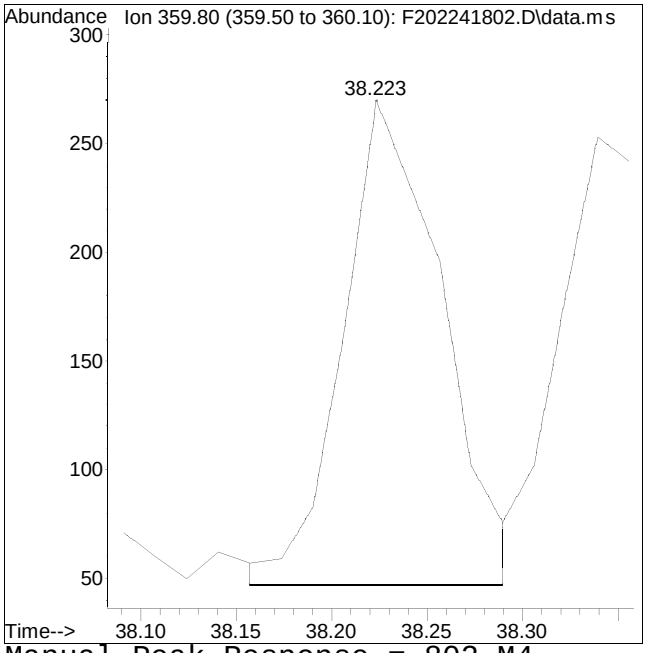
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241802.D
Date Inj'd : 2/24/2018 10:14 am
Sample : I202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:49 am

Compound #144: Cl6-BZ#165



Original Peak Response = 723



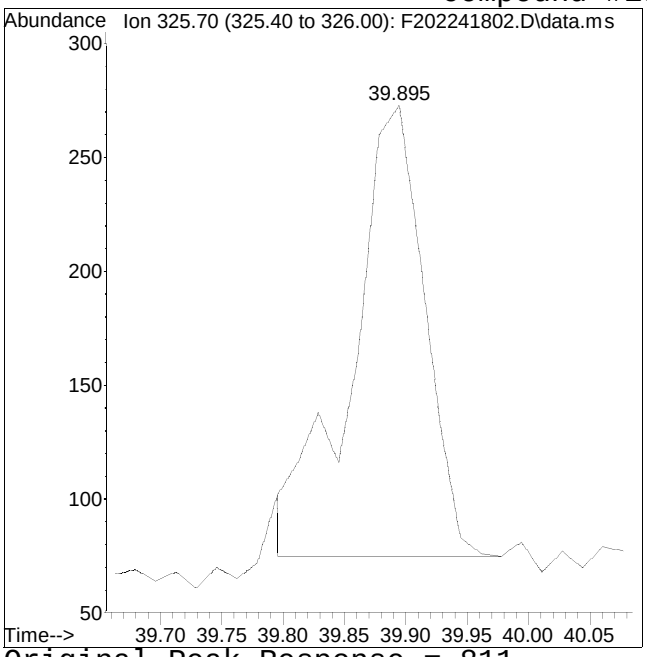
Manual Peak Response = 802 M4

M4 = Poor automated baseline construction.

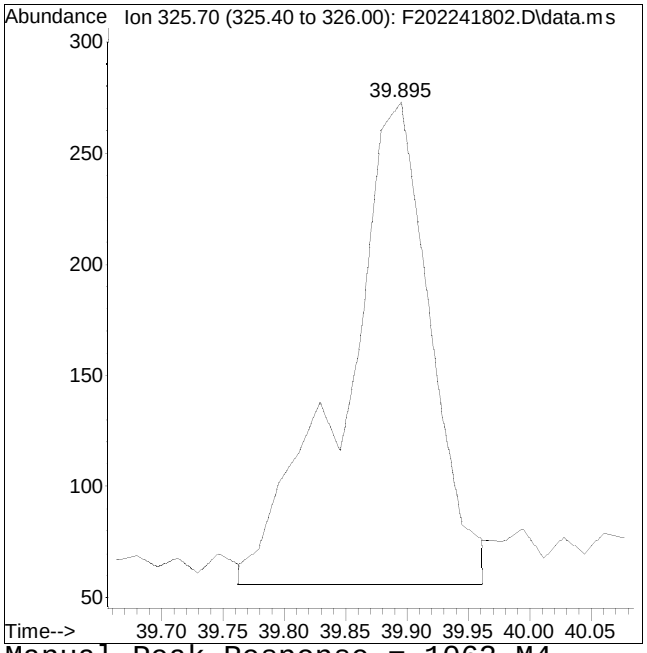
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #156: Cl5-BZ#105



Original Peak Response = 811



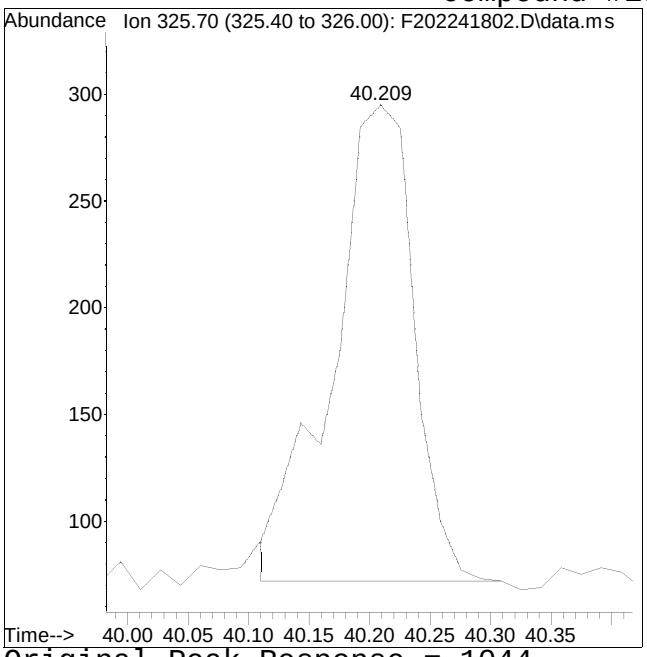
Manual Peak Response = 1062 M4

M4 = Poor automated baseline construction.

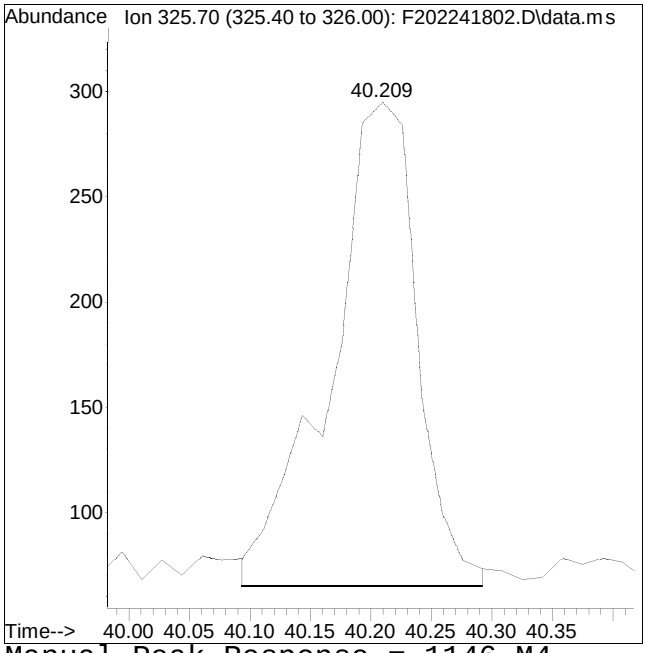
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #158: Cl5-BZ#127



Original Peak Response = 1044



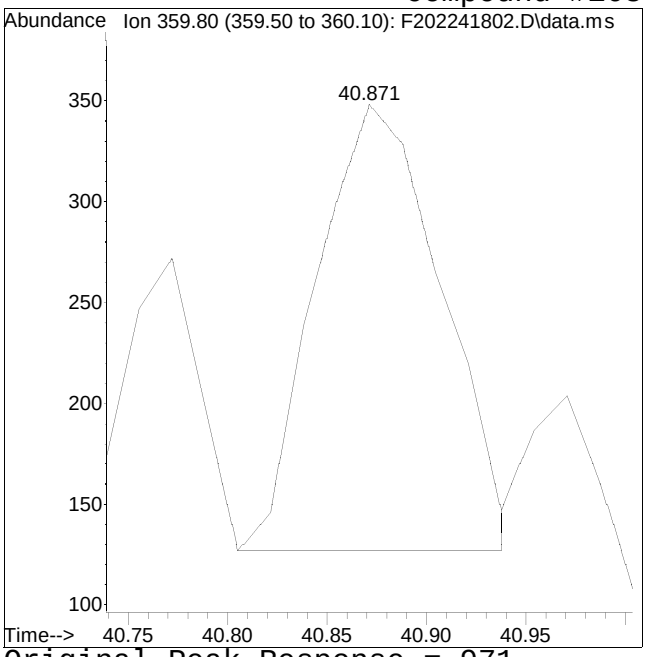
Manual Peak Response = 1146 M4

M4 = Poor automated baseline construction.

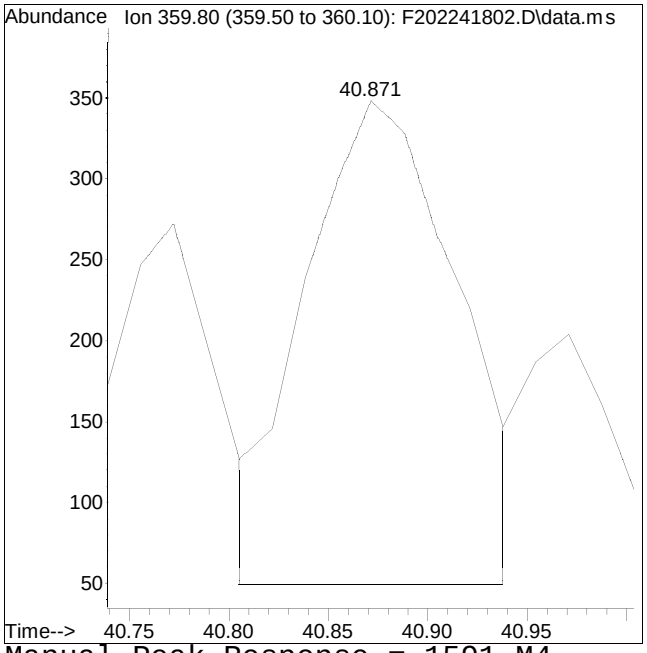
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 971



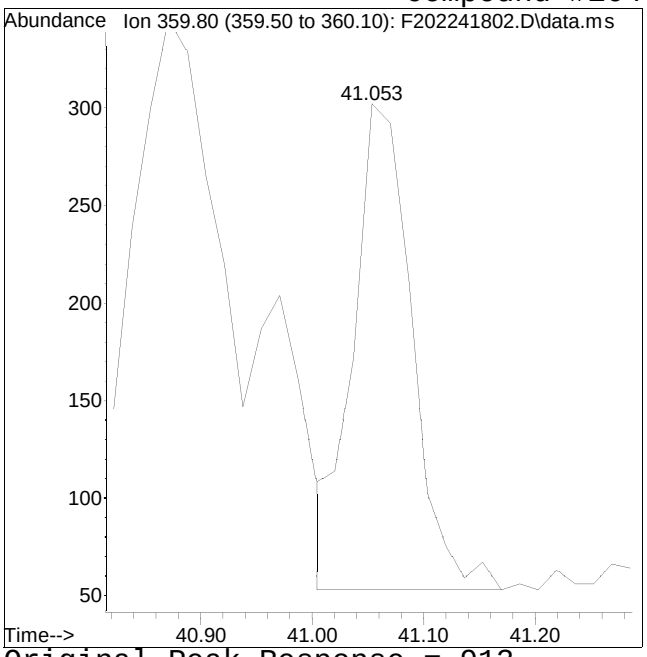
Manual Peak Response = 1591 M4

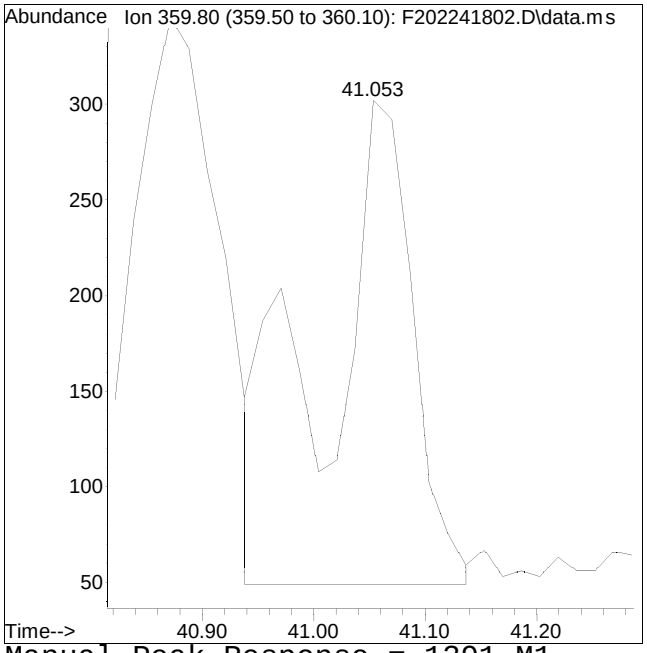
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #164: Cl6-BZ#129/#158



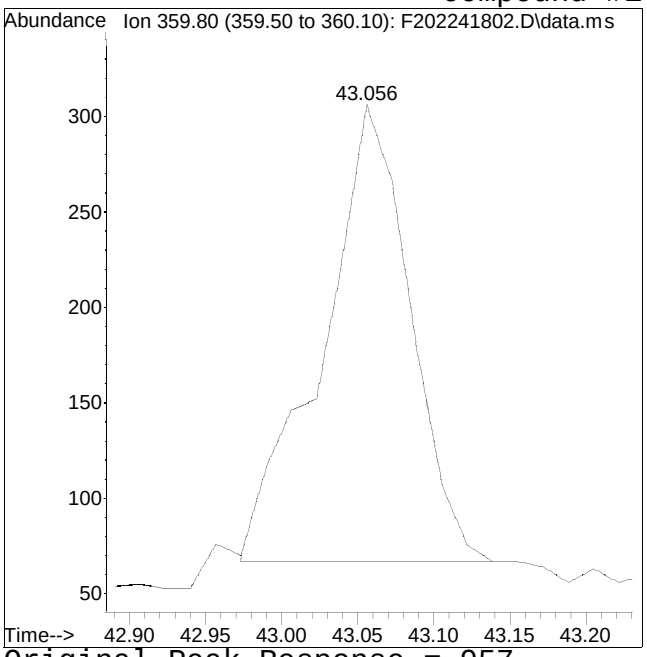


Original Peak Response = 913 Manual Peak Response = 1391 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

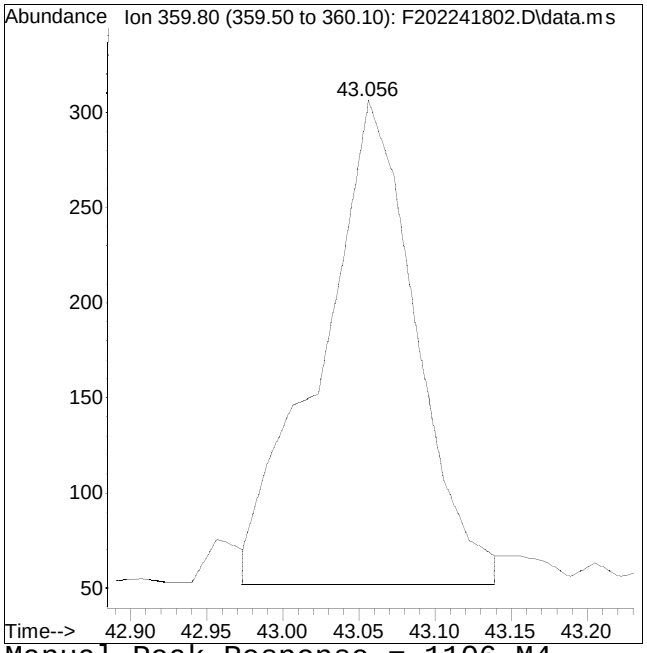
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #175: Cl6-BZ#167



Original Peak Response = 957



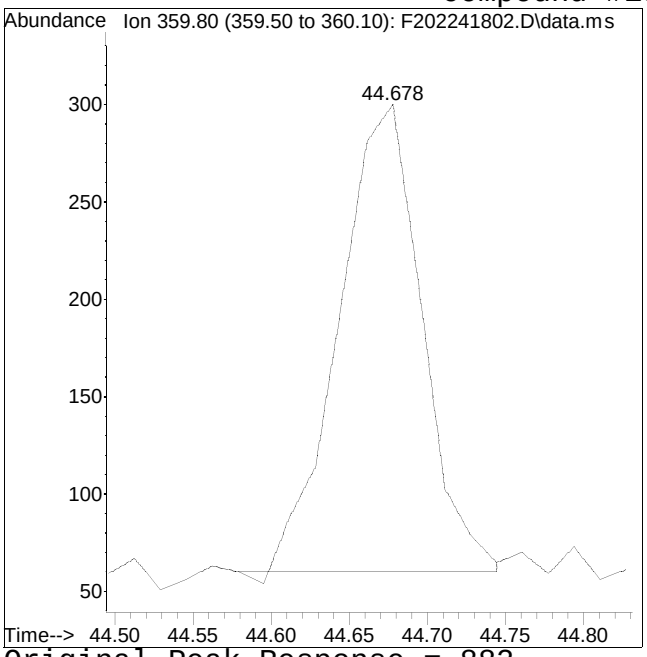
Manual Peak Response = 1106 M4

M4 = Poor automated baseline construction.

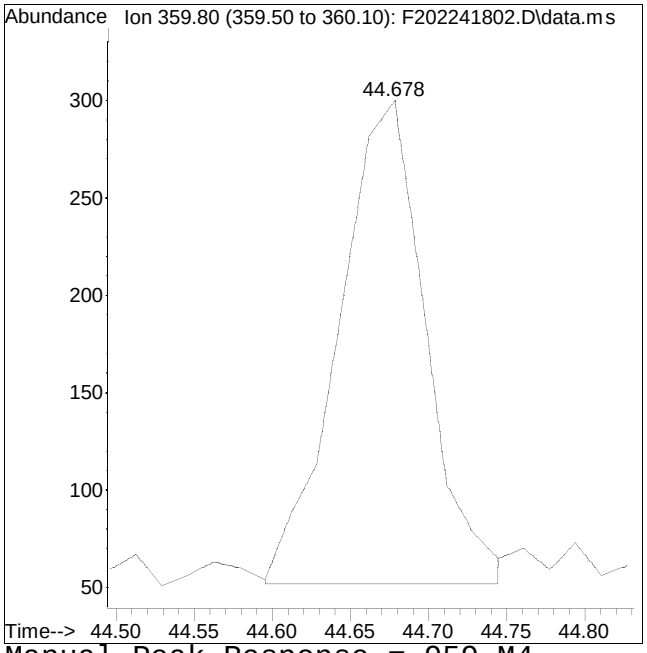
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #187: Cl6-BZ#156



Original Peak Response = 882



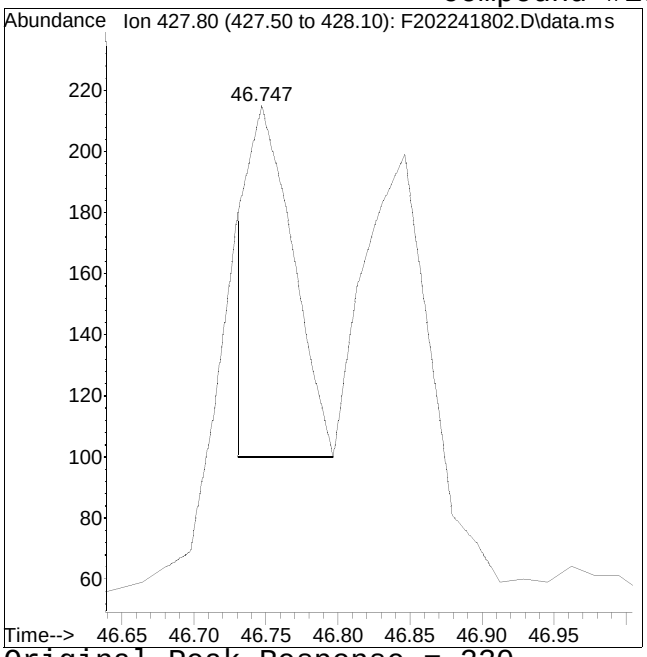
Manual Peak Response = 959 M4

M4 = Poor automated baseline construction.

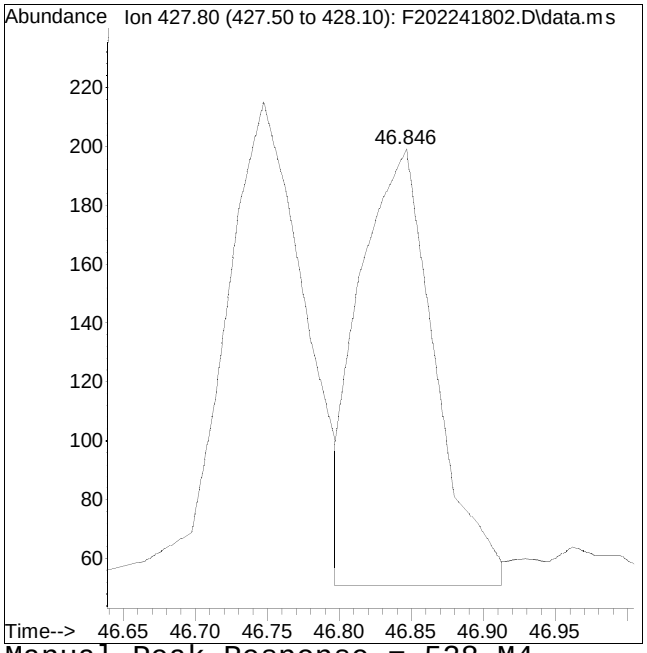
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #195: Cl8-BZ#201



Original Peak Response = 230



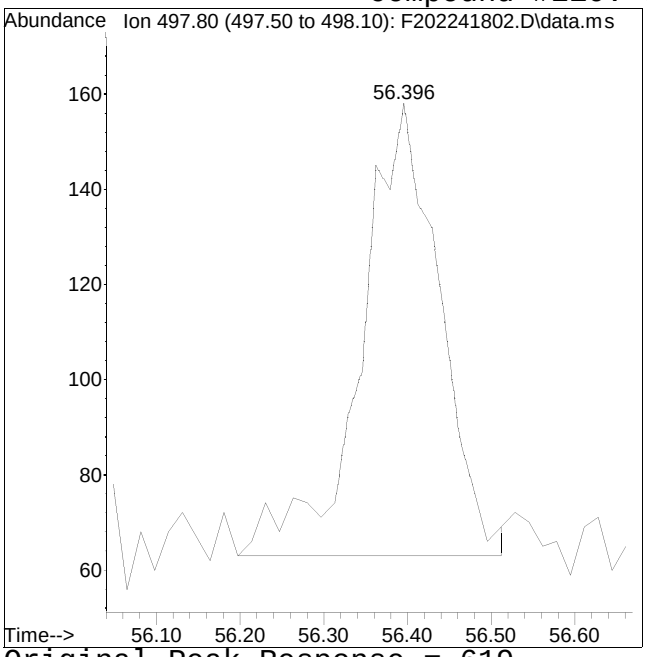
Manual Peak Response = 528 M4

M4 = Poor automated baseline construction.

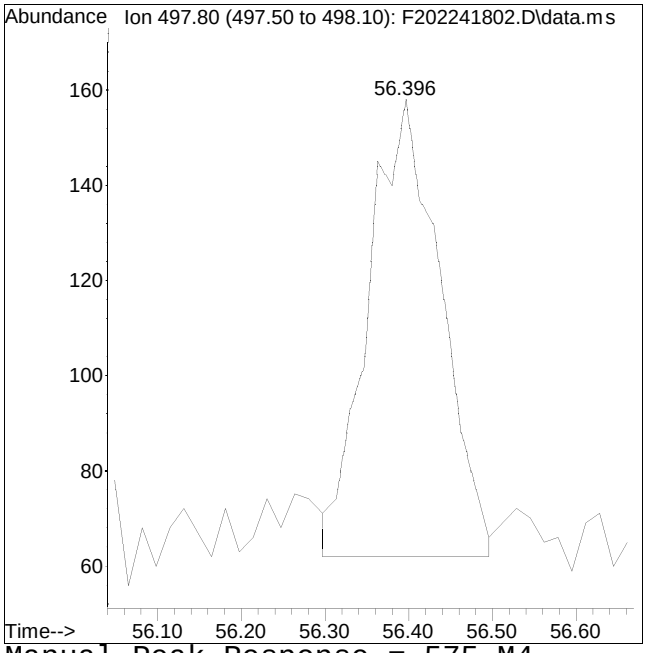
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241802.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 10:14 am Instrument : BNA2
Sample : I202241801 Quant Date : 2/25/2018 10:49 am

Compound #210: Cl10-BZ#209-Cal/RTW



Original Peak Response = 619



Manual Peak Response = 575 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	568374	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.943	406	305395	200.000	ng/mL	0.02
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	987	0.695	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.69%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	1374	0.658	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.66%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	1246	0.569	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.57%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	1376	0.720	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 0.72%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.583	188	2586	0.673	ng/mL	91
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.666	188	2691	0.718	ng/mL	98
7) Cl1-BZ#3-RTW	17.133	188	2623	0.703	ng/mL	94
8) Cl2-BZ#4/#10-RTW	17.551	222	3107	1.298	ng/mL	99
9) Cl2-BZ#9	19.111	222	1951	0.692	ng/mL	99
10) Cl2-BZ#7	19.207	222	1899	0.698	ng/mL	97
11) Cl2-BZ#6	19.642	222	2086	0.698	ng/mL	93
12) Cl2-BZ#5	20.084	222	1939	0.673	ng/mL	100
13) Cl2-BZ#8	20.229	222	2224	0.702	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.017	256	1100	0.662	ng/mL	100
17) Cl2-BZ#14	21.153	222	2095	0.720	ng/mL	96
18) Cl3-BZ#30	21.572	256	1738	0.682	ng/mL	100
19) Cl3-BZ#18	22.384	256	1239	0.705	ng/mL	92
20) Cl2-BZ#11	22.505	222	2207	0.691	ng/mL	99
21) Cl3-BZ#17	22.593	256	1098	0.661	ng/mL	97
22) Cl2-BZ#12	22.907	222	1922	0.691	ng/mL	96
23) Cl3-BZ#27	22.955	256	1546	0.675	ng/mL	99
24) Cl2-BZ#13	23.204	222	2375	0.742	ng/mL	95
25) Cl3-BZ#24	23.220	256	1608	0.712	ng/mL	100
26) Cl3-BZ#16	23.566	256	995	0.688	ng/mL	100
27) Cl3-BZ#32	23.767	256	1725	0.698	ng/mL	99
28) Cl2-BZ#15-RTW	23.928	222	2482	0.751	ng/mL	97

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.161	256	1575	0.688	ng/mL	98
30) Cl3-BZ#23	24.346	256	1480	0.654	ng/mL	92
31) Cl4-BZ#54-RTW	24.346	292	1450	0.643	ng/mL	99
32) Cl3-BZ#29-Cal	24.571	256	1609	0.721	ng/mL	98
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	1186	0.648	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.102	256	1732	0.717	ng/mL	95
39) Cl3-BZ#25	25.303	256	1784	0.731	ng/mL	95
40) Cl4-BZ#53	25.793	292	1329	0.670	ng/mL	94
41) Cl3-BZ#-31	25.876	256	2560M4	0.830	ng/mL	
42) Cl3-BZ#28	26.075	256	2352	0.749	ng/mL	100
43) Cl3-BZ#33	26.174	256	1576M3	0.556	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	4258M3	1.513	ng/mL	
45) Cl4-BZ#51	26.207	292	1376	0.635	ng/mL	89
46) Cl4-BZ#45	26.770	292	1137	0.696	ng/mL	87
47) Cl3-BZ#22	27.002	256	1999	0.706	ng/mL	94
48) Cl4-BZ#73/#46	27.151	292	3121	1.401	ng/mL	99
49) Cl4-BZ#69	27.432	292	1841	0.710	ng/mL	99
50) Cl4-BZ#43	27.531	292	1230	0.670	ng/mL	98
51) Cl3-BZ#36	27.564	256	2150	0.659	ng/mL	94
52) Cl4-BZ#52	27.664	292	1499	0.683	ng/mL	99
53) Cl4-BZ#48	27.829	292	1300	0.706	ng/mL	99
54) Cl4-BZ#49	27.978	292	1462	0.728	ng/mL	100
55) Cl5-BZ#104-RTW	28.193	326	1517	0.697	ng/mL	94
56) Cl4-BZ#47	28.293	292	1711M3	0.797	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	5095M3	1.943	ng/mL	
58) Cl3-BZ#39	28.425	256	2083	0.713	ng/mL	96
59) Cl3-BZ#38	28.557	256	1931	0.671	ng/mL	96
60) Cl4-BZ#44	28.938	292	1336	0.757	ng/mL	95
61) Cl4-BZ#59	29.170	292	1946	0.762	ng/mL	89
62) Cl4-BZ#42	29.253	292	1099	0.655	ng/mL	98
63) Cl4-BZ#71	29.484	292	1923	0.703	ng/mL	96
64) Cl3-BZ#35	29.617	256	2091	0.739	ng/mL	98
65) Cl4-BZ#41	29.716	292	1075	0.673	ng/mL	94
66) Cl4-BZ#72	29.848	292	2002	0.707	ng/mL	100
67) Cl5-BZ#96	29.865	326	1629	0.694	ng/mL	95
68) Cl5-BZ#103	29.997	326	1190	0.712	ng/mL	99
69) Cl4-BZ#68/#64	30.146	292	3508	1.338	ng/mL	93

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	875	0.688	ng/mL	98
71) Cl3-BZ#37-RTW	30.477	256	2830	0.761	ng/mL	94
72) Cl5-BZ#100	30.477	326	1270	0.671	ng/mL	91
73) Cl5-BZ#94	30.593	326	903	0.624	ng/mL	85
74) Cl4-BZ#57	30.676	292	1851	0.656	ng/mL	97
75) Cl4-BZ#67/#58	31.007	292	3797	1.344	ng/mL	98
76) Cl5-BZ#102	31.057	326	1385	0.664	ng/mL	95
77) Cl4-BZ#61	31.371	292	1896	0.685	ng/mL	98
78) Cl5-BZ#98	31.388	326	1268	0.679	ng/mL	100
79) Cl4-BZ#76	31.520	292	1984	0.653	ng/mL	100
80) Cl5-BZ#93	31.520	326	947	0.619	ng/mL	85
81) Cl4-BZ#63	31.619	292	1866M4	0.702	ng/mL	
82) Cl5-BZ#121/#95/#88	31.686	326	4008	1.998	ng/mL	100
83) Cl4-BZ#74	31.884	292	2010	0.698	ng/mL	90
84) Cl6-BZ#155-RTW	32.033	360	1506	0.676	ng/mL	99
85) Cl4-BZ#70	32.066	292	2048	0.609	ng/mL	92
86) Cl4-BZ#66	32.348	292	1874	0.693	ng/mL	85
87) Cl5-BZ#91	32.232	326	1249	0.709	ng/mL	99
88) Cl4-BZ#80	32.612	292	2019	0.745	ng/mL	98
89) Cl4-BZ#55	32.811	292	2038	0.728	ng/mL	95
90) Cl5-BZ#92	32.861	326	1163	0.687	ng/mL	99
91) Cl5-BZ#89/#84	33.142	326	2306	1.293	ng/mL	98
92) Cl5-BZ#101/#90	33.274	326	2471M4	1.351	ng/mL	
94) Cl4-BZ#56	33.258	292	2002	0.696	ng/mL	94
95) Cl5-BZ#113	33.374	326	1486	0.669	ng/mL	95
96) Cl5-BZ#99	33.639	326	1451	0.707	ng/mL	97
97) Cl6-BZ#150	33.688	360	1627	0.691	ng/mL	96
98) Cl4-BZ#60	33.705	292	2083	0.647	ng/mL	97
99) Cl6-BZ#152	34.052	360	1746	0.673	ng/mL	96
100) Cl5-BZ#119	34.135	326	1612	0.625	ng/mL	91
101) Cl5-BZ#83/#125/#112	34.284	326	4295M4	2.037	ng/mL	
102) Cl5-BZ#86/#109	34.449	326	2830M1	1.366	ng/mL	
103) Cl5-BZ#97	34.565	326	1068	0.665	ng/mL	98
104) Cl5-BZ#116	35.029	326	1490	0.696	ng/mL	98
105) Cl5-BZ#87/#111	35.310	326	2870M1	1.349	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	1765	0.672	ng/mL	99
109) Cl6-BZ#148	34.698	360	1222	0.701	ng/mL	96
110) Cl4-BZ#79	34.814	292	1951	0.735	ng/mL	99
111) Cl6-BZ#154-Cal	35.227	360	1459	0.737	ng/mL	95

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	2361	0.687	ng/mL	89
115) Cl6-BZ#136	35.360	360	1540	0.657	ng/mL	99
116) Cl5-BZ#117	35.409	326	1835M4	0.682	ng/mL	
117) Cl5-BZ#115	35.492	326	1813M4	0.723	ng/mL	
118) Cl5-BZ#85	35.591	326	1230M4	0.755	ng/mL	
119) Cl5-BZ#120	35.724	326	1773	0.716	ng/mL	100
120) Cl5-BZ#110	35.873	326	1758	0.728	ng/mL	100
121) Cl4-BZ#81	36.254	292	2033	0.780	ng/mL	94
123) Cl6-BZ#151	36.254	360	1350	0.763	ng/mL	92
124) Cl6-BZ#135	36.402	360	1260	0.672	ng/mL	90
125) Cl5-BZ#82	36.568	326	1102	0.636	ng/mL	99
126) Cl6-BZ#144	36.601	360	1214	0.637	ng/mL	94
127) Cl6-BZ#147/#149	36.899	360	2662	1.358	ng/mL	98
128) Cl4-BZ#77-RTW	37.015	292	1830M4	0.714	ng/mL	
129) Cl6-BZ#143/#139	37.147	360	2510	1.258	ng/mL	98
130) Cl5-BZ#124	37.296	326	1749	0.682	ng/mL	98
131) Cl5-BZ#108	37.578	326	1801	0.699	ng/mL	95
132) Cl5-BZ#107/#123	37.677	326	3663M4	1.340	ng/mL	
133) Cl6-BZ#140	37.329	360	1320	0.697	ng/mL	96
134) Cl7-BZ#188-Cal/RTW	37.677	394	1468	0.632	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.776	360	1004	0.615	ng/mL	87
138) Cl5-BZ#106	37.809	326	1587	0.583	ng/mL	91
139) Cl6-BZ#133	37.892	360	1370M4	0.650	ng/mL	
140) Cl6-BZ#142	37.925	360	973M3	0.636	ng/mL	
141) Cl5-BZ#118	38.041	326	1659	0.678	ng/mL	93
142) Cl6-BZ#131	38.041	360	1115	0.692	ng/mL	99
143) Cl7-BZ#184	38.173	394	1506	0.668	ng/mL	100
144) Cl6-BZ#165	38.240	360	1583	0.680	ng/mL	95
145) Cl6-BZ#146	38.339	360	1392	0.703	ng/mL	97
146) Cl6-BZ#161	38.521	360	1749	0.671	ng/mL	94
147) Cl5-BZ#122	38.504	326	1536	0.686	ng/mL	97
148) Cl6-BZ#168	38.736	360	1672	0.682	ng/mL	96
149) Cl5-BZ#114	38.786	326	1624	0.637	ng/mL	97
150) Cl6-BZ#153	38.802	360	1545M3	0.684	ng/mL	
152) Cl6-BZ#132	39.067	360	1298	0.712	ng/mL	96
153) Cl7-BZ#179	39.332	394	1586	0.716	ng/mL	97
154) Cl6-BZ#141	39.630	360	1237	0.757	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.828	394	1504	0.717	ng/mL	89
156) Cl5-BZ#105	39.895	326	2276M4	0.799	ng/mL	
157) Cl6-BZ#137	40.060	360	1256	0.702	ng/mL	98
158) Cl5-BZ#127	40.209	326	2424M4	0.763	ng/mL	
159) Cl7-BZ#186	40.159	394	1562	0.644	ng/mL	96
160) Cl6-BZ#130/#164	40.408	360	2913	1.413	ng/mL	98
161) Cl7-BZ#178	40.706	394	1123	0.726	ng/mL	98
162) Cl6-BZ#138	40.772	360	1522M4	0.705	ng/mL	
163) Cl6-BZ#163/#160	40.871	360	3369M4	1.419	ng/mL	
164) Cl6-BZ#129/#158	41.053	360	2877M1	1.371	ng/mL	
165) Cl7-BZ#182/#175	41.103	394	2468	1.307	ng/mL	100
166) Cl7-BZ#187	41.268	394	1385	0.744	ng/mL	98
167) Cl7-BZ#183	41.666	394	1257	0.788	ng/mL	96
168) Cl6-BZ#166	42.030	360	1823	0.726	ng/mL	99
169) Cl6-BZ#159	42.278	360	1906	0.785	ng/mL	92
170) Cl5-BZ#126-RTW	42.493	326	2321	0.764	ng/mL	94
171) Cl7-BZ#185	42.526	394	1096	0.680	ng/mL	93
172) Cl6-BZ#162	42.609	360	1562	0.667	ng/mL	93
173) Cl7-BZ#174	42.758	394	1150	0.688	ng/mL	96
174) Cl6-BZ#128	42.758	360	1179	0.639	ng/mL	97
175) Cl6-BZ#167	43.072	360	2278M4	0.738	ng/mL	
176) Cl8-BZ#202-RTW	43.006	428	1233	0.664	ng/mL	89
178) Cl7-BZ#181	43.139	394	1235	0.678	ng/mL	94
179) Cl7-BZ#177	43.486	394	1099	0.707	ng/mL	100
180) Cl8-BZ#204/#200-Cal	43.569	428	2531	1.361	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	1133	0.805	ng/mL	96
184) Cl7-BZ#173	43.999	394	1186	0.793	ng/mL	95
185) Cl7-BZ#172	44.446	394	1194	0.750	ng/mL	97
186) Cl7-BZ#192	44.661	394	1613	0.739	ng/mL	100
187) Cl6-BZ#156	44.678	360	1678	0.700	ng/mL	97
188) Cl6-BZ#157	44.926	360	1842	0.742	ng/mL	98
189) Cl7-BZ#180	44.959	394	1464	0.694	ng/mL	99
190) Cl7-BZ#193	45.042	394	1565	0.650	ng/mL	100
191) Cl8-BZ#197	44.099	428	1299	0.697	ng/mL	86
192) Cl7-BZ#191	45.389	394	1523	0.761	ng/mL	98
193) Cl8-BZ#199	45.207	428	1380	0.765	ng/mL	90
194) Cl8-BZ#198	46.747	428	1052	0.773	ng/mL	80
195) Cl8-BZ#201	46.846	428	934	0.694	ng/mL	98
196) Cl7-BZ#170	46.962	394	1200	0.904	ng/mL	90

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	1631	0.749	ng/mL	97
198) Cl8-BZ#196	47.293	428	1048	0.738	ng/mL	95
199) Cl8-BZ#203	47.376	428	1127	0.762	ng/mL	88
200) Cl6-BZ#169-RTW	47.657	360	2071	0.859	ng/mL	95
201) Cl9-BZ#208-RTW	48.799	464	1411	0.783	ng/mL	98
202) Cl9-BZ#207	49.478	464	1361	0.738	ng/mL	99
203) Cl7-BZ#189-RTW	49.660	394	1568	0.867	ng/mL	93
204) Cl8-BZ#195	49.809	428	1164M4	0.884	ng/mL	
205) Cl8-BZ#194	51.480	428	1158	0.854	ng/mL	81
206) Cl8-BZ#205-RTW	52.076	428	1370	0.869	ng/mL	90
207) Cl9-BZ#206-Cal/RTW	54.095	464	1140	0.825	ng/mL	96
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.396	498	1128	0.779	ng/mL#	73
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

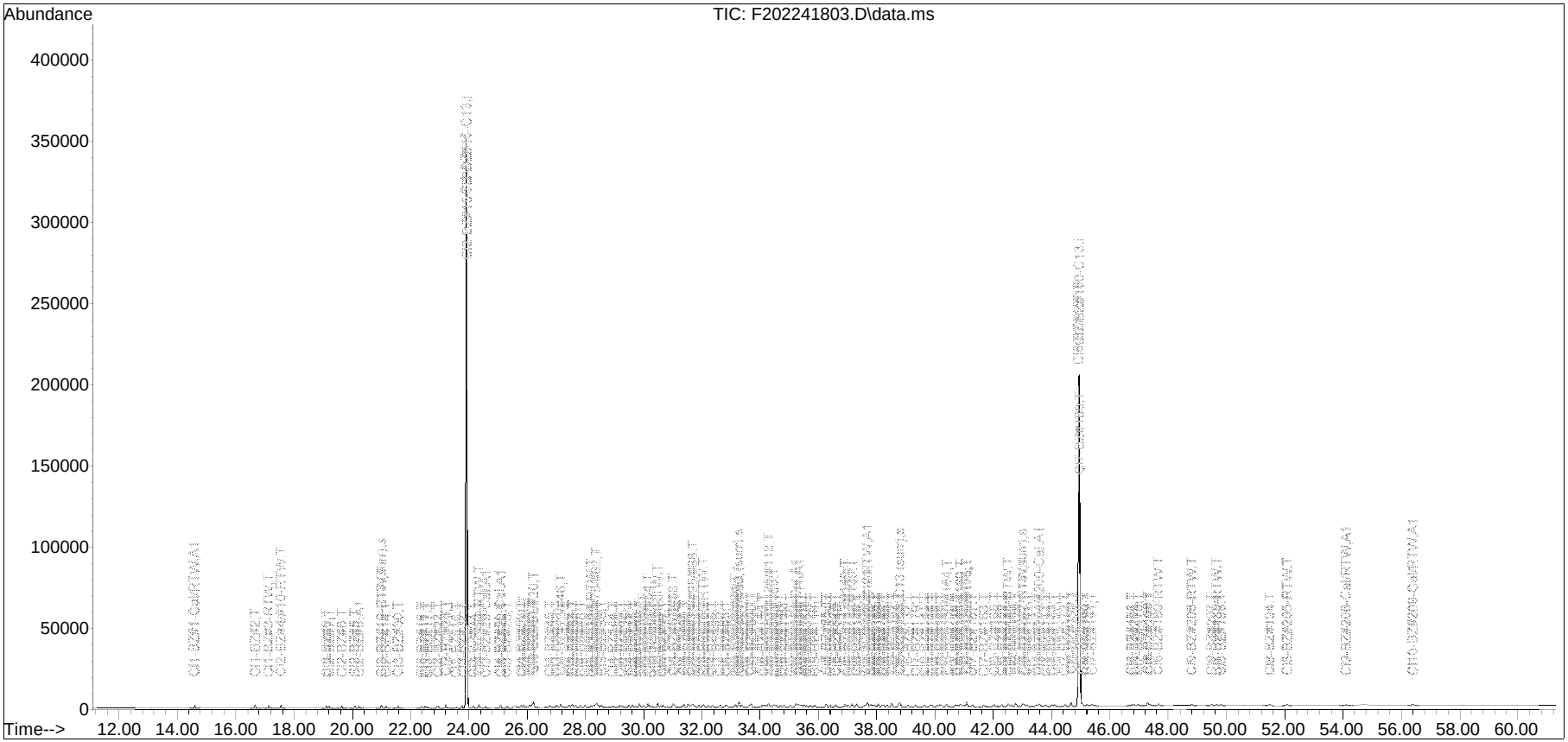
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241803.D
Acq On : 24 Feb 2018 11:28 am
Operator : BNA2:JT
Sample : I202241802
Misc : wg1092764,MSAT60,1.0ug/l
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 26 15:40:00 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

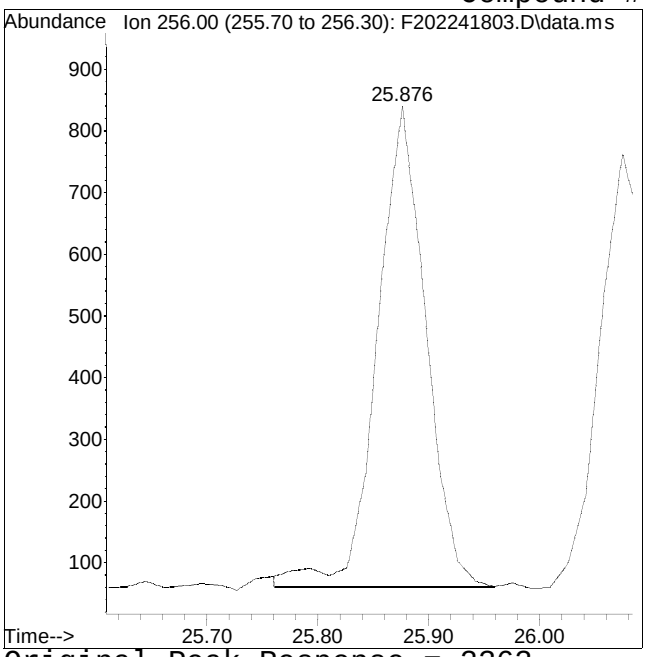
Sub List : Default - All compounds listed



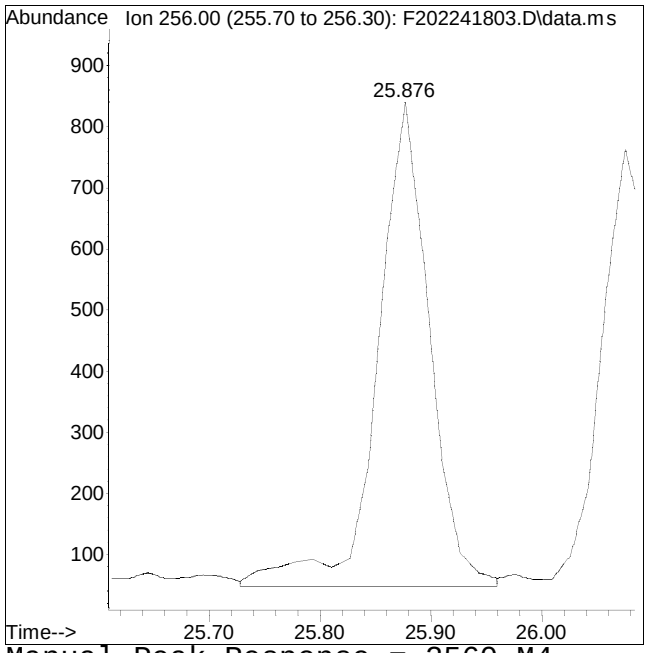
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #41: Cl3-BZ#-31



Original Peak Response = 2363



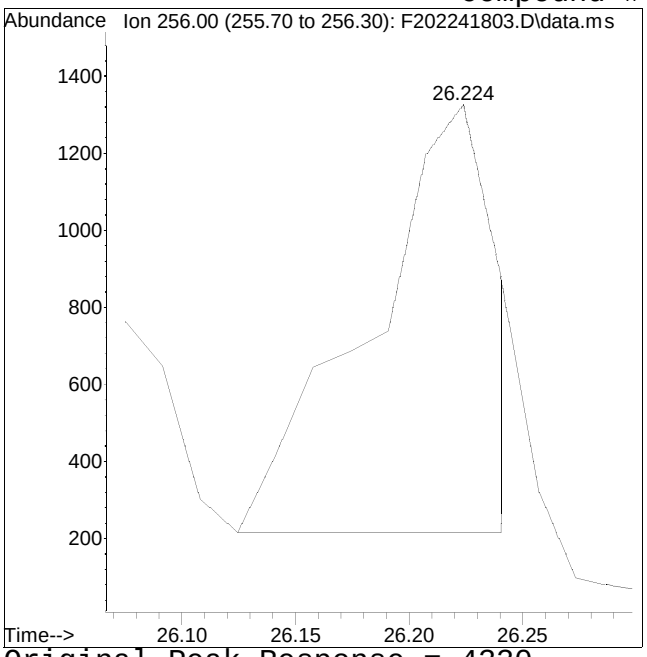
Manual Peak Response = 2560 M4

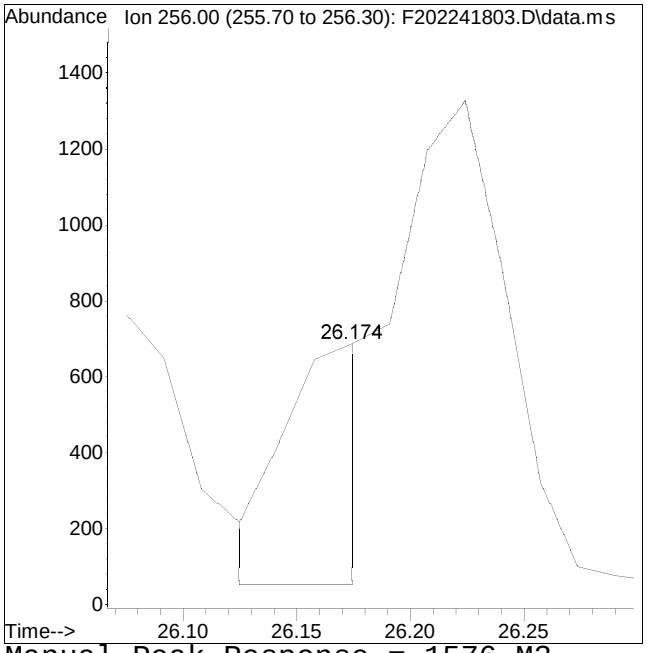
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #43: Cl3-BZ#33





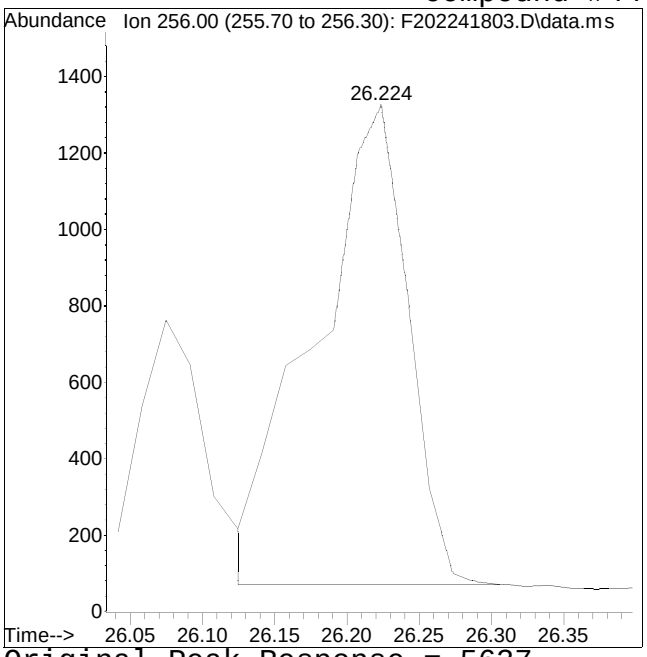
Original Peak Response = 4330 Manual Peak Response = 1576 M3

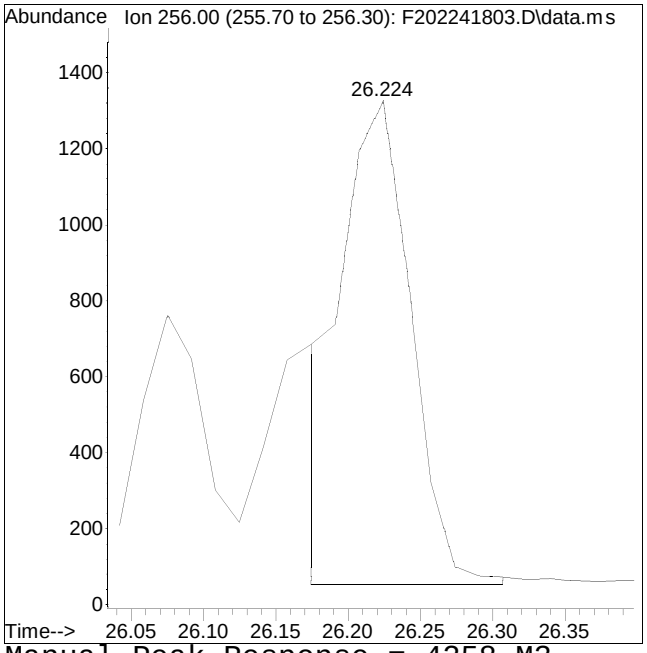
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #44: Cl3-BZ#21/#20





Original Peak Response = 5637 Manual Peak Response = 4258 M3

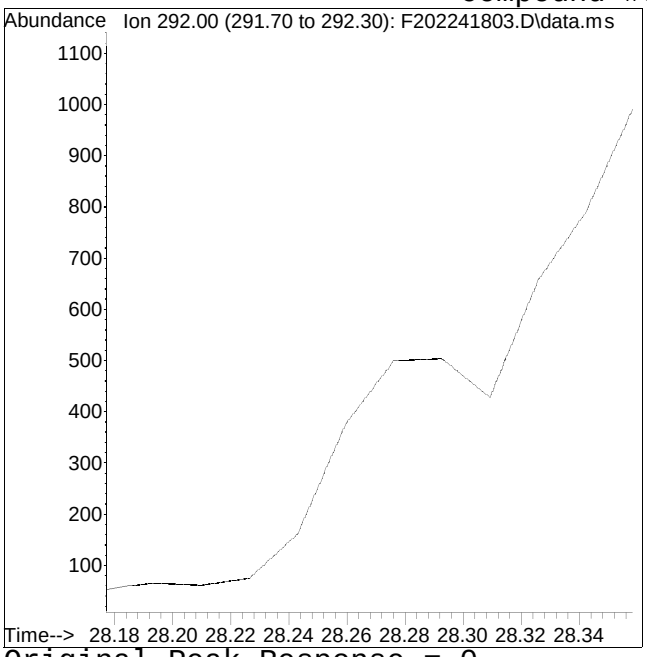
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

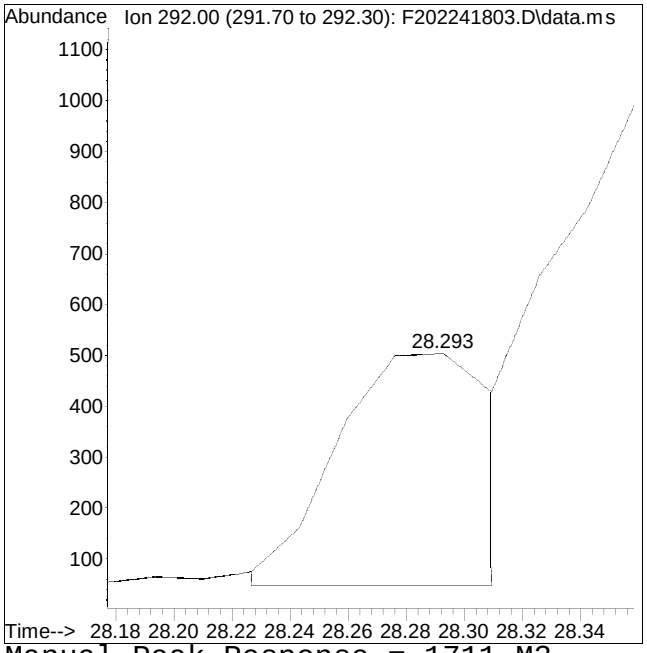
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #56: Cl4-BZ#47





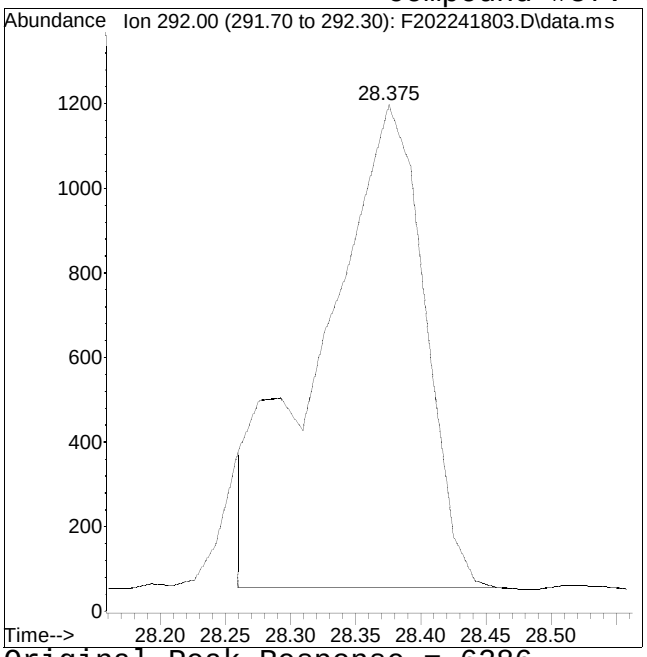
Original Peak Response = 0 Manual Peak Response = 1711 M3

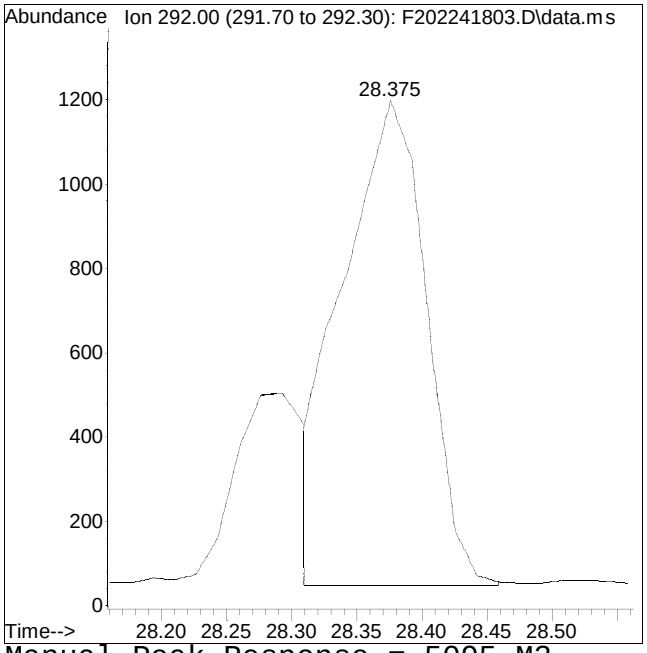
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #57: Cl4-BZ#65/#75/#62





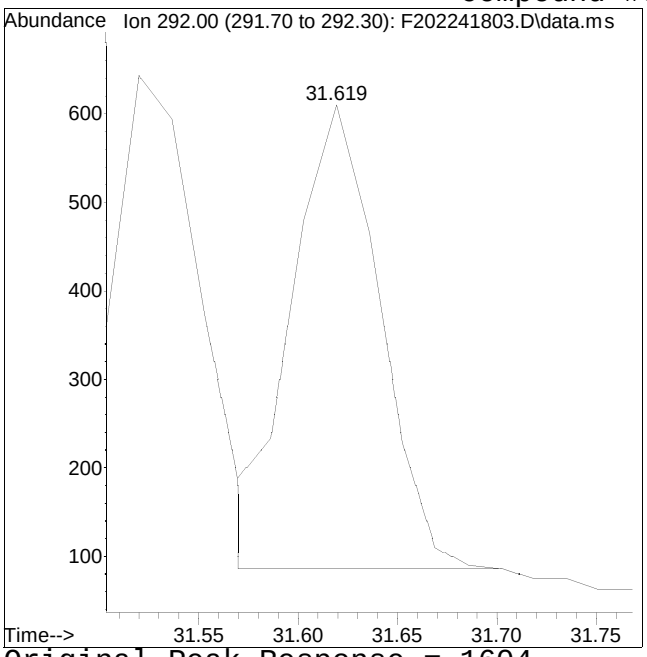
Original Peak Response = 6286 Manual Peak Response = 5095 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

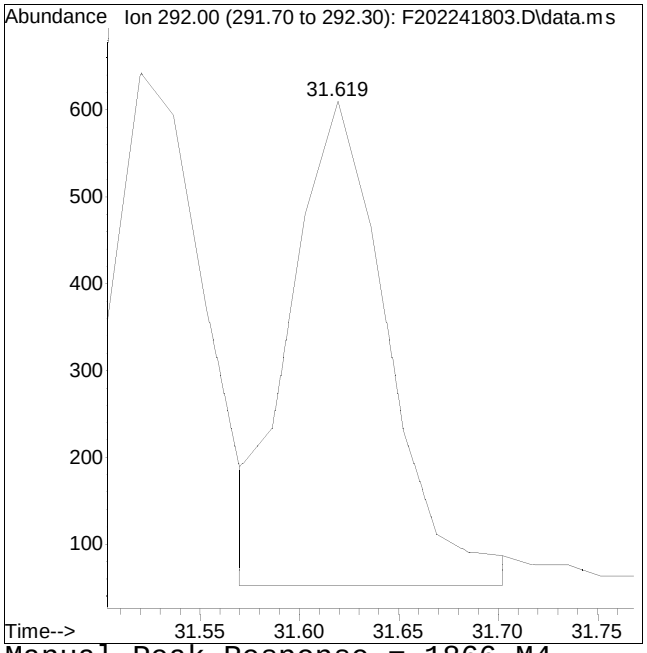
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #81: Cl4-BZ#63



Original Peak Response = 1604



Manual Peak Response = 1866 M4

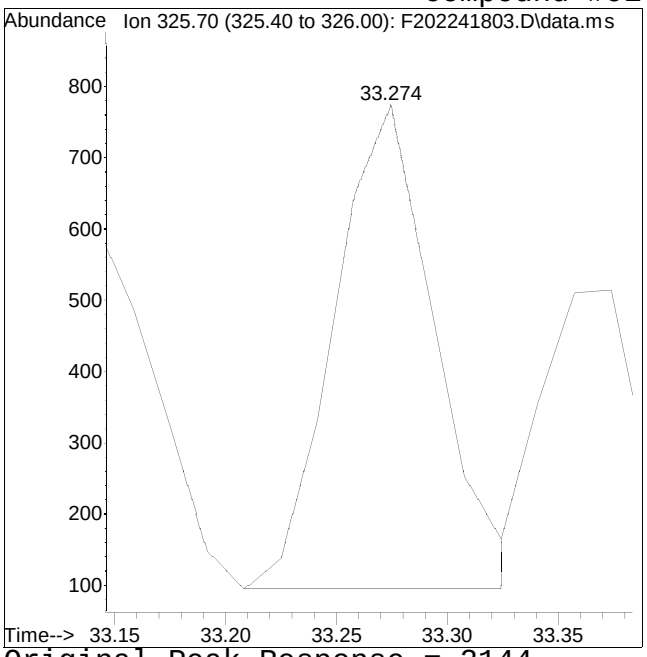
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

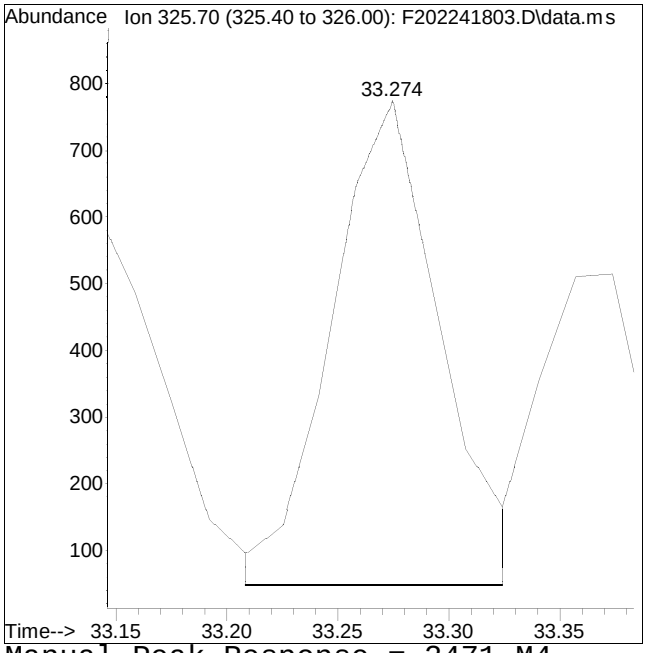
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 2144



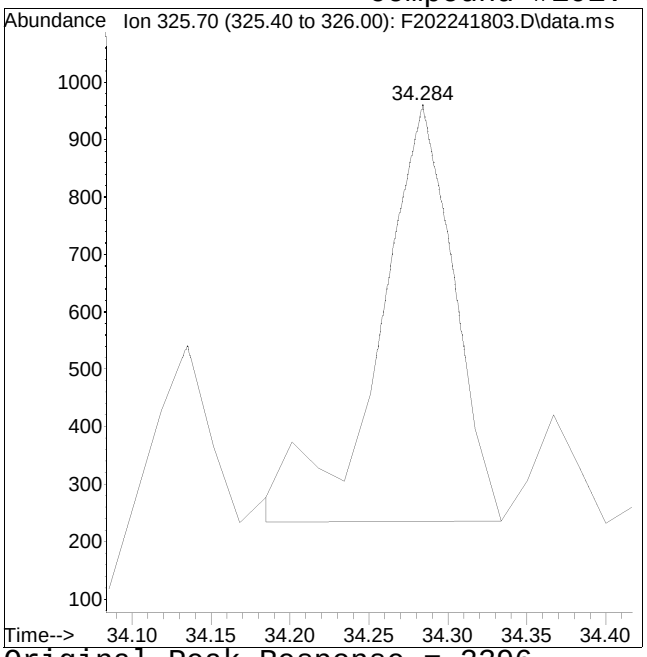
Manual Peak Response = 2471 M4

M4 = Poor automated baseline construction.

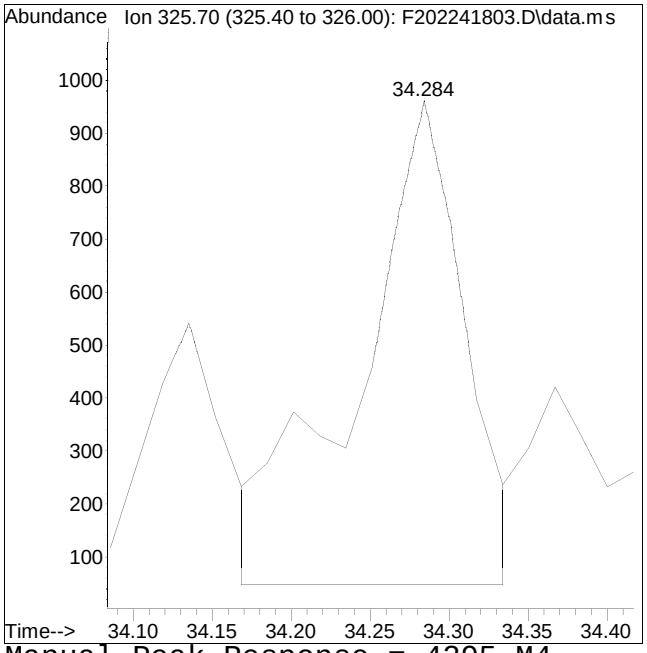
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 2396



Manual Peak Response = 4295 M4

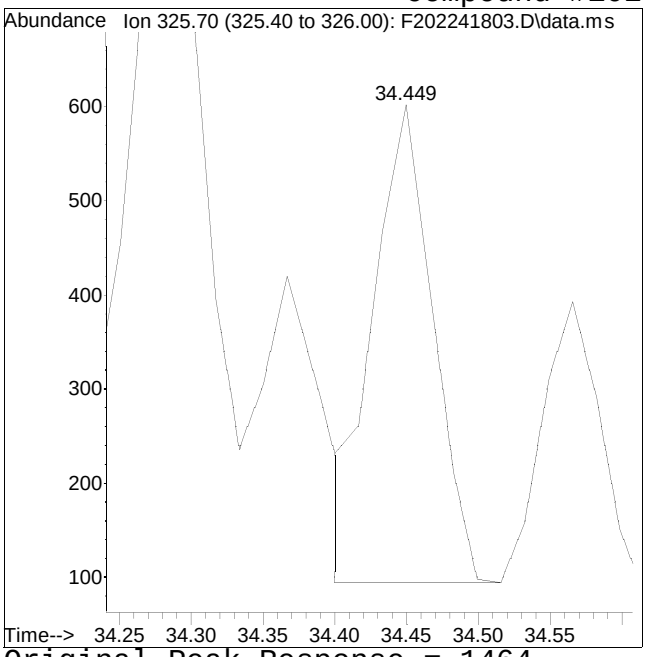
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

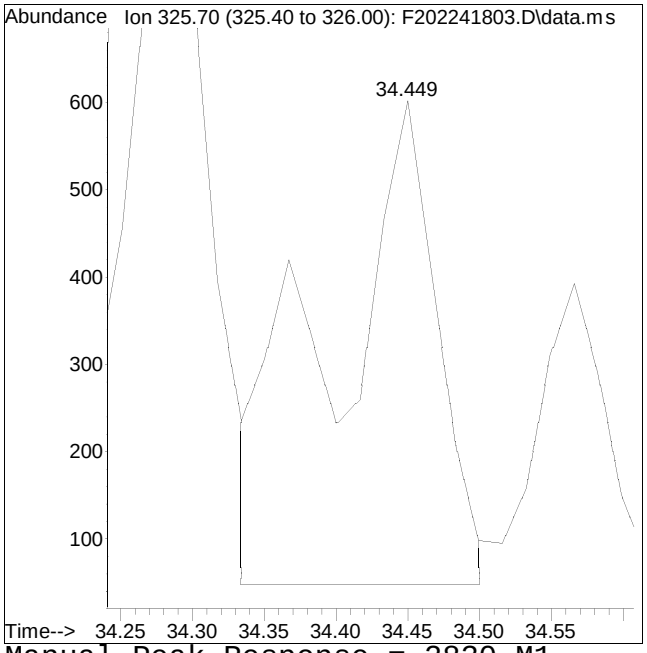
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 1464



Manual Peak Response = 2830 M1

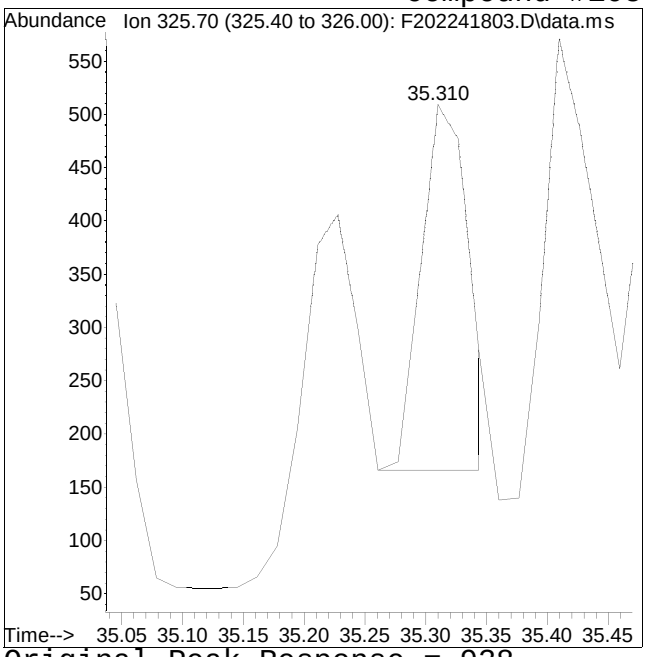
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

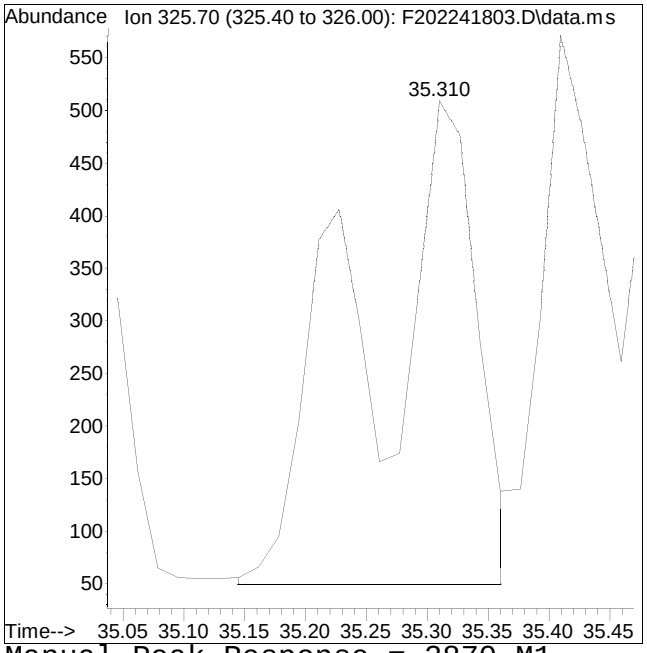
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 938



Manual Peak Response = 2870 M1

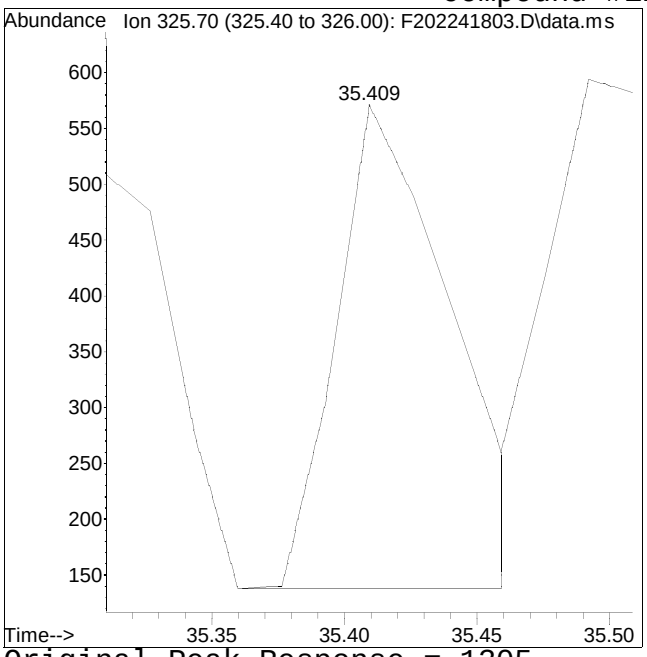
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

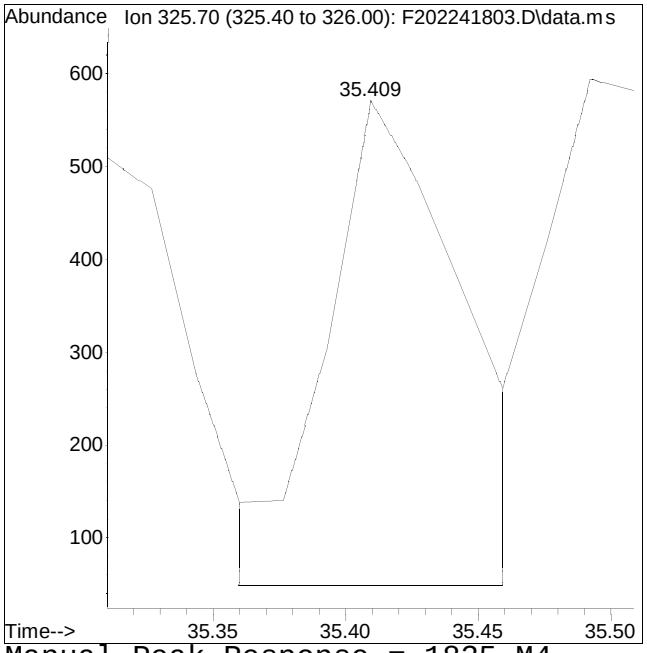
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #116: Cl5-BZ#117



Original Peak Response = 1305



Manual Peak Response = 1835 M4

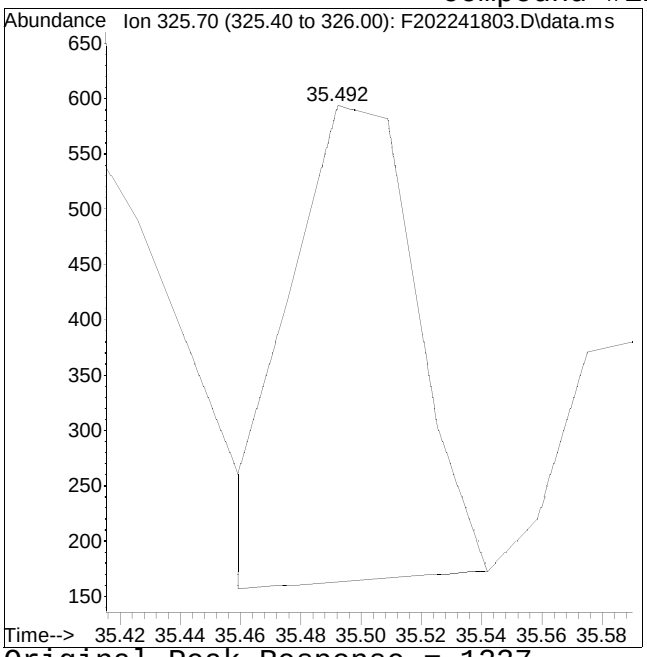
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

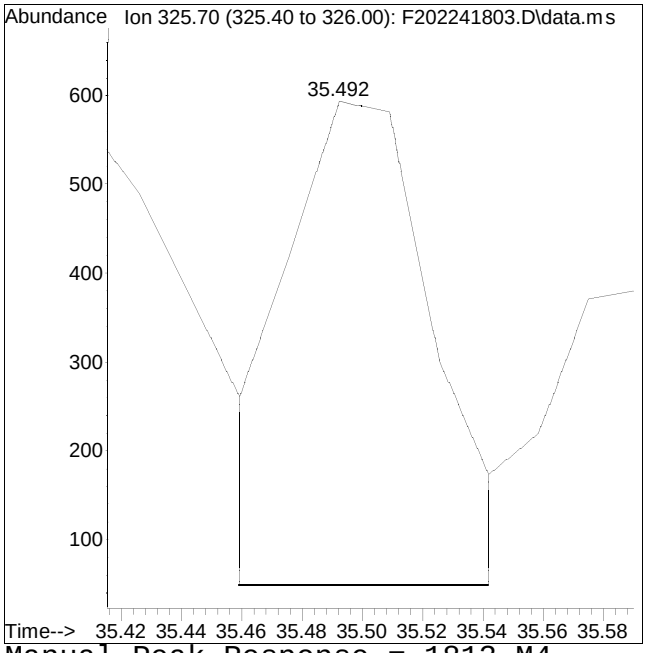
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #117: Cl5-BZ#115



Original Peak Response = 1237



Manual Peak Response = 1813 M4

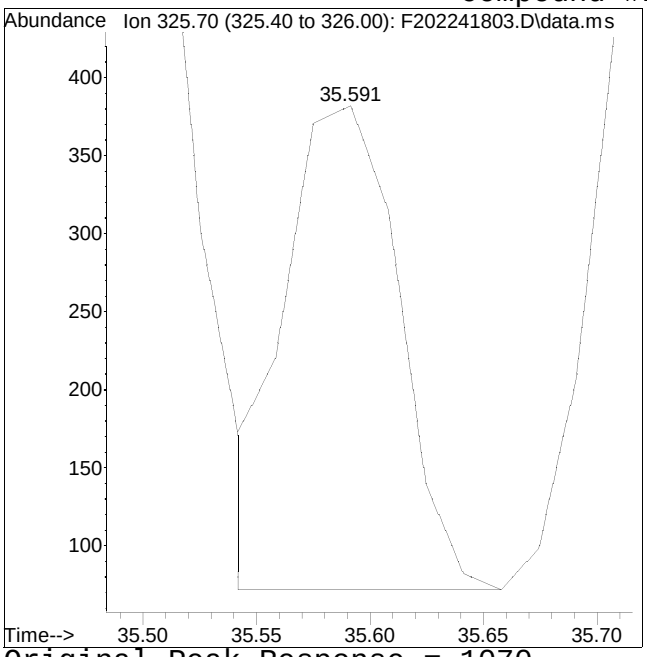
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

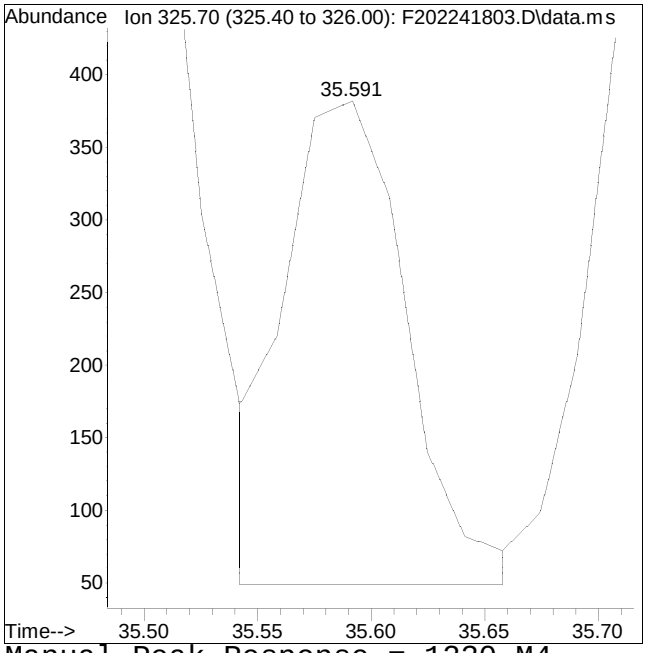
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #118: Cl5-BZ#85



Original Peak Response = 1070



Manual Peak Response = 1230 M4

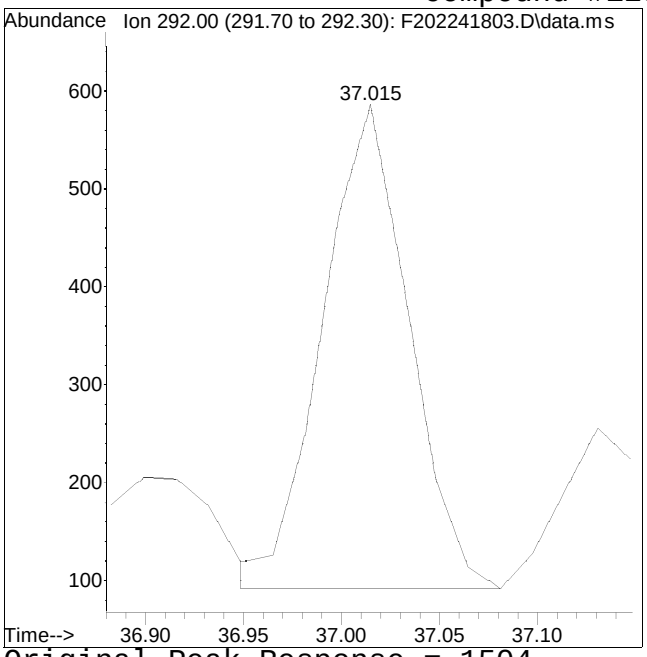
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

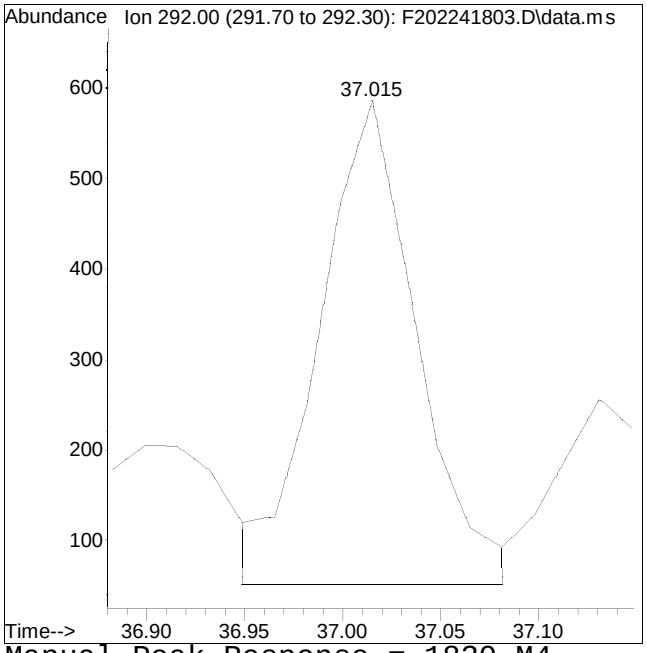
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 1504



Manual Peak Response = 1830 M4

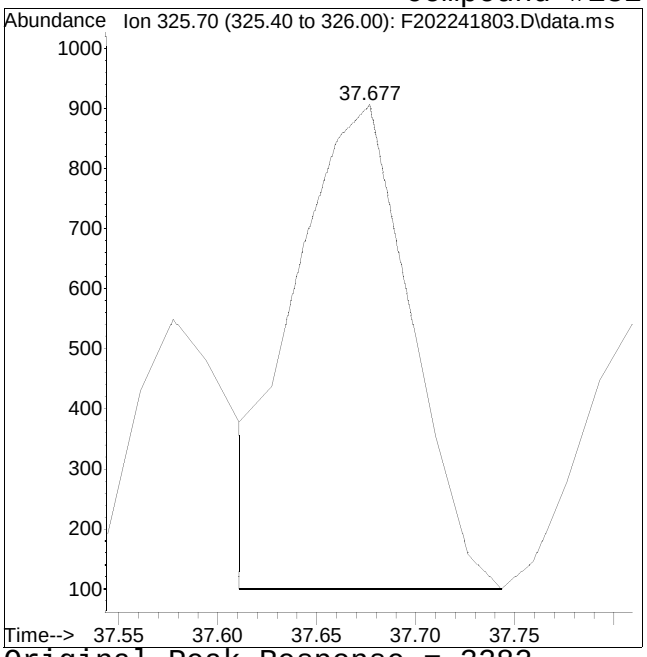
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

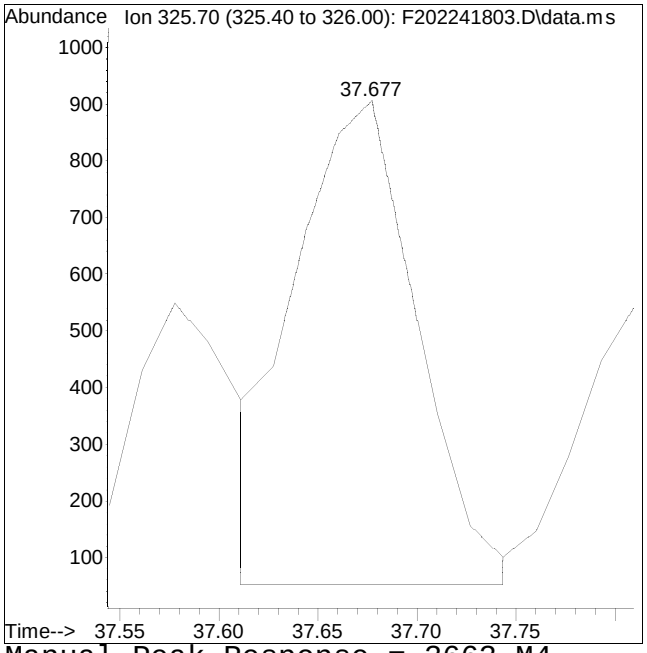
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 3282



Manual Peak Response = 3663 M4

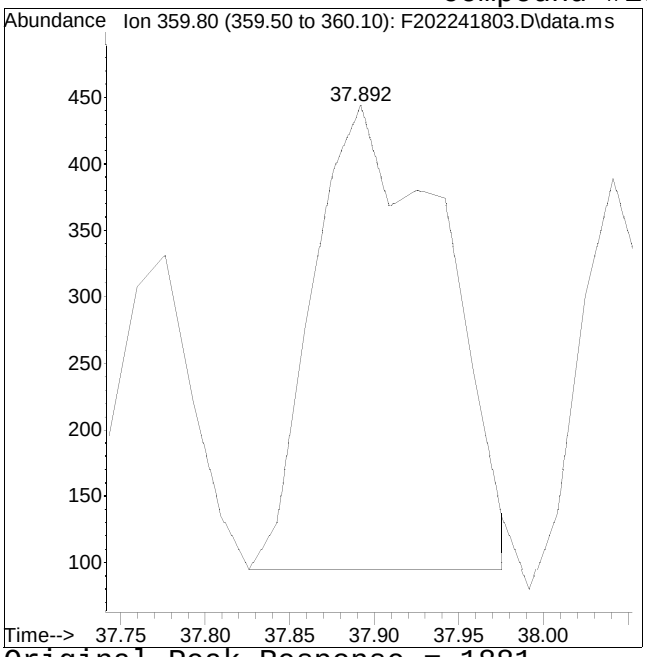
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

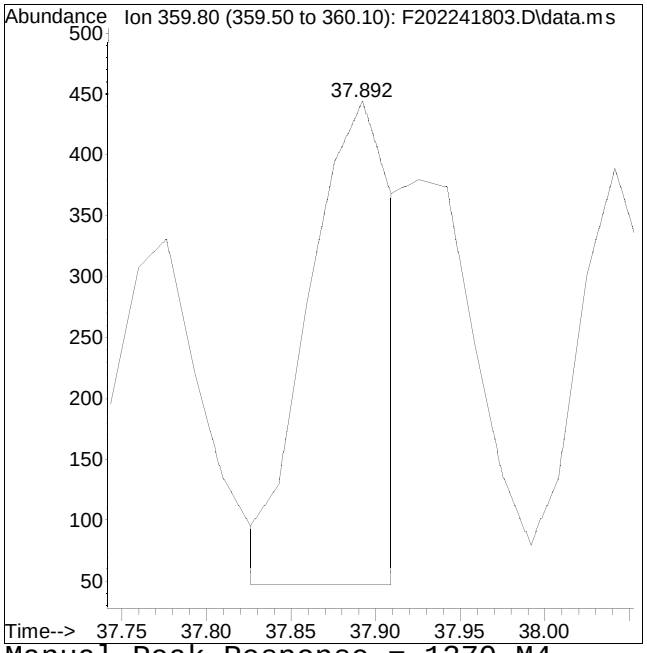
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #139: Cl6-BZ#133



Original Peak Response = 1881



Manual Peak Response = 1370 M4

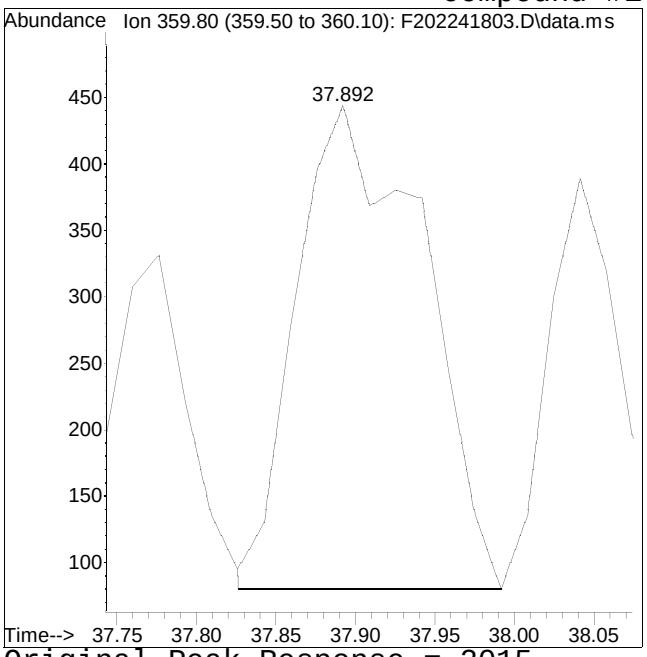
M4 = Poor automated baseline construction.

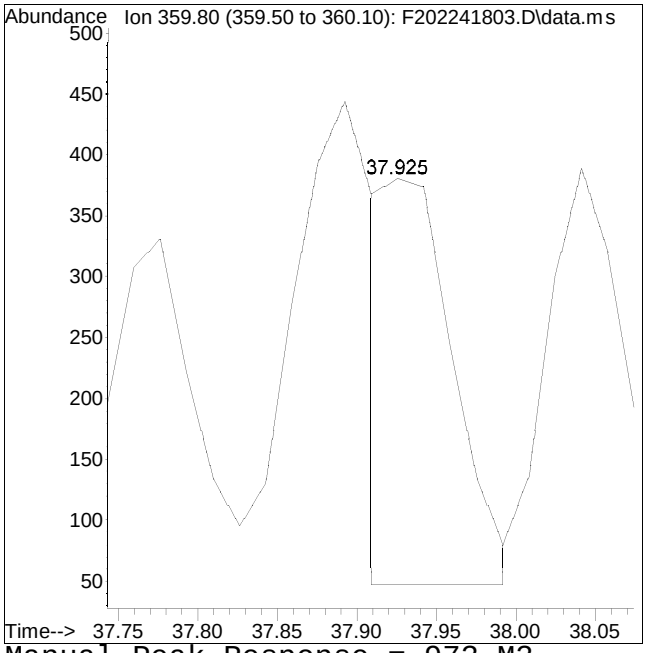
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #140: Cl6-BZ#142





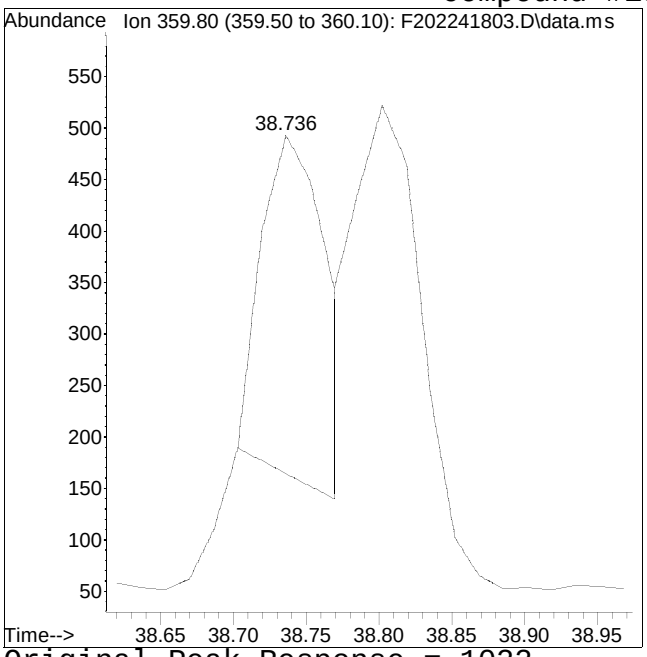
Original Peak Response = 2015 Manual Peak Response = 973 M3

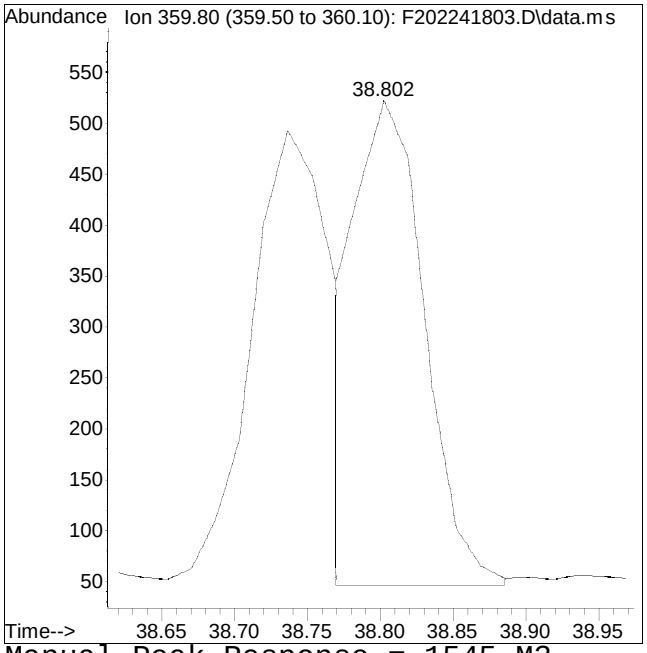
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #150: Cl6-BZ#153





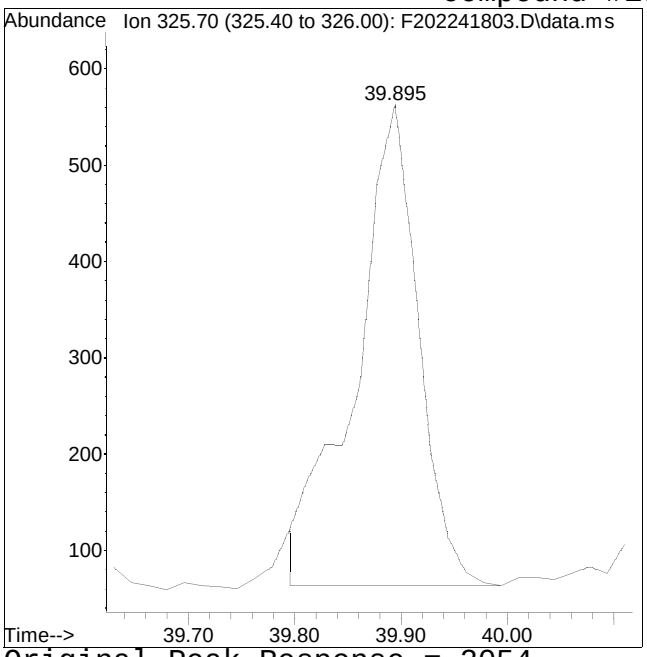
Original Peak Response = 1022 Manual Peak Response = 1545 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

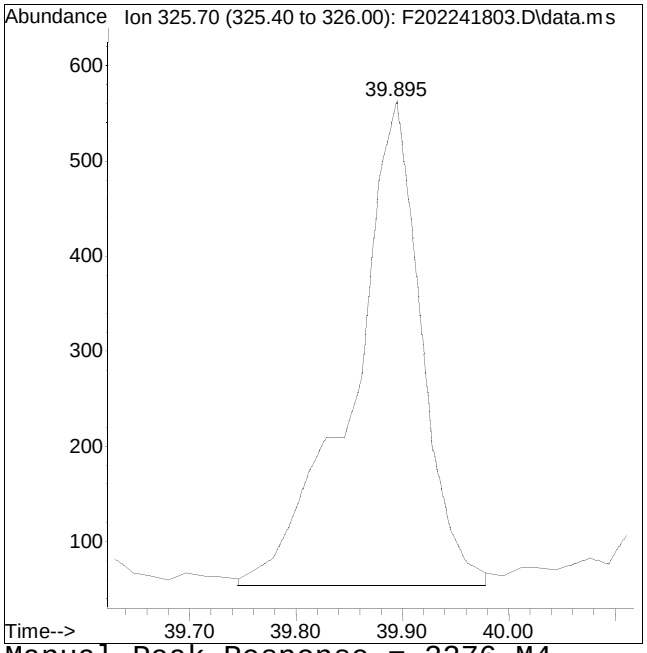
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #156: Cl5-BZ#105



Original Peak Response = 2054



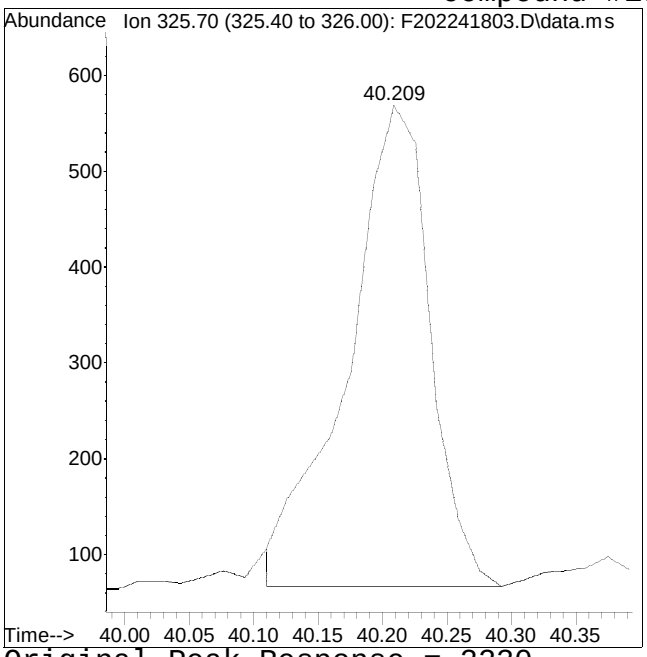
Manual Peak Response = 2276 M4

M4 = Poor automated baseline construction.

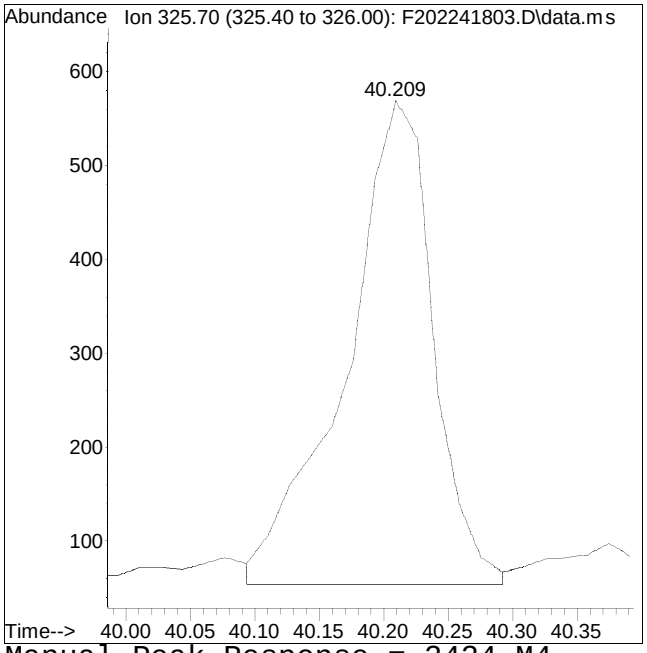
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #158: Cl5-BZ#127



Original Peak Response = 2230



Manual Peak Response = 2424 M4

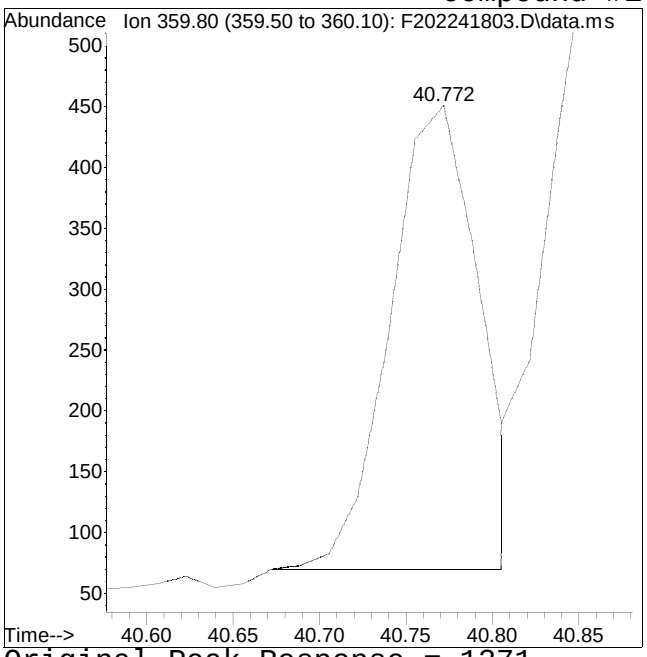
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

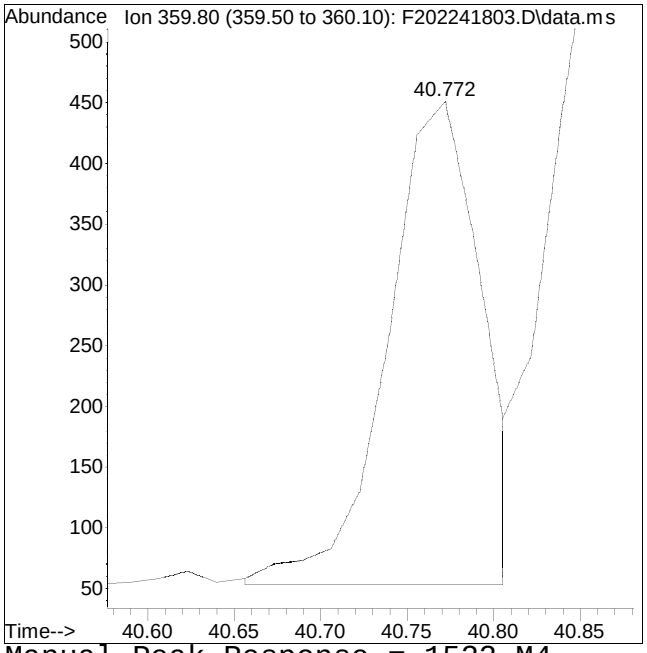
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #162: Cl6-BZ#138



Original Peak Response = 1371



Manual Peak Response = 1522 M4

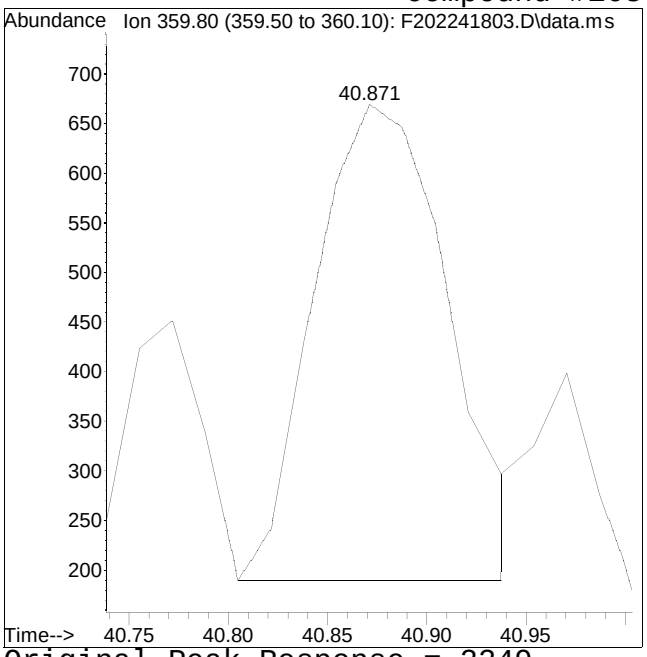
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

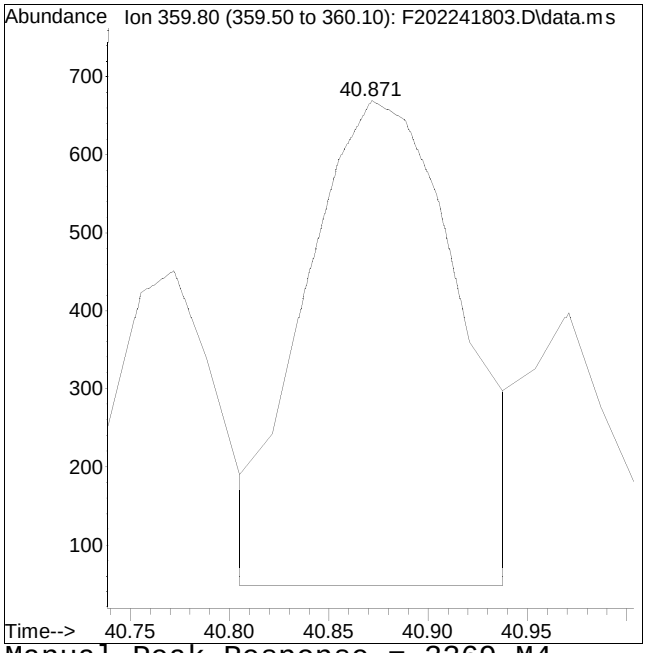
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 2249



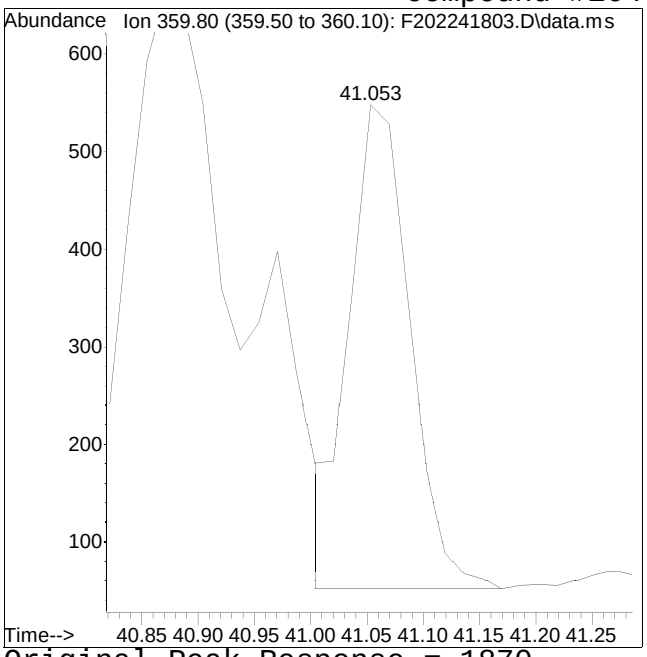
Manual Peak Response = 3369 M4

M4 = Poor automated baseline construction.

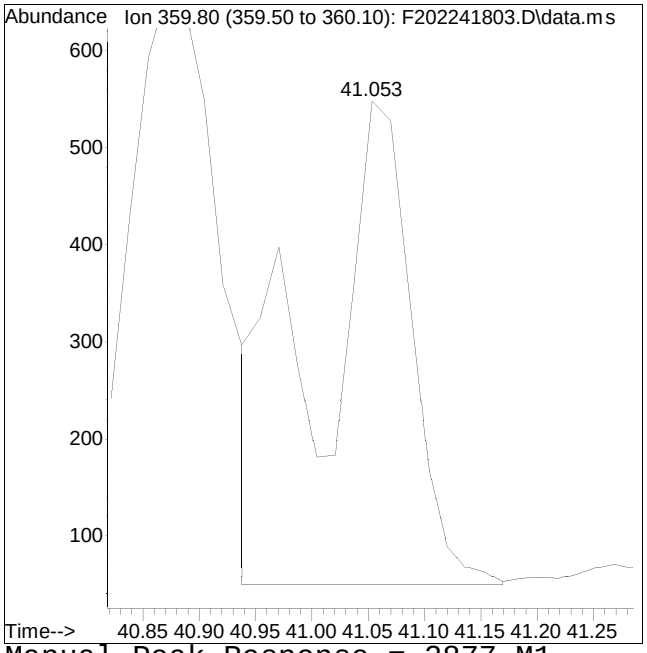
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 1870



Manual Peak Response = 2877 M1

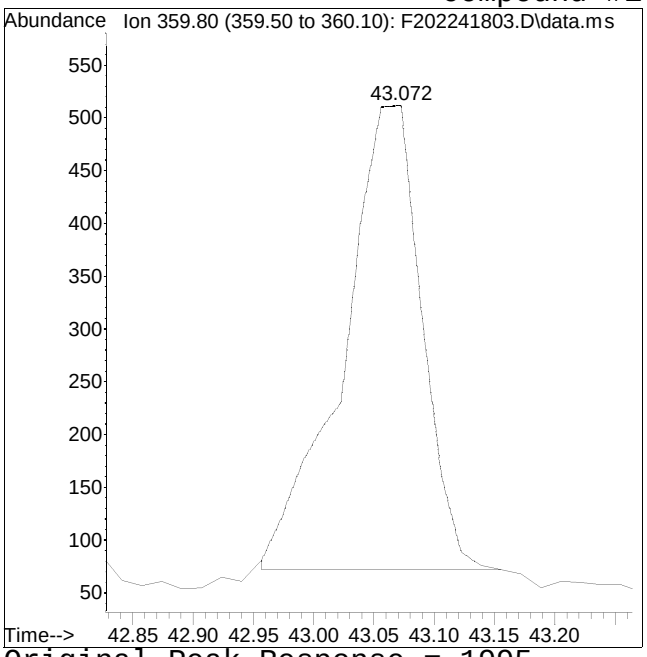
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

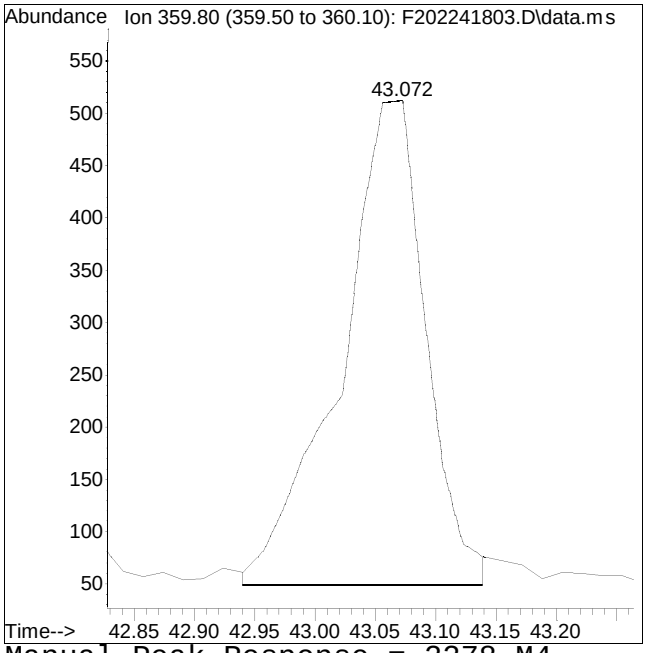
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241803.D
Date Inj'd : 2/24/2018 11:28 am
Sample : I202241802

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #175: Cl6-BZ#167



Original Peak Response = 1995



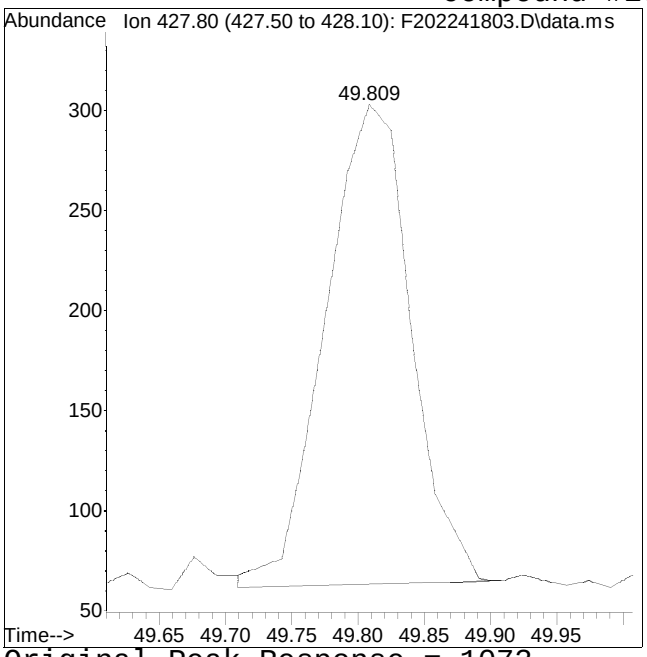
Manual Peak Response = 2278 M4

M4 = Poor automated baseline construction.

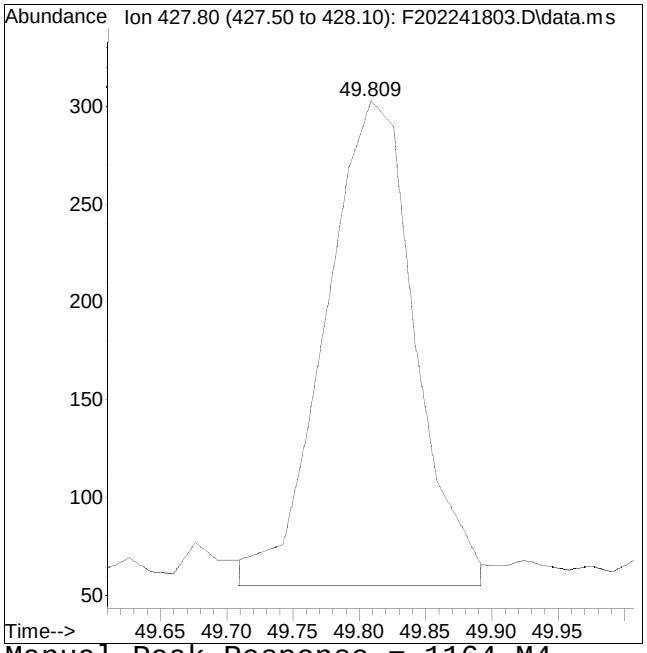
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241803.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 11:28 am Instrument : BNA2
Sample : I202241802 Quant Date : 2/25/2018 10:50 am

Compound #204: Cl8-BZ#195



Original Peak Response = 1073



Manual Peak Response = 1164 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	570585	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.943	406	304480	200.000	ng/mL	0.02
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	21.001	268	9555	6.700	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 6.70%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	13720	6.544	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 6.54%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	13038	5.973	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 5.97%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	13298	6.979	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 6.98%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.583	188	25446	6.593	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.666	188	26313	6.989	ng/mL	100
7) Cl1-BZ#3-RTW	17.133	188	26086	6.963	ng/mL	99
8) Cl2-BZ#4/#10-RTW	17.551	222	30350	12.632	ng/mL	99
9) Cl2-BZ#9	19.111	222	19424	6.862	ng/mL	100
10) Cl2-BZ#7	19.207	222	19112	7.000	ng/mL	96
11) Cl2-BZ#6	19.642	222	20768	6.921	ng/mL	98
12) Cl2-BZ#5	20.084	222	18747	6.478	ng/mL	99
13) Cl2-BZ#8	20.237	222	21349	6.709	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.017	256	10517	6.301	ng/mL	99
17) Cl2-BZ#14	21.154	222	20615	7.060	ng/mL	97
18) Cl3-BZ#30	21.572	256	16945	6.627	ng/mL	99
19) Cl3-BZ#18	22.384	256	11592	6.572	ng/mL	94
20) Cl2-BZ#11	22.513	222	22024	6.873	ng/mL	97
21) Cl3-BZ#17	22.593	256	10708	6.424	ng/mL	99
22) Cl2-BZ#12	22.907	222	19728	7.065	ng/mL	99
23) Cl3-BZ#27	22.955	256	15120	6.573	ng/mL	98
24) Cl2-BZ#13	23.204	222	22418	6.980	ng/mL	99
25) Cl3-BZ#24	23.220	256	15509	6.837	ng/mL	98
26) Cl3-BZ#16	23.566	256	9491	6.537	ng/mL	97
27) Cl3-BZ#32	23.767	256	16529	6.659	ng/mL	98
28) Cl2-BZ#15-RTW	23.928	222	23328	7.033	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.161	256	15743	6.850	ng/mL	100
30) Cl3-BZ#23	24.346	256	15274	6.728	ng/mL	100
31) Cl4-BZ#54-RTW	24.346	292	14412	6.364	ng/mL	99
32) Cl3-BZ#29-Cal	24.571	256	15312	6.836	ng/mL	99
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	11910	6.486	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.102	256	17149	7.069	ng/mL	99
39) Cl3-BZ#25	25.311	256	16772	6.850	ng/mL	99
40) Cl4-BZ#53	25.794	292	13319	6.688	ng/mL	100
41) Cl3-BZ#-31	25.876	256	22914M4	7.397	ng/mL	
42) Cl3-BZ#28	26.075	256	22379	7.102	ng/mL	100
43) Cl3-BZ#33	26.174	256	15882M3	5.586	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	42590M3	15.073	ng/mL	
45) Cl4-BZ#51	26.207	292	14690	6.750	ng/mL	98
46) Cl4-BZ#45	26.770	292	11416	6.961	ng/mL	100
47) Cl3-BZ#22	27.018	256	20280	7.138	ng/mL	99
48) Cl4-BZ#73/#46	27.151	292	30516	13.646	ng/mL	100
49) Cl4-BZ#69	27.432	292	18037	6.933	ng/mL	99
50) Cl4-BZ#43	27.531	292	12061	6.540	ng/mL	97
51) Cl3-BZ#36	27.564	256	22653	6.922	ng/mL	98
52) Cl4-BZ#52	27.664	292	14387	6.528	ng/mL	97
53) Cl4-BZ#48	27.829	292	13100	7.088	ng/mL	95
54) Cl4-BZ#49	27.978	292	13657	6.778	ng/mL	98
55) Cl5-BZ#104-RTW	28.193	326	14932	6.833	ng/mL	99
56) Cl4-BZ#47	28.276	292	17122M3	7.940	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	51475M3	19.557	ng/mL	
58) Cl3-BZ#39	28.425	256	20724	7.062	ng/mL	100
59) Cl3-BZ#38	28.541	256	20121	6.966	ng/mL	97
60) Cl4-BZ#44	28.938	292	12242	6.914	ng/mL	99
61) Cl4-BZ#59	29.170	292	18577	7.245	ng/mL	92
62) Cl4-BZ#42	29.253	292	10793	6.408	ng/mL	95
63) Cl4-BZ#71	29.484	292	18914	6.886	ng/mL	99
64) Cl3-BZ#35	29.600	256	20868	7.347	ng/mL	100
65) Cl4-BZ#41	29.716	292	11606	7.239	ng/mL	99
66) Cl4-BZ#72	29.832	292	19370	6.816	ng/mL	98
67) Cl5-BZ#96	29.865	326	16008	6.798	ng/mL	94
68) Cl5-BZ#103	29.997	326	12061	7.190	ng/mL	100
69) Cl4-BZ#68/#64	30.146	292	36653	13.922	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	8917	6.987	ng/mL	100
71) Cl3-BZ#37-RTW	30.477	256	27677	7.409	ng/mL	98
72) Cl5-BZ#100	30.477	326	13044	6.866	ng/mL	98
73) Cl5-BZ#94	30.593	326	10306	7.093	ng/mL	99
74) Cl4-BZ#57	30.676	292	19881M4	7.018	ng/mL	
75) Cl4-BZ#67/#58	31.007	292	39894	14.069	ng/mL	100
76) Cl5-BZ#102	31.057	326	14277	6.815	ng/mL	99
77) Cl4-BZ#61	31.371	292	19640	7.068	ng/mL	98
78) Cl5-BZ#98	31.388	326	13058	6.964	ng/mL	96
79) Cl4-BZ#76	31.537	292	20618	6.761	ng/mL	99
80) Cl5-BZ#93	31.520	326	10504	6.835	ng/mL	99
81) Cl4-BZ#63	31.619	292	18467M4	6.917	ng/mL	
82) Cl5-BZ#121/#95/#88	31.686	326	41640	20.680	ng/mL	99
83) Cl4-BZ#74	31.901	292	20418	7.065	ng/mL	96
84) Cl6-BZ#155-RTW	32.033	360	15289	6.840	ng/mL	99
85) Cl4-BZ#70	32.066	292	21212	6.280	ng/mL	96
86) Cl4-BZ#66	32.348	292	18883	6.958	ng/mL	99
87) Cl5-BZ#91	32.232	326	12127	6.856	ng/mL	98
88) Cl4-BZ#80	32.612	292	19732	7.249	ng/mL	98
89) Cl4-BZ#55	32.811	292	20314	7.225	ng/mL	100
90) Cl5-BZ#92	32.861	326	11826	6.955	ng/mL	100
91) Cl5-BZ#89/#84	33.142	326	22424	12.520	ng/mL	98
92) Cl5-BZ#101/#90	33.274	326	26146M4	14.239	ng/mL	
94) Cl4-BZ#56	33.258	292	19979	6.917	ng/mL	100
95) Cl5-BZ#113	33.357	326	15785	7.078	ng/mL	97
96) Cl5-BZ#99	33.639	326	14729	7.147	ng/mL	98
97) Cl6-BZ#150	33.688	360	16346	6.912	ng/mL	96
98) Cl4-BZ#60	33.705	292	21261	6.577	ng/mL	99
99) Cl6-BZ#152	34.052	360	17623	6.767	ng/mL	99
100) Cl5-BZ#119	34.135	326	17846	6.891	ng/mL	98
101) Cl5-BZ#83/#125/#112	34.284	326	44518M4	21.037	ng/mL	
102) Cl5-BZ#86/#109	34.450	326	29891M4	14.373	ng/mL	
103) Cl5-BZ#97	34.565	326	11167	6.931	ng/mL	96
104) Cl5-BZ#116	35.029	326	15025	6.986	ng/mL	97
105) Cl5-BZ#87/#111	35.310	326	29398M1	13.762	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	18016	6.829	ng/mL	98
109) Cl6-BZ#148	34.698	360	12184	6.963	ng/mL	96
110) Cl4-BZ#79	34.814	292	19293	7.242	ng/mL	99
111) Cl6-BZ#154-Cal	35.227	360	14049	7.068	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	24366	7.058	ng/mL	84
115) Cl6-BZ#136	35.360	360	15709	6.675	ng/mL	100
116) Cl5-BZ#117	35.426	326	18924M4	7.010	ng/mL	
117) Cl5-BZ#115	35.492	326	18652M4	7.412	ng/mL	
118) Cl5-BZ#85	35.592	326	11476	7.013	ng/mL	99
119) Cl5-BZ#120	35.724	326	18165	7.304	ng/mL	100
120) Cl5-BZ#110	35.873	326	17226	7.102	ng/mL	99
121) Cl4-BZ#81	36.254	292	19817	7.575	ng/mL	97
123) Cl6-BZ#151	36.254	360	12231	6.935	ng/mL	98
124) Cl6-BZ#135	36.386	360	13217	7.069	ng/mL	97
125) Cl5-BZ#82	36.568	326	11356	6.577	ng/mL	100
126) Cl6-BZ#144	36.601	360	12699	6.678	ng/mL	100
127) Cl6-BZ#147/#149	36.916	360	26800	13.708	ng/mL	96
128) Cl4-BZ#77-RTW	37.015	292	18038M4	7.056	ng/mL	
129) Cl6-BZ#143/#139	37.147	360	26004	13.067	ng/mL	100
130) Cl5-BZ#124	37.296	326	17642	6.904	ng/mL	99
131) Cl5-BZ#108	37.578	326	17857	6.956	ng/mL	99
132) Cl5-BZ#107/#123	37.677	326	37987M4	13.942	ng/mL	
133) Cl6-BZ#140	37.313	360	12449	6.597	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.677	394	14941	6.455	ng/mL	100
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.776	360	10763	6.618	ng/mL	94
138) Cl5-BZ#106	37.809	326	16196	5.968	ng/mL	99
139) Cl6-BZ#133	37.892	360	14417M4	6.861	ng/mL	
140) Cl6-BZ#142	37.925	360	9830M3	6.450	ng/mL	
141) Cl5-BZ#118	38.041	326	16512	6.765	ng/mL	98
142) Cl6-BZ#131	38.041	360	11093	6.908	ng/mL	98
143) Cl7-BZ#184	38.173	394	14379	6.396	ng/mL	96
144) Cl6-BZ#165	38.240	360	15713	6.772	ng/mL	99
145) Cl6-BZ#146	38.339	360	13976	7.079	ng/mL	99
146) Cl6-BZ#161	38.521	360	17400	6.696	ng/mL	98
147) Cl5-BZ#122	38.504	326	15233	6.825	ng/mL	99
148) Cl6-BZ#168	38.736	360	16608	6.799	ng/mL	99
149) Cl5-BZ#114	38.786	326	16922	6.656	ng/mL	100
150) Cl6-BZ#153	38.802	360	15161	6.737	ng/mL	98
152) Cl6-BZ#132	39.067	360	12127	6.674	ng/mL	98
153) Cl7-BZ#179	39.332	394	15286	6.925	ng/mL	99
154) Cl6-BZ#141	39.630	360	12060	7.403	ng/mL	98

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.828	394	14313	6.842	ng/mL	98
156) Cl5-BZ#105	39.895	326	20310M4	7.152	ng/mL	
157) Cl6-BZ#137	40.060	360	12683	7.106	ng/mL	98
158) Cl5-BZ#127	40.209	326	22656M4	7.154	ng/mL	
159) Cl7-BZ#186	40.160	394	16371	6.766	ng/mL	98
160) Cl6-BZ#130/#164	40.408	360	29057	14.133	ng/mL	97
161) Cl7-BZ#178	40.706	394	10821	7.012	ng/mL	100
162) Cl6-BZ#138	40.772	360	14787M4	6.866	ng/mL	
163) Cl6-BZ#163/#160	40.871	360	33657M4	14.219	ng/mL	
164) Cl6-BZ#129/#158	41.070	360	27703M1	13.241	ng/mL	
165) Cl7-BZ#182/#175	41.103	394	25470	13.534	ng/mL	99
166) Cl7-BZ#187	41.268	394	12951	6.982	ng/mL	98
167) Cl7-BZ#183	41.666	394	12399	7.793	ng/mL	99
168) Cl6-BZ#166	42.030	360	18110	7.232	ng/mL	99
169) Cl6-BZ#159	42.278	360	18100	7.479	ng/mL	99
170) Cl5-BZ#126-RTW	42.493	326	22153	7.313	ng/mL	89
171) Cl7-BZ#185	42.526	394	11185	6.964	ng/mL	98
172) Cl6-BZ#162	42.609	360	16943	7.256	ng/mL	99
173) Cl7-BZ#174	42.758	394	11538	6.921	ng/mL	99
174) Cl6-BZ#128	42.775	360	12495	6.793	ng/mL	99
175) Cl6-BZ#167	43.056	360	22538M4	7.322	ng/mL	
176) Cl8-BZ#202-RTW	43.006	428	13001	7.023	ng/mL	99
178) Cl7-BZ#181	43.155	394	12884	7.093	ng/mL	96
179) Cl7-BZ#177	43.470	394	11613	7.490	ng/mL	96
180) Cl8-BZ#204/#200-Cal	43.586	428	25352	13.672	ng/mL	99
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	11119	7.922	ng/mL	99
184) Cl7-BZ#173	44.016	394	10769	7.227	ng/mL	100
185) Cl7-BZ#172	44.446	394	11713	7.384	ng/mL	99
186) Cl7-BZ#192	44.661	394	16159	7.428	ng/mL	99
187) Cl6-BZ#156	44.678	360	17333	7.251	ng/mL	99
188) Cl6-BZ#157	44.926	360	17927	7.244	ng/mL	98
189) Cl7-BZ#180	44.959	394	15006	7.139	ng/mL	97
190) Cl7-BZ#193	45.042	394	13850M4	5.768	ng/mL	
191) Cl8-BZ#197	44.099	428	13071	7.033	ng/mL	97
192) Cl7-BZ#191	45.390	394	14997	7.514	ng/mL	98
193) Cl8-BZ#199	45.207	428	12909	7.182	ng/mL	98
194) Cl8-BZ#198	46.747	428	11222	8.273	ng/mL	98
195) Cl8-BZ#201	46.829	428	9427	7.022	ng/mL	99
196) Cl7-BZ#170	46.962	394	10649	8.050	ng/mL	98

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	16249	7.486	ng/mL	96
198) Cl8-BZ#196	47.293	428	9764	6.896	ng/mL	82
199) Cl8-BZ#203	47.376	428	11402	7.729	ng/mL	85
200) Cl6-BZ#169-RTW	47.657	360	18860	7.847	ng/mL	100
201) Cl9-BZ#208-RTW	48.816	464	13370	7.439	ng/mL	99
202) Cl9-BZ#207	49.494	464	13571	7.380	ng/mL	95
203) Cl7-BZ#189-RTW	49.660	394	14244	7.897	ng/mL	99
204) Cl8-BZ#195	49.809	428	9984	7.604	ng/mL	98
205) Cl8-BZ#194	51.497	428	10731	7.938	ng/mL	99
206) Cl8-BZ#205-RTW	52.076	428	12980	8.256	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.112	464	11074	8.039	ng/mL	97
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.396	498	11168	7.739	ng/mL#	82
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

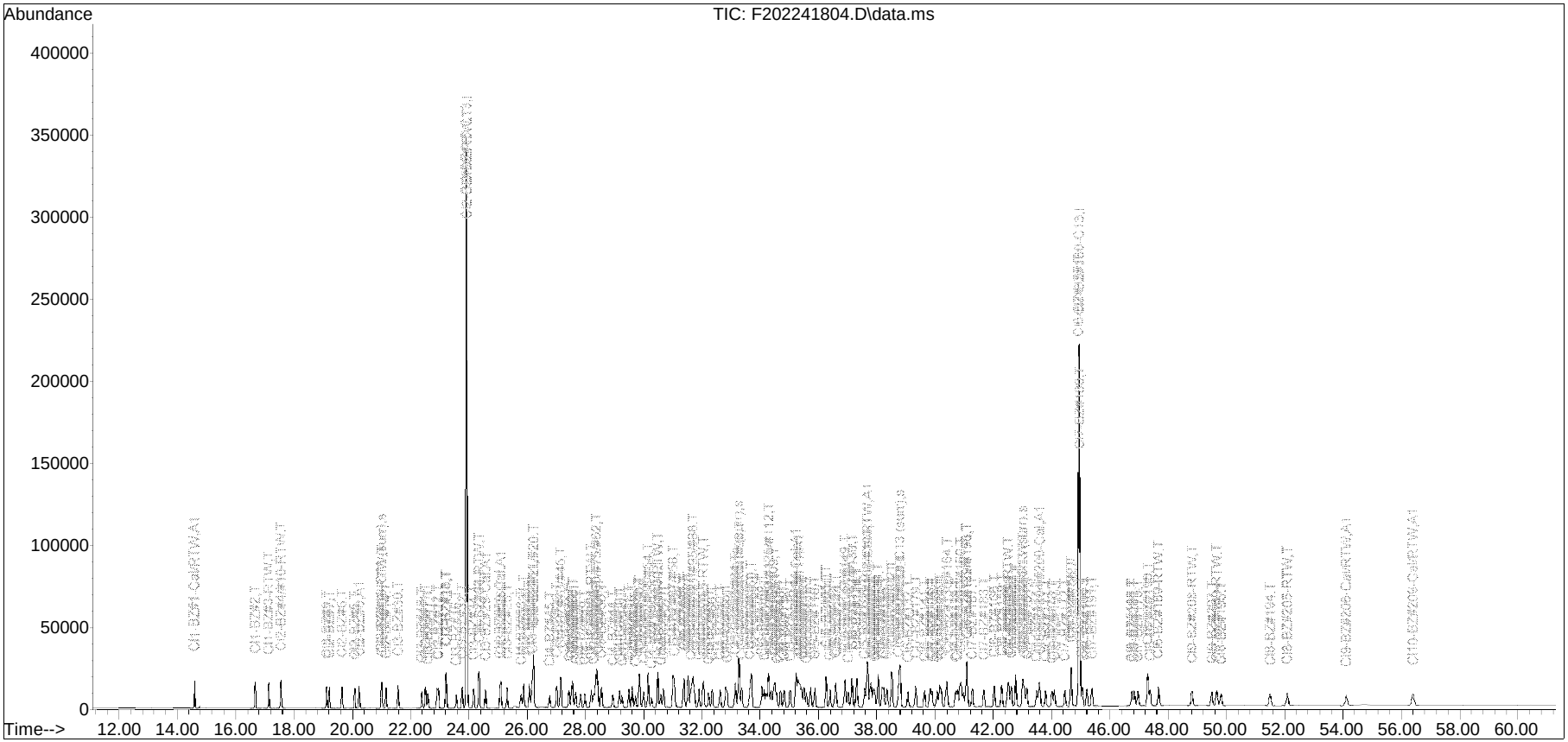
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241804.D
Acq On : 24 Feb 2018 12:42 pm
Operator : BNA2:JT
Sample : I202241803
Misc : wg1092764,MSAT59,10ug/l
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 26 16:02:47 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

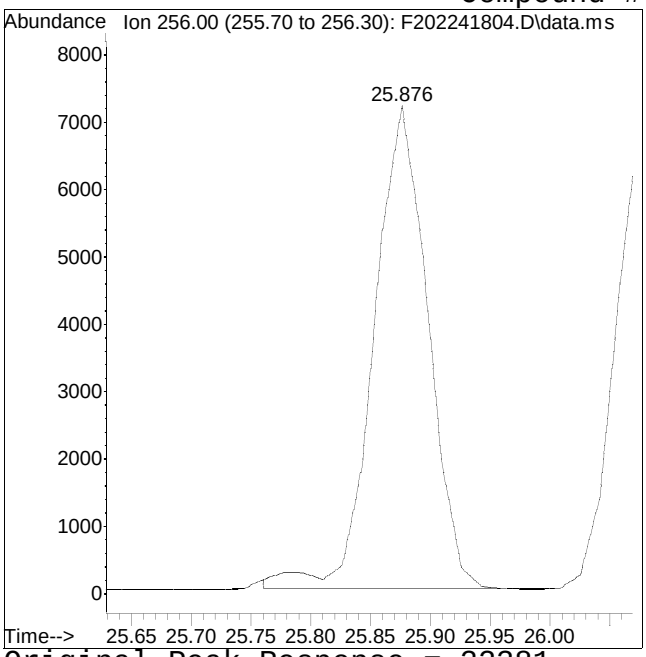
Sub List : Default - All compounds listed



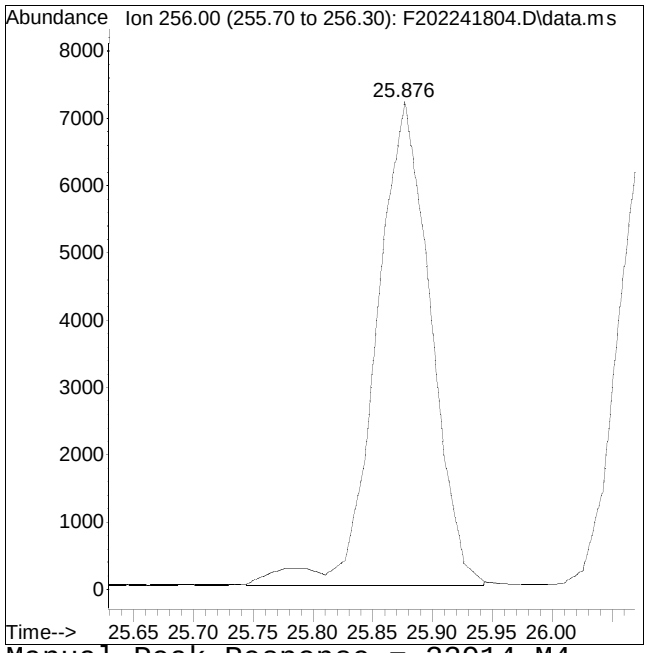
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #41: Cl3-BZ#-31



Original Peak Response = 22381



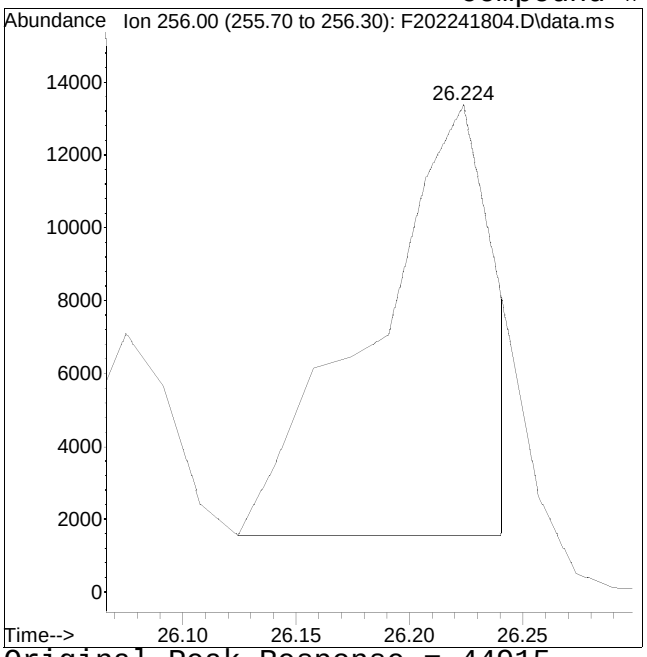
Manual Peak Response = 22914 M4

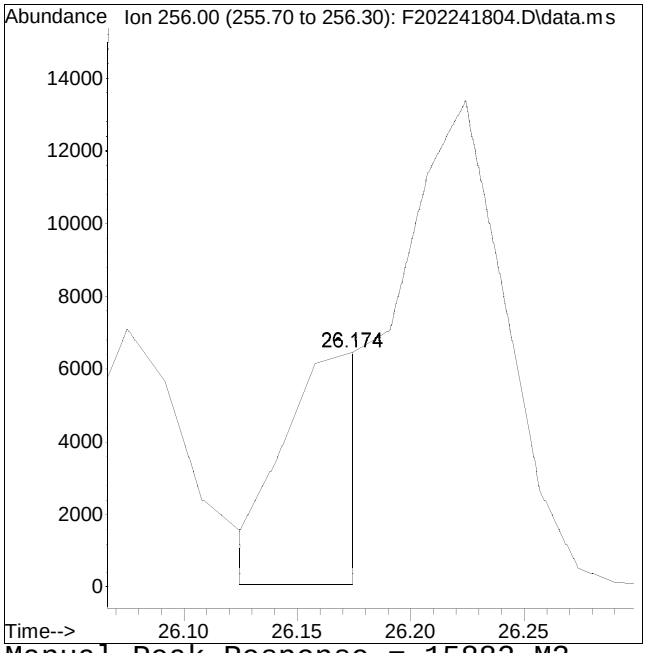
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #43: Cl3-BZ#33





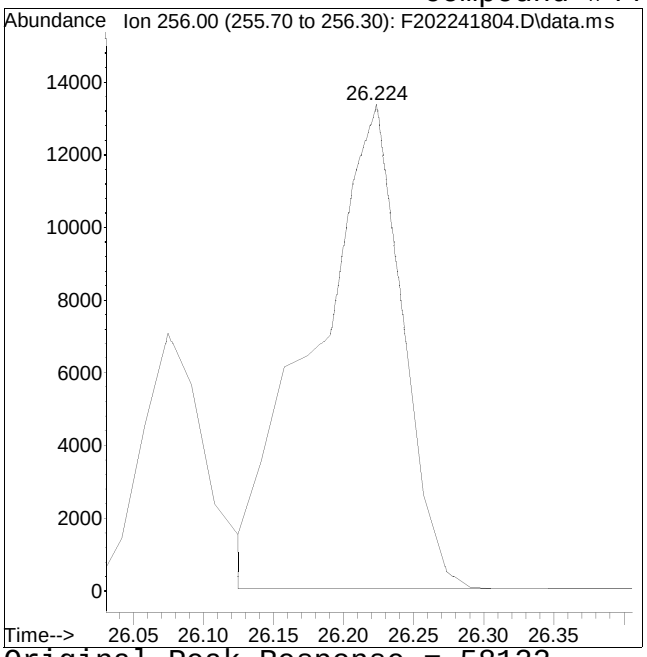
Original Peak Response = 44915 Manual Peak Response = 15882 M3

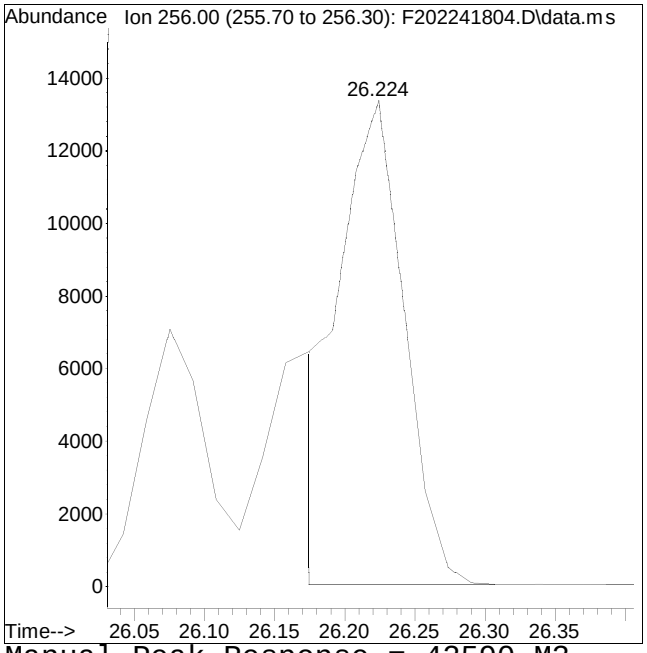
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #44: Cl3-BZ#21/#20





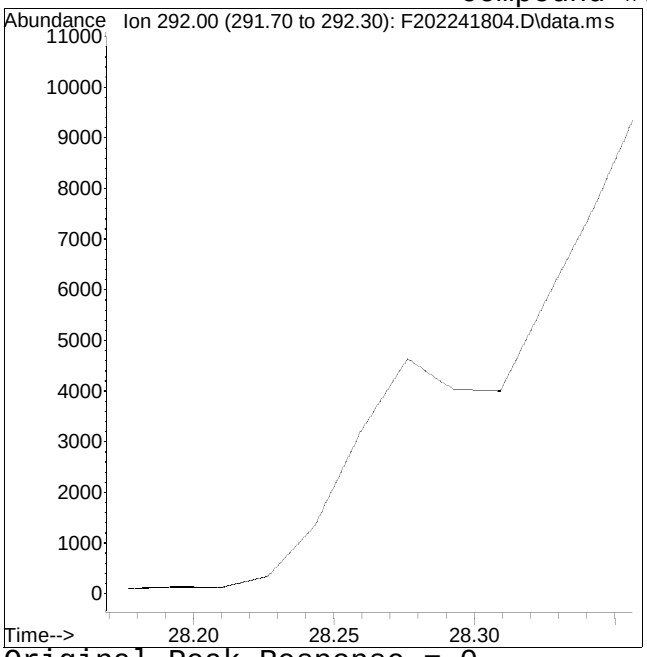
Original Peak Response = 58122 Manual Peak Response = 42590 M3

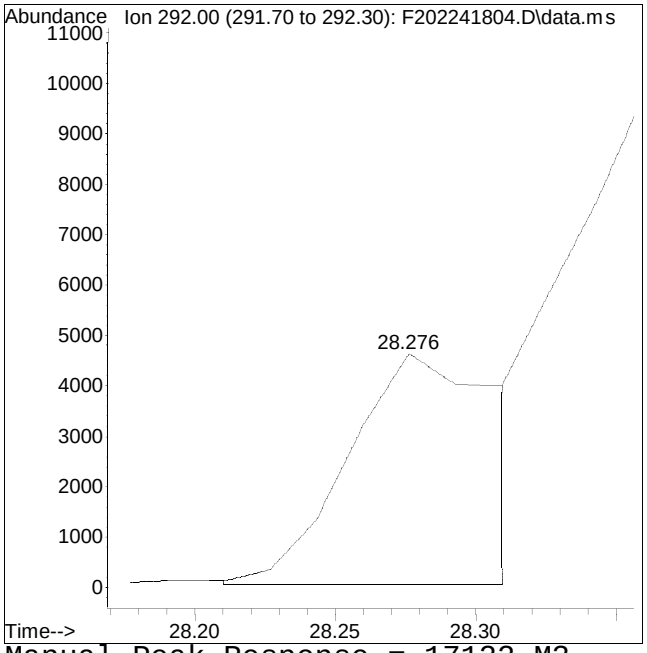
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #56: Cl4-BZ#47





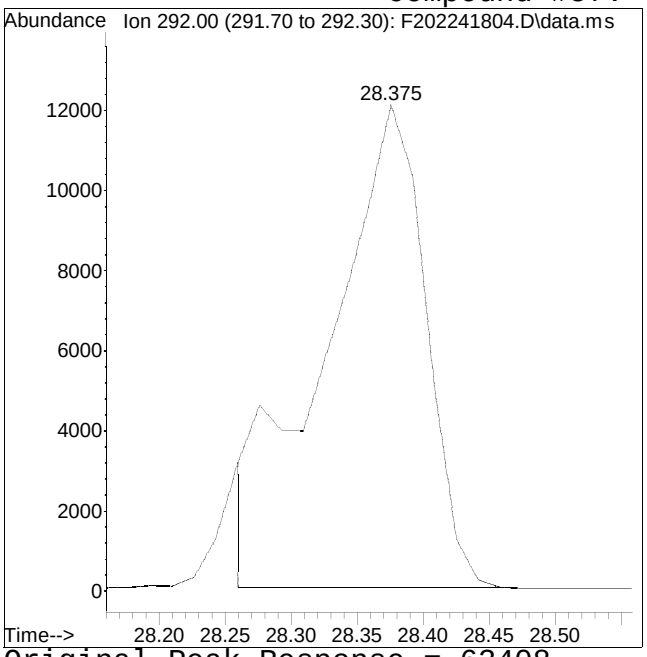
Original Peak Response = 0 Manual Peak Response = 17122 M3

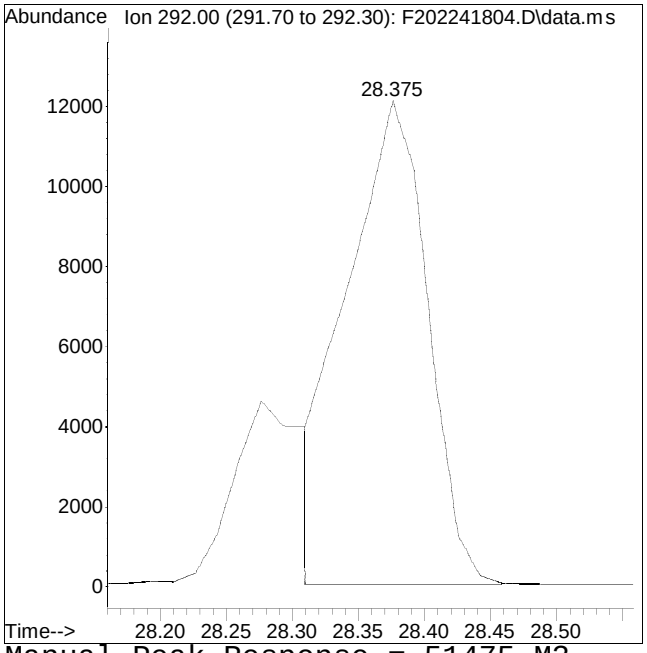
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #57: Cl4-BZ#65/#75/#62





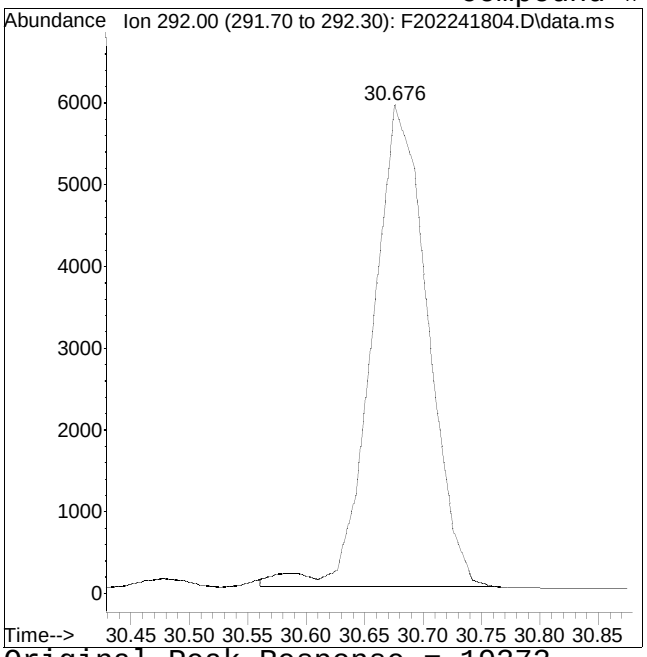
Original Peak Response = 63408 Manual Peak Response = 51475 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

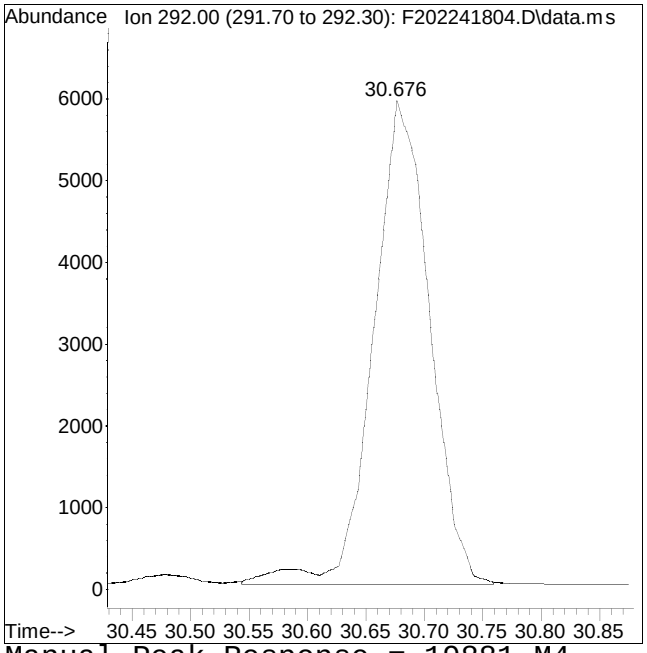
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #74: Cl4-BZ#57



Original Peak Response = 19373



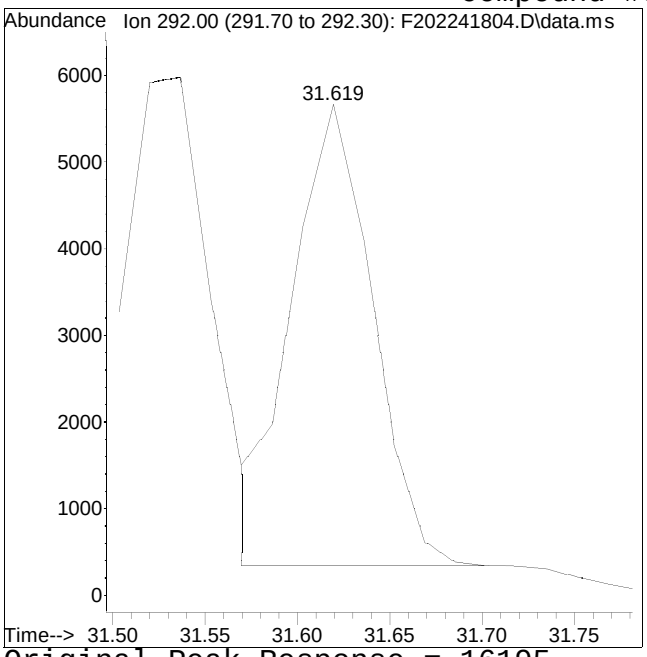
Manual Peak Response = 19881 M4

M4 = Poor automated baseline construction.

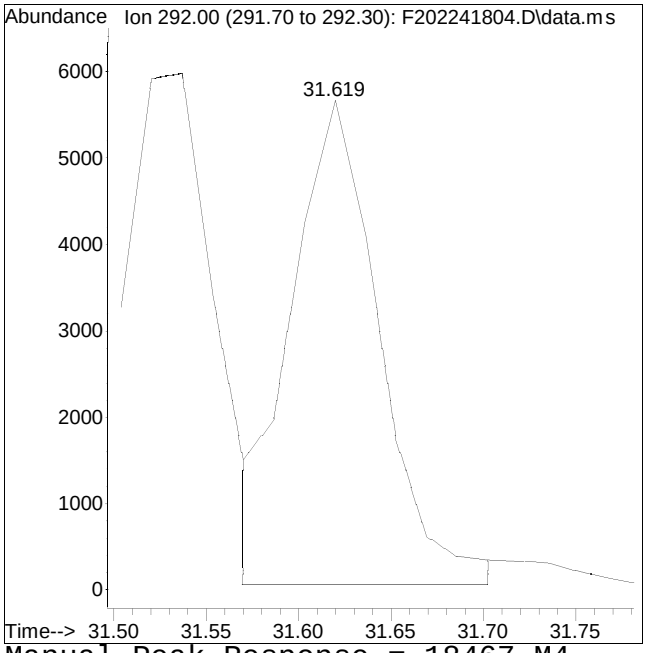
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #81: Cl4-BZ#63



Original Peak Response = 16195



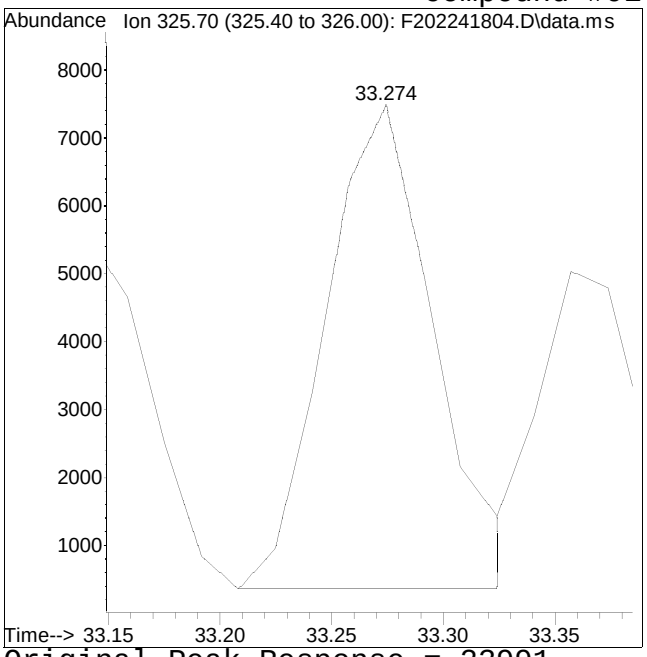
Manual Peak Response = 18467 M4

M4 = Poor automated baseline construction.

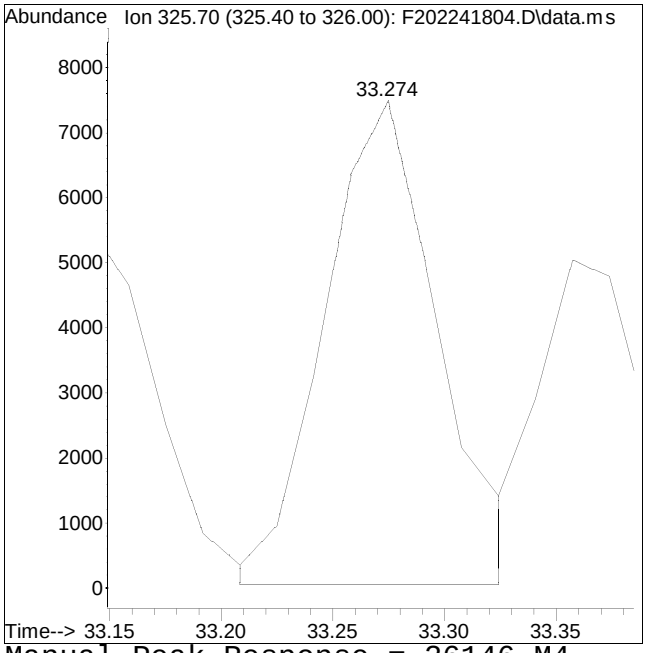
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 23991



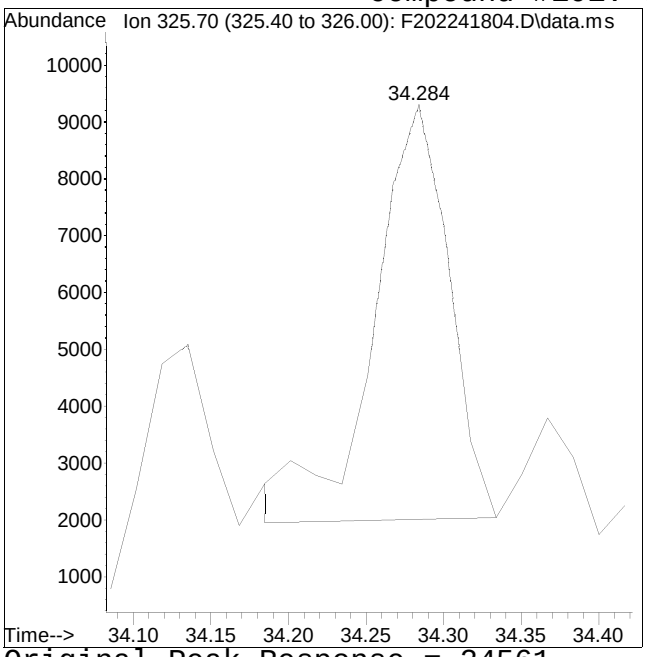
Manual Peak Response = 26146 M4

M4 = Poor automated baseline construction.

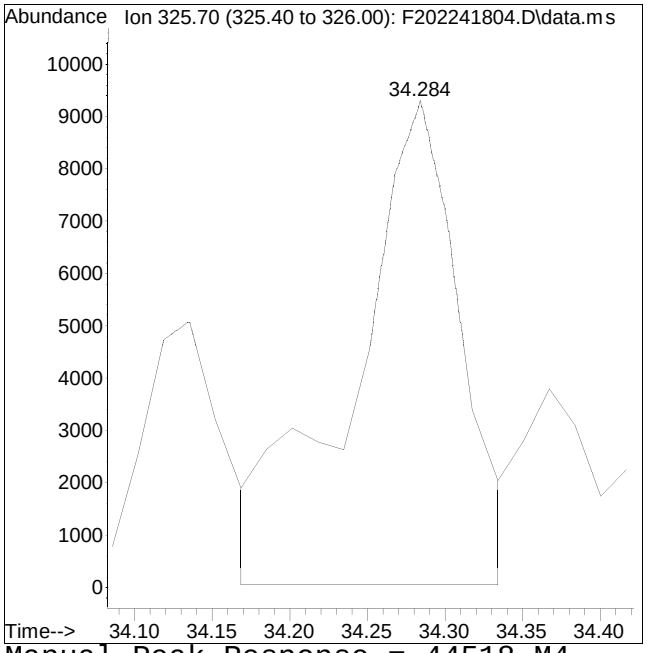
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 24561



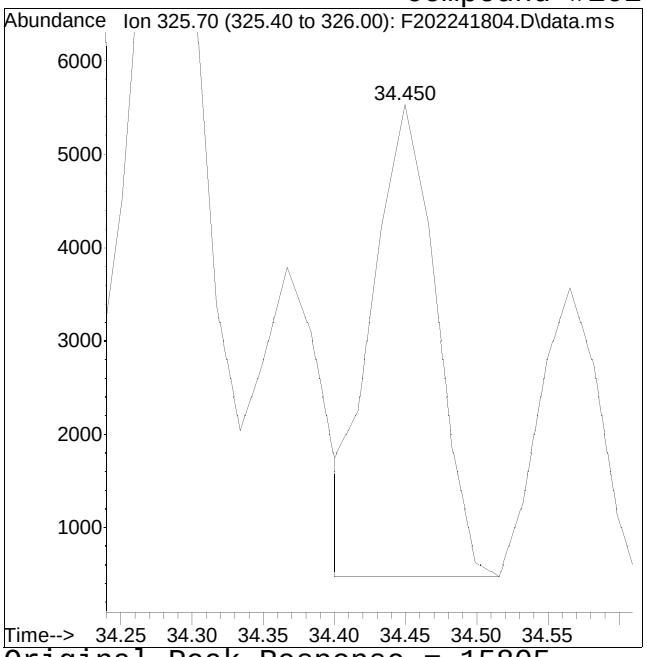
Manual Peak Response = 44518 M4

M4 = Poor automated baseline construction.

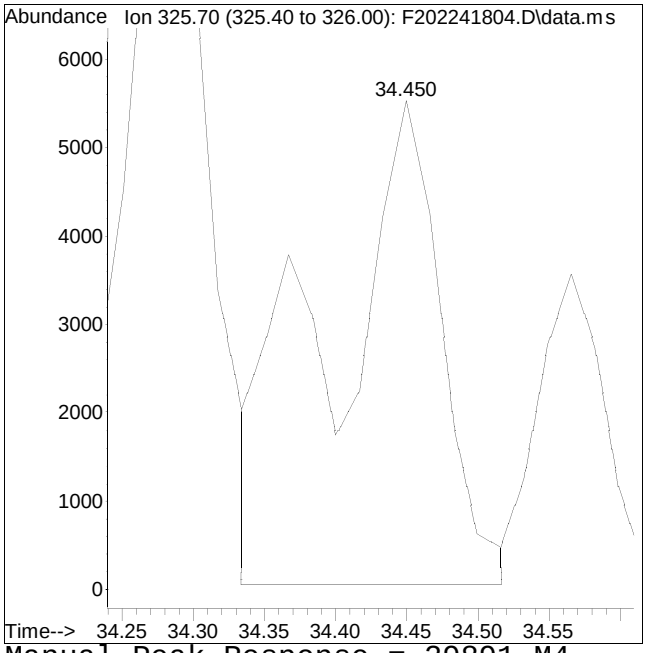
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 15805



Manual Peak Response = 29891 M4

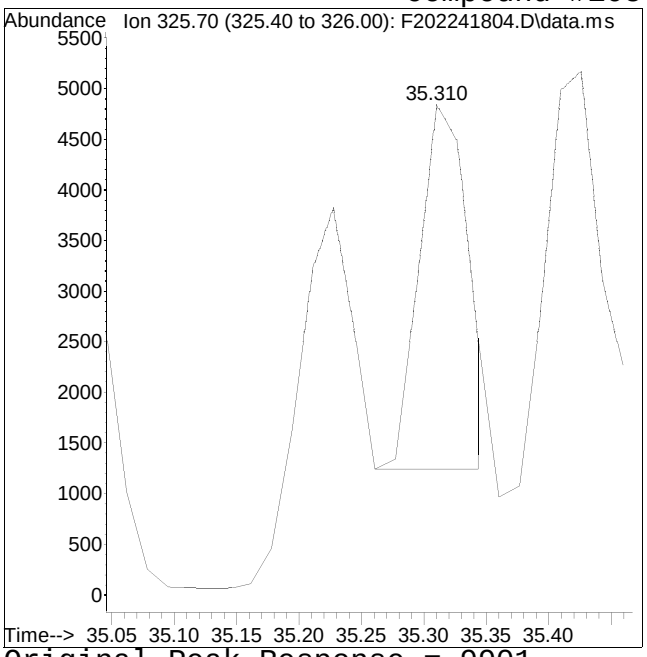
M4 = Poor automated baseline construction.

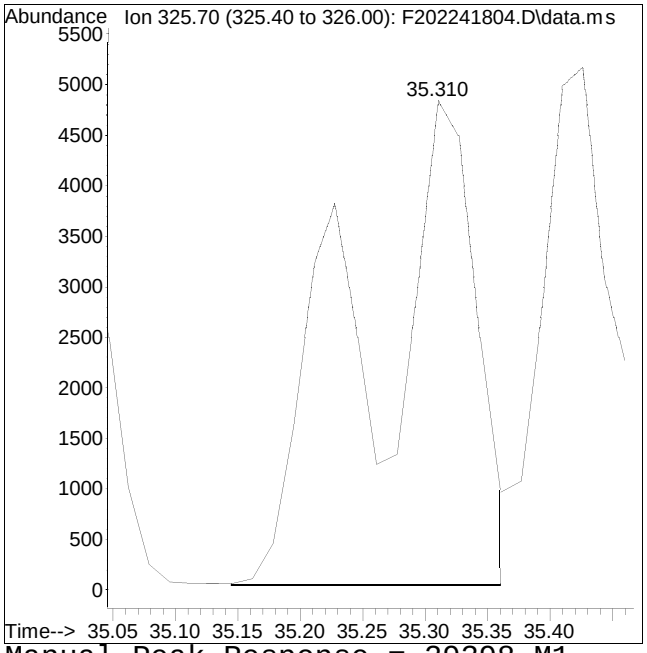
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #105: Cl5-BZ#87/#111





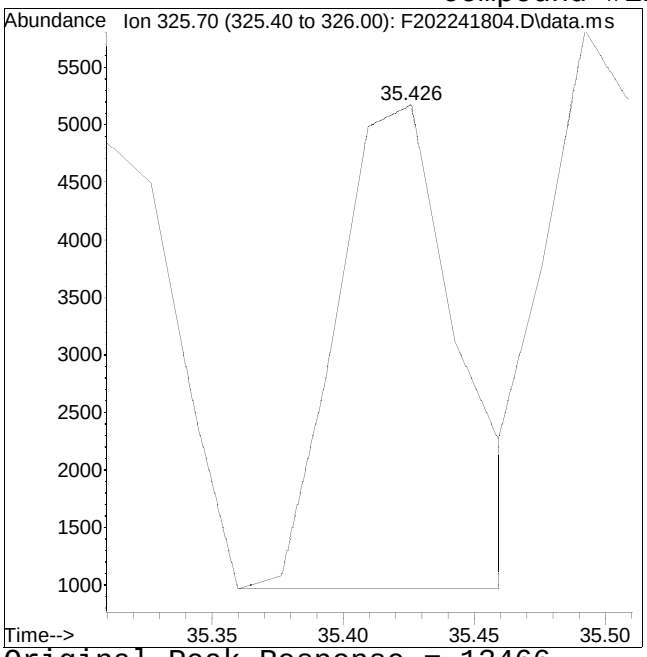
Original Peak Response = 9901 Manual Peak Response = 29398 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

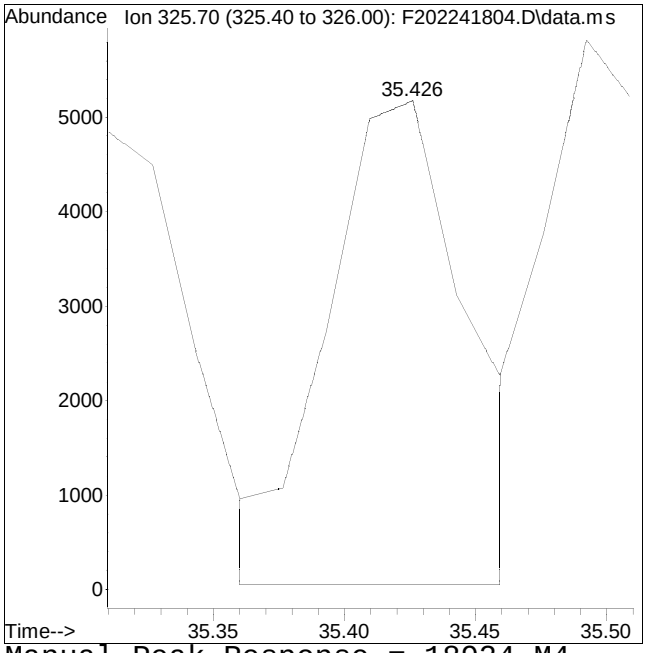
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #116: Cl5-BZ#117



Original Peak Response = 13466



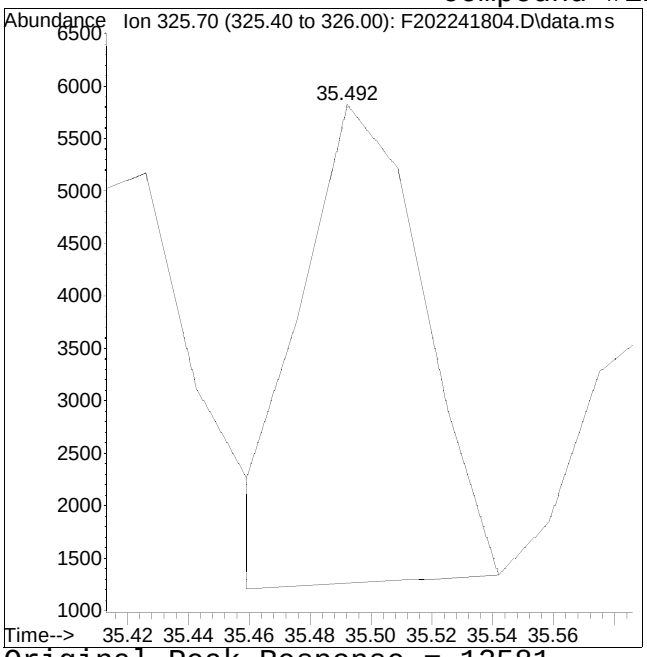
Manual Peak Response = 18924 M4

M4 = Poor automated baseline construction.

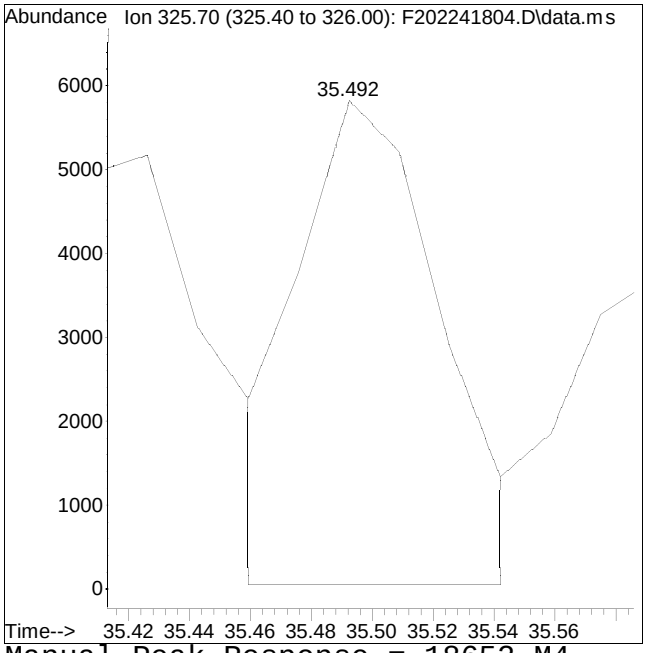
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #117: Cl5-BZ#115



Original Peak Response = 12581



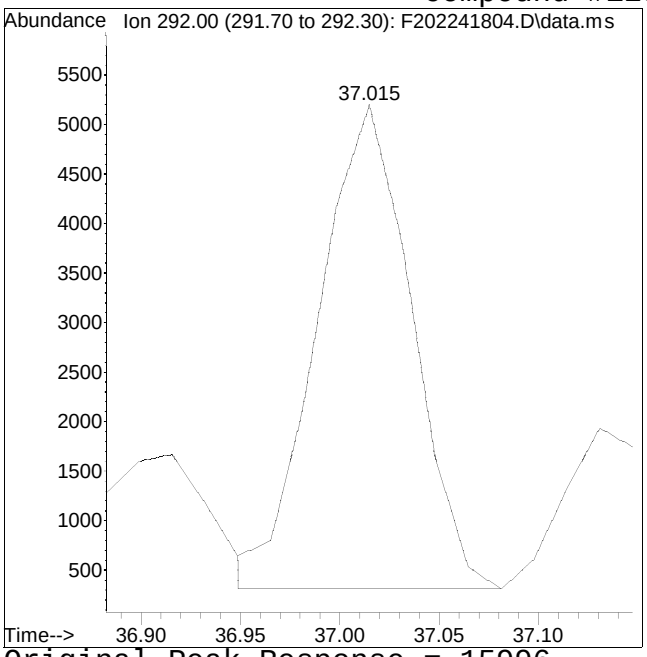
Manual Peak Response = 18652 M4

M4 = Poor automated baseline construction.

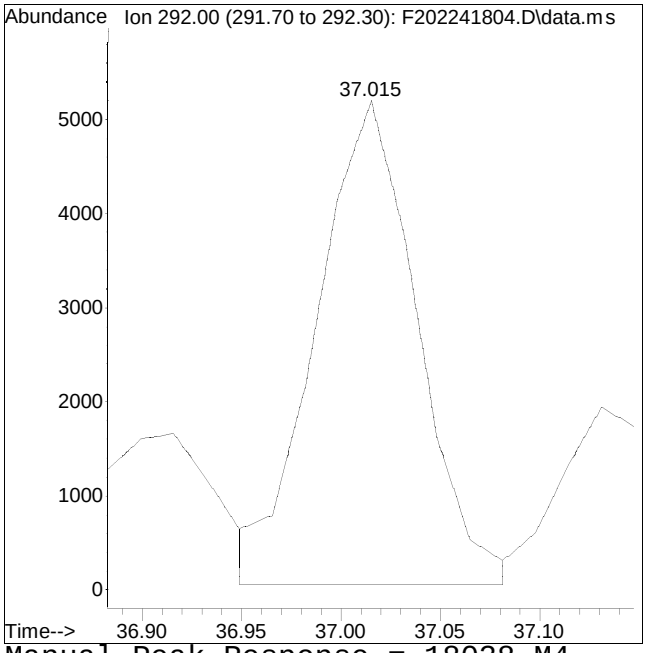
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 15996



Manual Peak Response = 18038 M4

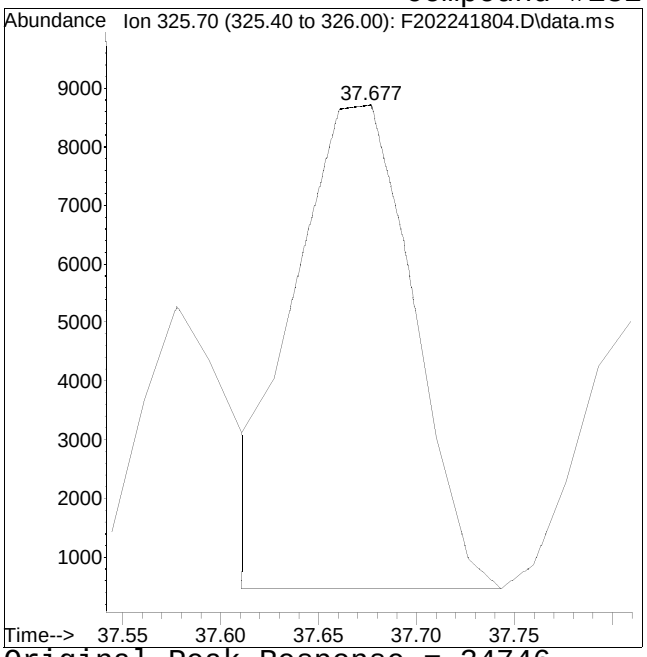
M4 = Poor automated baseline construction.

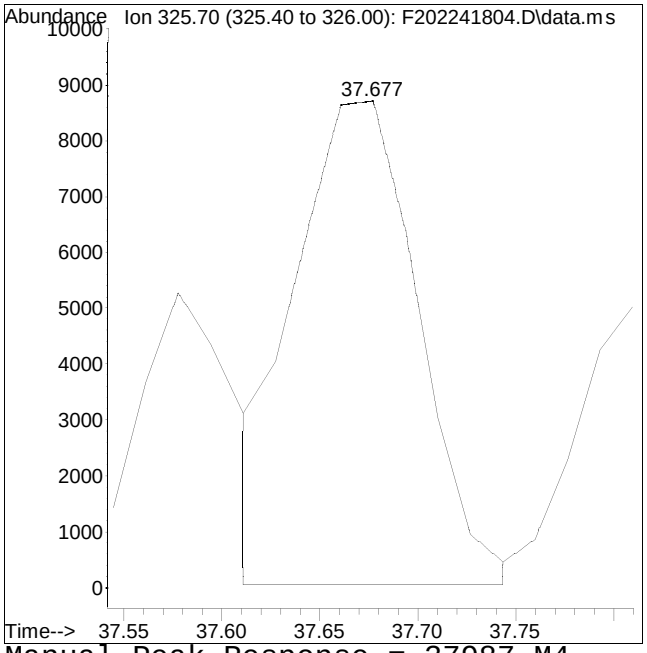
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #132: Cl5-BZ#107/#123





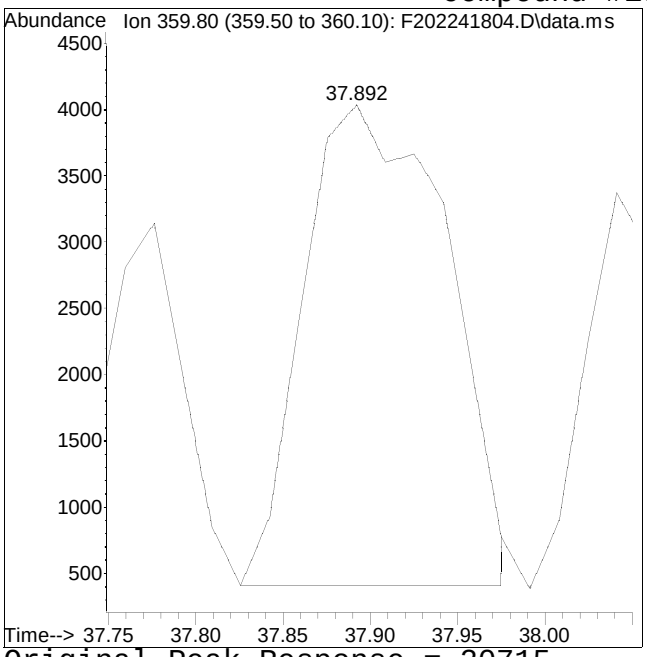
Original Peak Response = 34746 Manual Peak Response = 37987 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

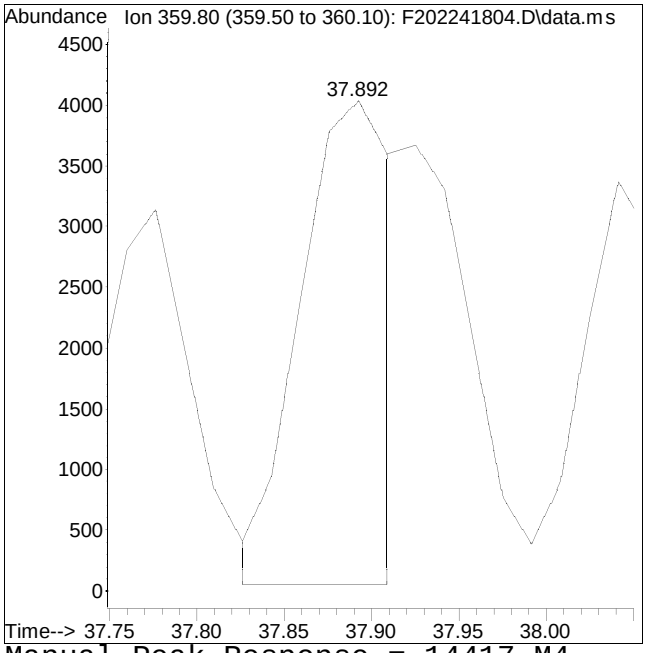
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #139: Cl6-BZ#133



Original Peak Response = 20715



Manual Peak Response = 14417 M4

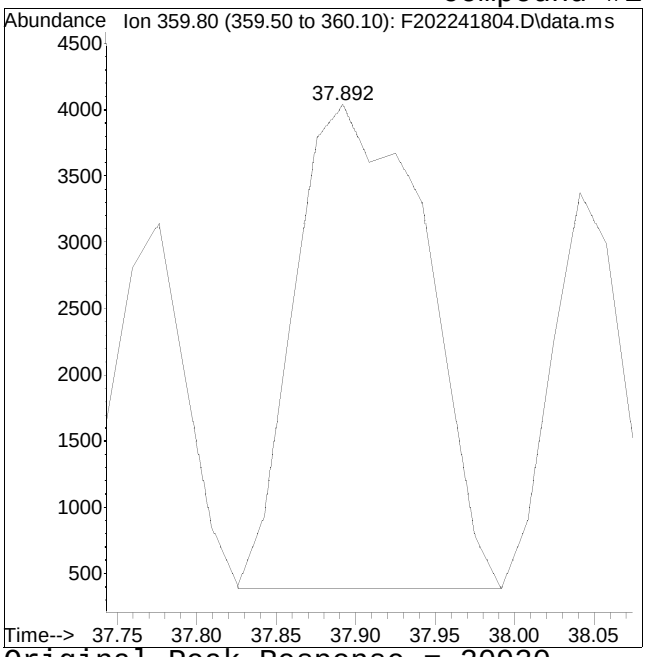
M4 = Poor automated baseline construction.

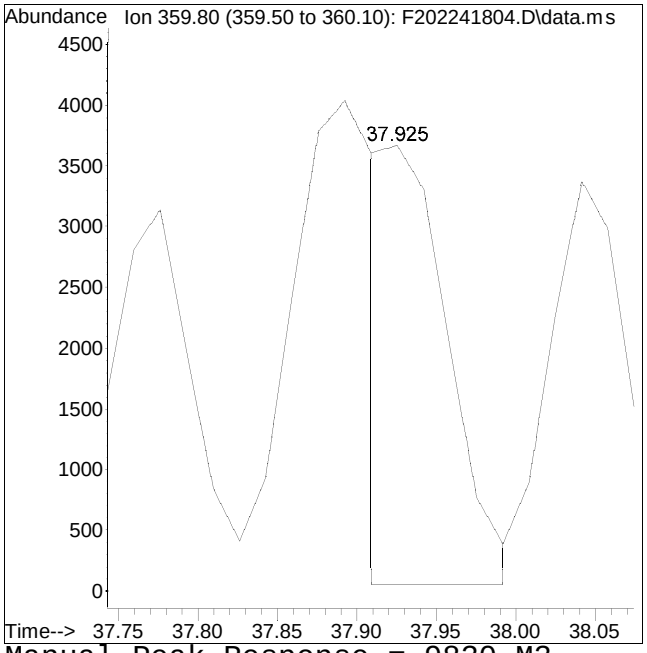
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #140: Cl6-BZ#142





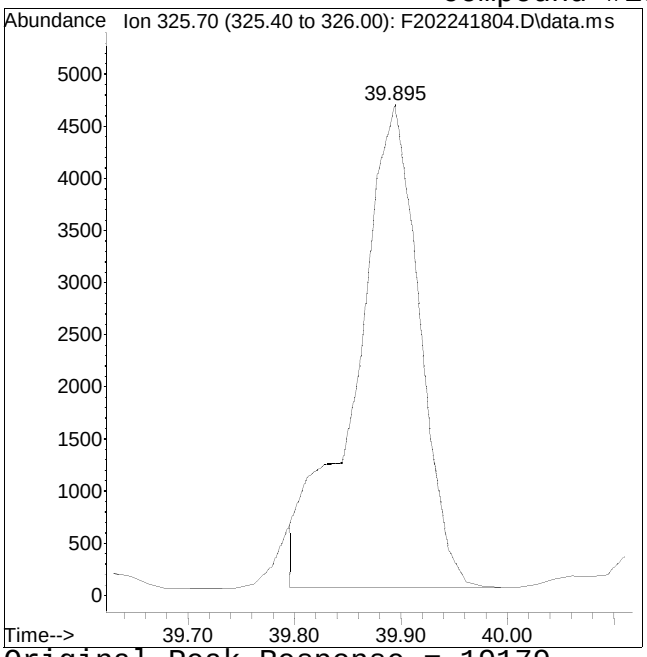
Original Peak Response = 20930 Manual Peak Response = 9830 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

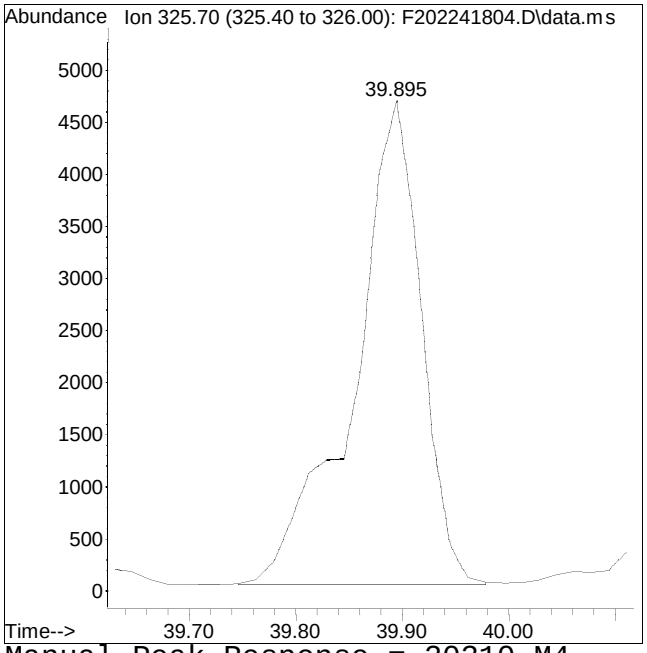
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #156: Cl5-BZ#105



Original Peak Response = 19179



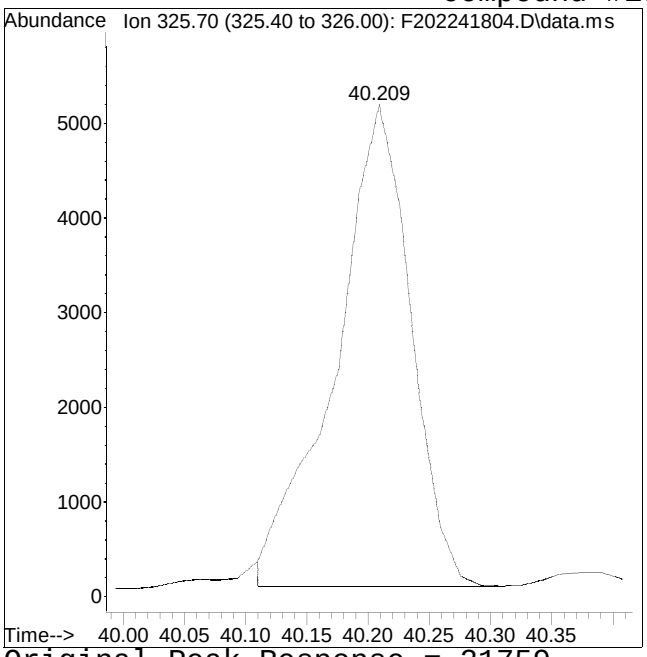
Manual Peak Response = 20310 M4

M4 = Poor automated baseline construction.

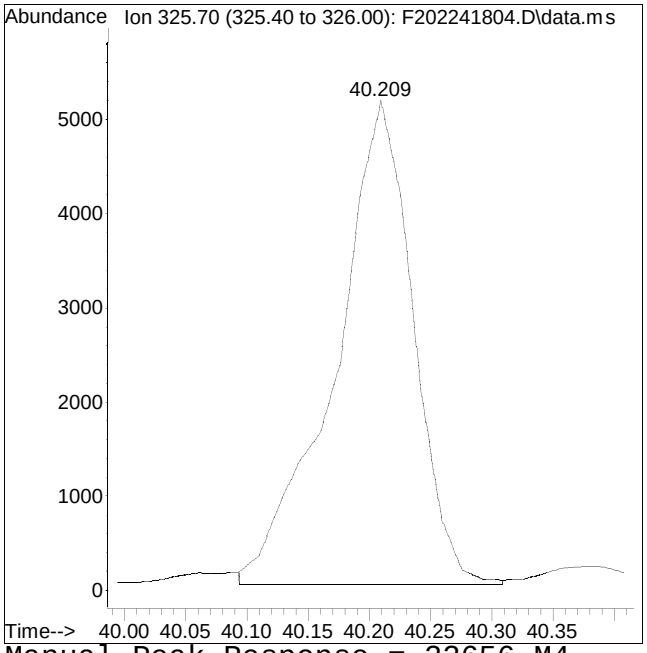
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #158: Cl5-BZ#127



Original Peak Response = 21759



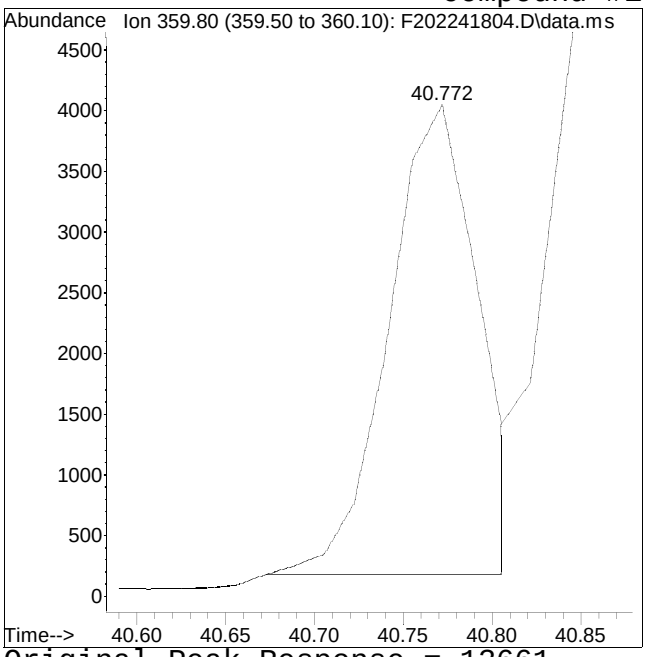
Manual Peak Response = 22656 M4

M4 = Poor automated baseline construction.

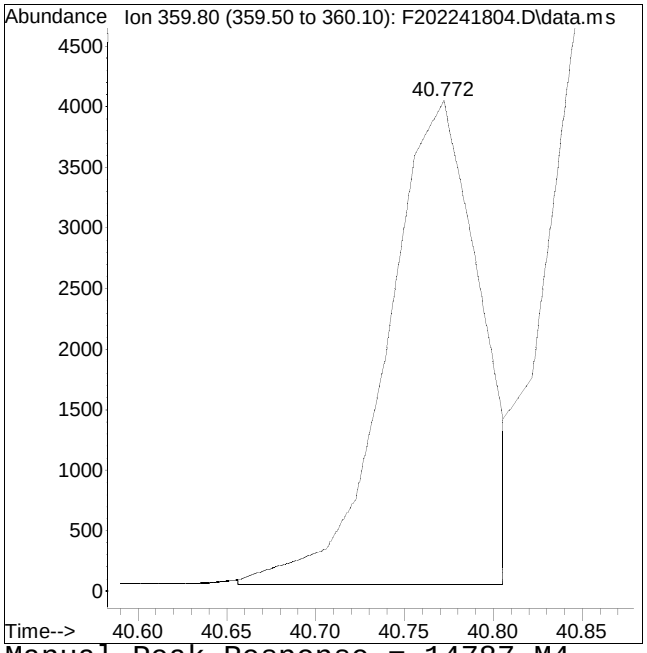
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #162: Cl6-BZ#138



Original Peak Response = 13661



Manual Peak Response = 14787 M4

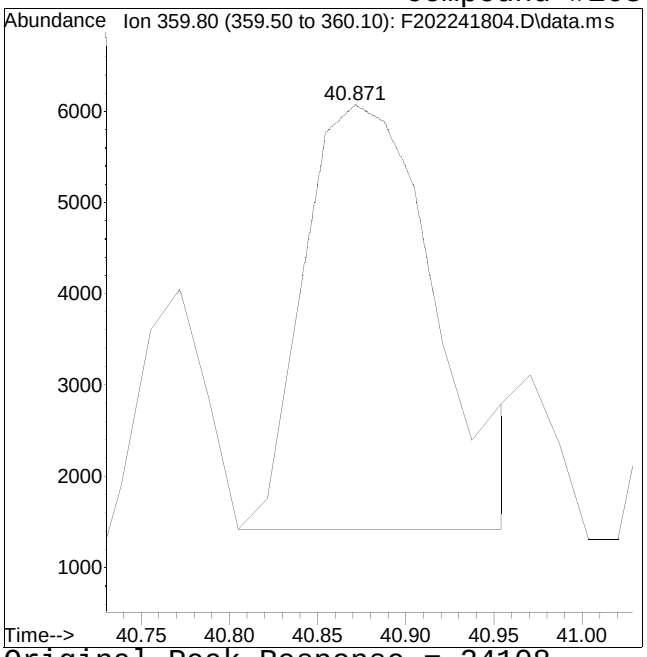
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

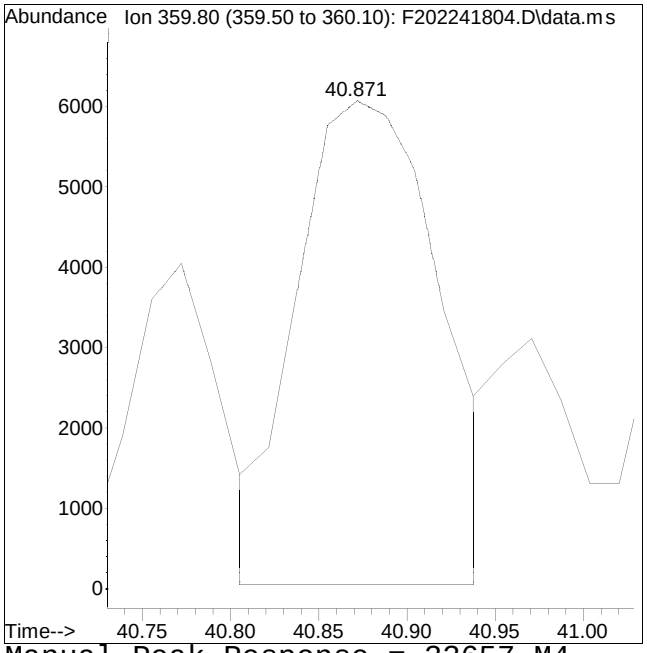
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 24108



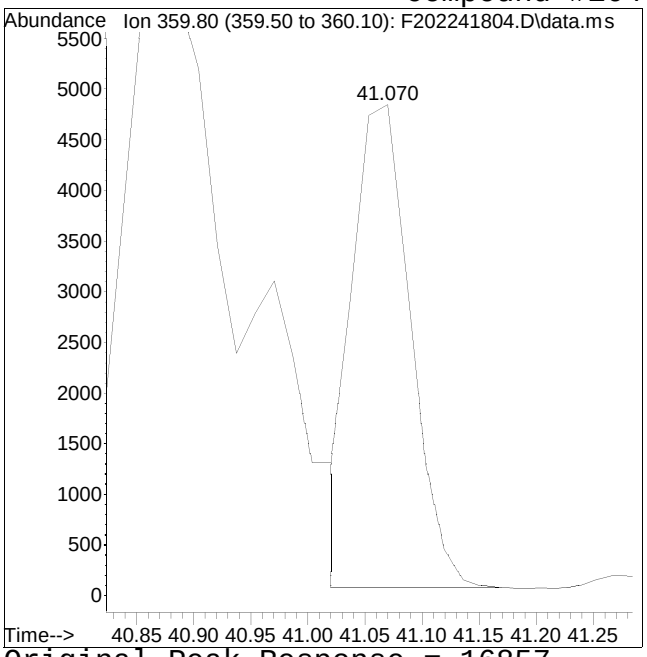
Manual Peak Response = 33657 M4

M4 = Poor automated baseline construction.

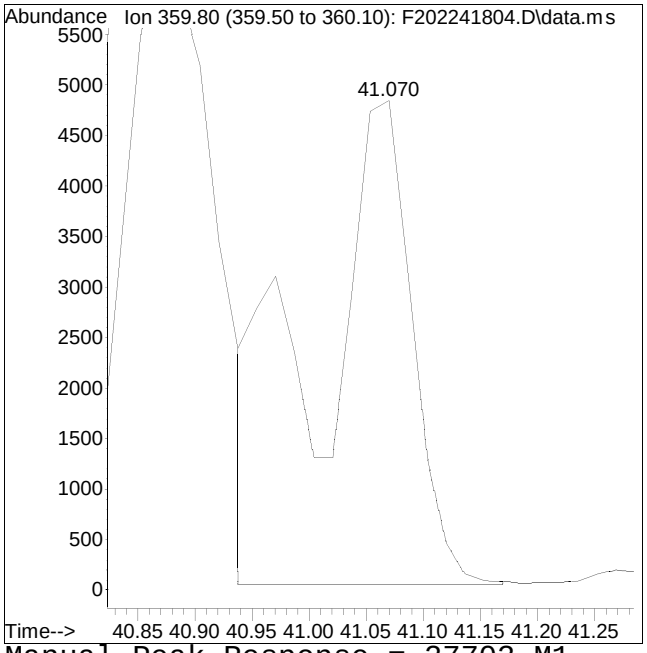
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 16857



Manual Peak Response = 27703 M1

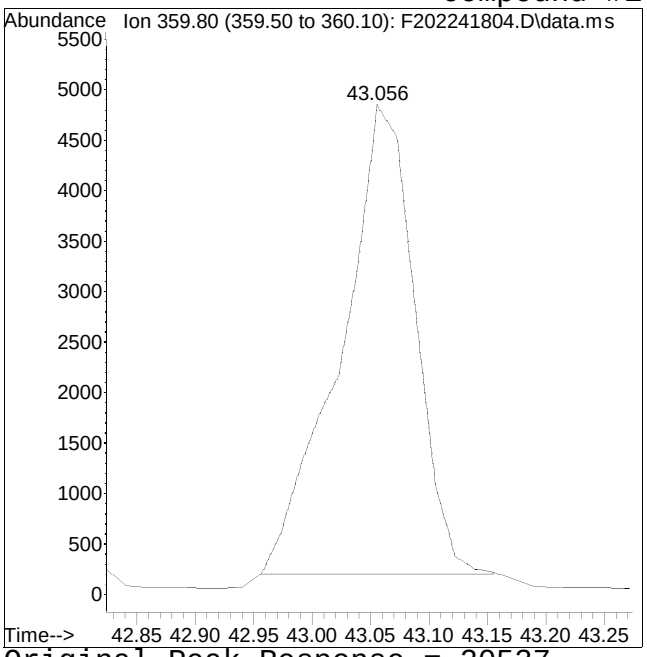
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

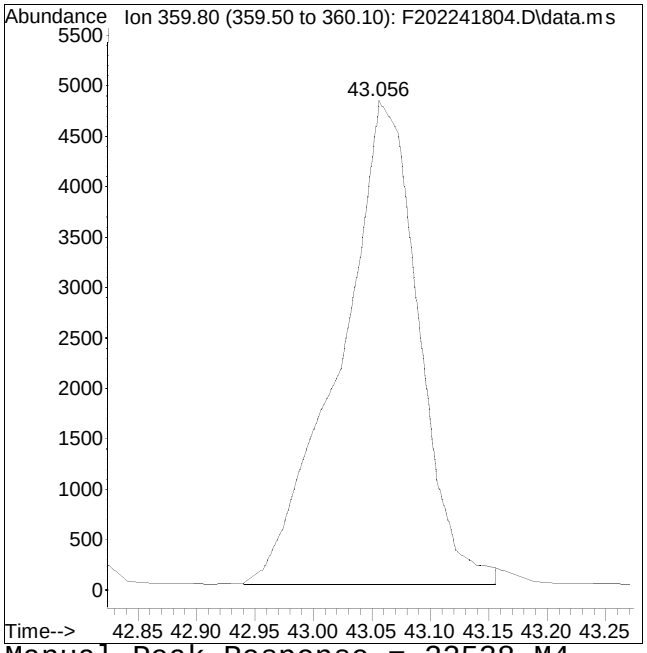
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241804.D
Date Inj'd : 2/24/2018 12:42 pm
Sample : I202241803

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #175: Cl6-BZ#167



Original Peak Response = 20537



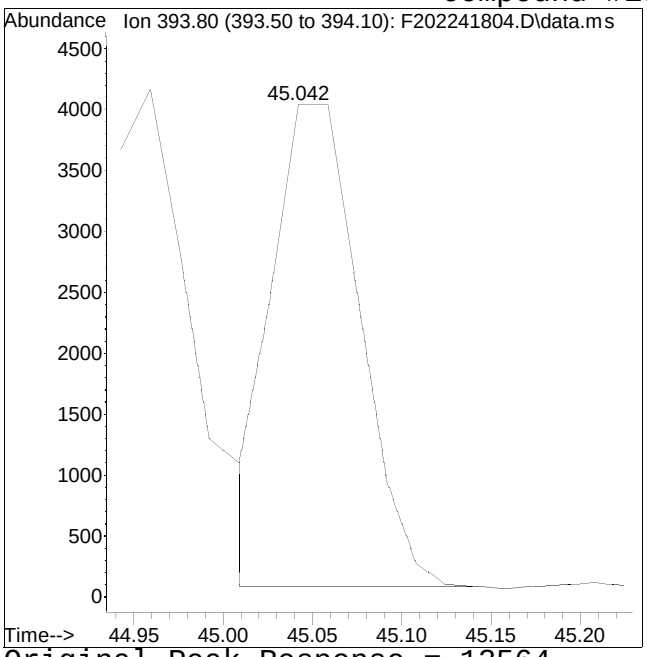
Manual Peak Response = 22538 M4

M4 = Poor automated baseline construction.

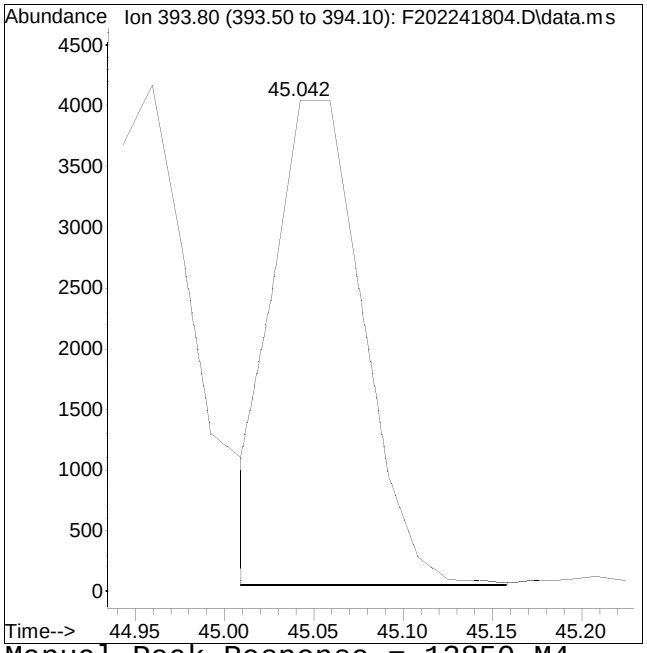
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241804.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 12:42 pm Instrument : BNA2
Sample : I202241803 Quant Date : 2/25/2018 10:50 am

Compound #190: Cl7-BZ#193



Original Peak Response = 13564



Manual Peak Response = 13850 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241805.D
Acq On : 24 Feb 2018 1:56 pm
Operator : BNA2:JT
Sample : I202241804
Misc : wg1092764,MSAT58,50ug/l
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 16:04:44 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	565469	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.926	406	305049	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	19475	13.779	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 13.78%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	28945	13.931	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 13.93%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	27776	12.702	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 12.70%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	27592	14.454	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 14.45%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.583	188	51823	13.550	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.666	188	53838	14.430	ng/mL	100
7) Cl1-BZ#3-RTW	17.133	188	53270	14.348	ng/mL	100
8) Cl2-BZ#4/#10-RTW	17.551	222	63094	26.498	ng/mL	99
9) Cl2-BZ#9	19.111	222	40219	14.337	ng/mL	100
10) Cl2-BZ#7	19.207	222	39551	14.618	ng/mL	100
11) Cl2-BZ#6	19.634	222	42711	14.361	ng/mL	100
12) Cl2-BZ#5	20.076	222	38412	13.393	ng/mL	100
13) Cl2-BZ#8	20.229	222	44370	14.070	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.009	256	21716	13.129	ng/mL	100
17) Cl2-BZ#14	21.154	222	42540	14.699	ng/mL	98
18) Cl3-BZ#30	21.564	256	35111	13.855	ng/mL	100
19) Cl3-BZ#18	22.376	256	23960	13.708	ng/mL	100
20) Cl2-BZ#11	22.505	222	46109	14.520	ng/mL	99
21) Cl3-BZ#17	22.585	256	22457	13.595	ng/mL	100
22) Cl2-BZ#12	22.907	222	40670	14.697	ng/mL	98
23) Cl3-BZ#27	22.947	256	31636	13.877	ng/mL	98
24) Cl2-BZ#13	23.196	222	46312	14.550	ng/mL	99
25) Cl3-BZ#24	23.220	256	32296	14.367	ng/mL	99
26) Cl3-BZ#16	23.558	256	19717	13.703	ng/mL	96
27) Cl3-BZ#32	23.759	256	34215	13.909	ng/mL	97
28) Cl2-BZ#15-RTW	23.928	222	47777	14.533	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241805.D
Acq On : 24 Feb 2018 1:56 pm
Operator : BNA2:JT
Sample : I202241804
Misc : wg1092764,MSAT58,50ug/l
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 16:04:44 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.161	256	32626	14.325	ng/mL	99
30) Cl3-BZ#23	24.338	256	32087	14.262	ng/mL	99
31) Cl4-BZ#54-RTW	24.346	292	30104	13.414	ng/mL	99
32) Cl3-BZ#29-Cal	24.563	256	32219	14.515	ng/mL	100
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	24664	13.553	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.102	256	35629	14.820	ng/mL	100
39) Cl3-BZ#25	25.311	256	34808	14.345	ng/mL	100
40) Cl4-BZ#53	25.793	292	27488	13.928	ng/mL	100
41) Cl3-BZ#-31	25.876	256	47766M4	15.559	ng/mL	
42) Cl3-BZ#28	26.075	256	46906	15.020	ng/mL	100
43) Cl3-BZ#33	26.158	256	35009M3	12.424	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	87111M3	31.107	ng/mL	
45) Cl4-BZ#51	26.207	292	30700	14.233	ng/mL	98
46) Cl4-BZ#45	26.770	292	23568	14.500	ng/mL	99
47) Cl3-BZ#22	27.002	256	42440	15.072	ng/mL	100
48) Cl4-BZ#73/#46	27.151	292	63675	28.732	ng/mL	100
49) Cl4-BZ#69	27.432	292	37740	14.637	ng/mL	99
50) Cl4-BZ#43	27.531	292	24922	13.636	ng/mL	99
51) Cl3-BZ#36	27.564	256	47874	14.760	ng/mL	98
52) Cl4-BZ#52	27.664	292	30230	13.841	ng/mL	100
53) Cl4-BZ#48	27.829	292	27669	15.107	ng/mL	100
54) Cl4-BZ#49	27.978	292	28900	14.474	ng/mL	100
55) Cl5-BZ#104-RTW	28.193	326	30463	14.067	ng/mL	100
56) Cl4-BZ#47	28.276	292	28101M3	13.150	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	115727M4	44.366	ng/mL	
58) Cl3-BZ#39	28.425	256	43220	14.861	ng/mL	99
59) Cl3-BZ#38	28.541	256	42828	14.962	ng/mL	98
60) Cl4-BZ#44	28.938	292	25679	14.633	ng/mL	100
61) Cl4-BZ#59	29.170	292	36409	14.327	ng/mL	99
62) Cl4-BZ#42	29.253	292	24865	14.897	ng/mL	100
63) Cl4-BZ#71	29.484	292	39190	14.397	ng/mL	99
64) Cl3-BZ#35	29.600	256	43565	15.476	ng/mL	100
65) Cl4-BZ#41	29.716	292	24338	15.318	ng/mL	99
66) Cl4-BZ#72	29.832	292	41648	14.788	ng/mL	98
67) Cl5-BZ#96	29.865	326	33589	14.393	ng/mL	98
68) Cl5-BZ#103	29.981	326	25746	15.486	ng/mL	97
69) Cl4-BZ#68/#64	30.146	292	77433	29.677	ng/mL	99

Quantitation Report (QT Reviewed)

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Operator : BNA2:JT
Sample : I202241804
Misc : wg1092764,MSAT58,50ug/l
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 16:04:44 2018
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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	18598	14.705	ng/mL	98
71) Cl3-BZ#37-RTW	30.477	256	58082	15.689	ng/mL	100
72) Cl5-BZ#100	30.477	326	27466	14.588	ng/mL	99
73) Cl5-BZ#94	30.577	326	20727	14.394	ng/mL	99
74) Cl4-BZ#57	30.676	292	41872M4	14.914	ng/mL	
75) Cl4-BZ#67/#58	31.007	292	83657	29.769	ng/mL	99
76) Cl5-BZ#102	31.057	326	29276	14.101	ng/mL	100
77) Cl4-BZ#61	31.371	292	40371	14.659	ng/mL	98
78) Cl5-BZ#98	31.388	326	26651	14.342	ng/mL	99
79) Cl4-BZ#76	31.520	292	43659	14.447	ng/mL	99
80) Cl5-BZ#93	31.520	326	22026	14.461	ng/mL	99
81) Cl4-BZ#63	31.619	292	38754M4	14.648	ng/mL	
82) Cl5-BZ#121/#95/#88	31.686	326	86733	43.465	ng/mL	100
83) Cl4-BZ#74	31.884	292	42362	14.791	ng/mL	100
84) Cl6-BZ#155-RTW	32.033	360	31950	14.423	ng/mL	98
85) Cl4-BZ#70	32.066	292	43513	13.000	ng/mL	100
86) Cl4-BZ#66	32.348	292	40076	14.901	ng/mL	100
87) Cl5-BZ#91	32.215	326	24731	14.107	ng/mL	100
88) Cl4-BZ#80	32.612	292	41446	15.365	ng/mL	99
89) Cl4-BZ#55	32.811	292	42148	15.126	ng/mL	98
90) Cl5-BZ#92	32.861	326	24612	14.605	ng/mL	100
91) Cl5-BZ#89/#84	33.142	326	46987	26.472	ng/mL	100
92) Cl5-BZ#101/#90	33.274	326	54632M4	30.021	ng/mL	
94) Cl4-BZ#56	33.258	292	41745	14.583	ng/mL	99
95) Cl5-BZ#113	33.357	326	31754	14.367	ng/mL	97
96) Cl5-BZ#99	33.622	326	30243	14.808	ng/mL	99
97) Cl6-BZ#150	33.688	360	33871	14.453	ng/mL	99
98) Cl4-BZ#60	33.688	292	44716	13.958	ng/mL	99
99) Cl6-BZ#152	34.052	360	37083	14.369	ng/mL	100
100) Cl5-BZ#119	34.135	326	37796	14.727	ng/mL	100
101) Cl5-BZ#83/#125/#112	34.284	326	92610M1	44.159	ng/mL	
102) Cl5-BZ#86/#109	34.449	326	60058M1	29.140	ng/mL	
103) Cl5-BZ#97	34.565	326	23507	14.722	ng/mL	99
104) Cl5-BZ#116	35.012	326	31757	14.900	ng/mL	99
105) Cl5-BZ#87/#111	35.310	326	62344M1	29.450	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	37654	14.403	ng/mL	98
109) Cl6-BZ#148	34.698	360	25642	14.786	ng/mL	99
110) Cl4-BZ#79	34.814	292	41642	15.773	ng/mL	99
111) Cl6-BZ#154-Cal	35.227	360	29349	14.898	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241805.D
Acq On : 24 Feb 2018 1:56 pm
Operator : BNA2:JT
Sample : I202241804
Misc : wg1092764,MSAT58,50ug/l
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 16:04:44 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	51974	15.191	ng/mL#	76
115) Cl6-BZ#136	35.360	360	33334	14.293	ng/mL	99
116) Cl5-BZ#117	35.409	326	39507M4	14.768	ng/mL	
117) Cl5-BZ#115	35.492	326	38650M4	15.498	ng/mL	
118) Cl5-BZ#85	35.591	326	23183	14.296	ng/mL	100
119) Cl5-BZ#120	35.724	326	38117	15.464	ng/mL	98
120) Cl5-BZ#110	35.873	326	35708	14.855	ng/mL	100
121) Cl4-BZ#81	36.254	292	40931	15.787	ng/mL	100
123) Cl6-BZ#151	36.254	360	25551	14.460	ng/mL	99
124) Cl6-BZ#135	36.386	360	27431	14.645	ng/mL	99
125) Cl5-BZ#82	36.568	326	23619	13.654	ng/mL	99
126) Cl6-BZ#144	36.601	360	26731	14.031	ng/mL	98
127) Cl6-BZ#147/#149	36.899	360	56556	28.874	ng/mL	99
128) Cl4-BZ#77-RTW	37.015	292	38321M4	14.962	ng/mL	
129) Cl6-BZ#143/#139	37.147	360	55228	27.700	ng/mL	99
130) Cl5-BZ#124	37.296	326	36744	14.353	ng/mL	99
131) Cl5-BZ#108	37.578	326	37488	14.575	ng/mL	99
132) Cl5-BZ#107/#123	37.660	326	79142M4	28.993	ng/mL	
133) Cl6-BZ#140	37.313	360	25836	13.665	ng/mL	100
134) Cl7-BZ#188-Cal/RTW	37.677	394	31384	13.534	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.760	360	23059	14.151	ng/mL	97
138) Cl5-BZ#106	37.809	326	38271M4	14.077	ng/mL	
139) Cl6-BZ#133	37.875	360	30952M3	14.702	ng/mL	
140) Cl6-BZ#142	37.925	360	20118M3	13.175	ng/mL	
141) Cl5-BZ#118	38.041	326	35002	14.314	ng/mL	98
142) Cl6-BZ#131	38.041	360	23857	14.828	ng/mL	99
143) Cl7-BZ#184	38.173	394	30761	13.657	ng/mL	98
144) Cl6-BZ#165	38.240	360	33558	14.436	ng/mL	97
145) Cl6-BZ#146	38.339	360	28948	14.636	ng/mL	99
146) Cl6-BZ#161	38.521	360	36928	14.185	ng/mL	100
147) Cl5-BZ#122	38.504	326	32091	14.351	ng/mL	100
148) Cl6-BZ#168	38.736	360	35698	14.586	ng/mL	99
149) Cl5-BZ#114	38.786	326	35402	13.898	ng/mL	100
150) Cl6-BZ#153	38.802	360	30811	13.665	ng/mL	97
152) Cl6-BZ#132	39.067	360	25063	13.768	ng/mL	98
153) Cl7-BZ#179	39.332	394	31379	14.190	ng/mL	99
154) Cl6-BZ#141	39.630	360	25249	15.471	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241805.D
Acq On : 24 Feb 2018 1:56 pm
Operator : BNA2:JT
Sample : I202241804
Misc : wg1092764,MSAT58,50ug/l
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 26 16:04:44 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.828	394	29515	14.082	ng/mL	100
156) Cl5-BZ#105	39.895	326	42437M4	14.916	ng/mL	
157) Cl6-BZ#137	40.060	360	26270	14.692	ng/mL	98
158) Cl5-BZ#127	40.209	326	46311	14.596	ng/mL#	75
159) Cl7-BZ#186	40.143	394	33606	13.864	ng/mL	100
160) Cl6-BZ#130/#164	40.408	360	60351	29.300	ng/mL	98
161) Cl7-BZ#178	40.706	394	22588	14.610	ng/mL	99
162) Cl6-BZ#138	40.772	360	29957	13.883	ng/mL	100
163) Cl6-BZ#163/#160	40.871	360	71101M4	29.981	ng/mL	
164) Cl6-BZ#129/#158	41.070	360	57967M4	27.654	ng/mL	
165) Cl7-BZ#182/#175	41.086	394	53179	28.204	ng/mL	100
166) Cl7-BZ#187	41.268	394	26529	14.275	ng/mL	98
167) Cl7-BZ#183	41.666	394	25952	16.282	ng/mL	100
168) Cl6-BZ#166	42.030	360	37748	15.046	ng/mL	98
169) Cl6-BZ#159	42.278	360	37615	15.513	ng/mL	100
170) Cl5-BZ#126-RTW	42.493	326	46250	15.240	ng/mL	89
171) Cl7-BZ#185	42.526	394	23631	14.685	ng/mL	99
172) Cl6-BZ#162	42.609	360	37006M4	15.819	ng/mL	
173) Cl7-BZ#174	42.758	394	23773	14.233	ng/mL	100
174) Cl6-BZ#128	42.774	360	25893	14.050	ng/mL	99
175) Cl6-BZ#167	43.056	360	46413	15.049	ng/mL	92
176) Cl8-BZ#202-RTW	43.006	428	26945	14.528	ng/mL	99
178) Cl7-BZ#181	43.139	394	27287	14.995	ng/mL	99
179) Cl7-BZ#177	43.486	394	23093	14.867	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.569	428	52780	28.411	ng/mL	99
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	22723	16.160	ng/mL	98
184) Cl7-BZ#173	43.999	394	22066	14.780	ng/mL	99
185) Cl7-BZ#172	44.446	394	23798	14.974	ng/mL	98
186) Cl7-BZ#192	44.661	394	32799	15.050	ng/mL	99
187) Cl6-BZ#156	44.661	360	35927	15.001	ng/mL	99
188) Cl6-BZ#157	44.910	360	37356	15.067	ng/mL	98
189) Cl7-BZ#180	44.959	394	28816	13.684	ng/mL	89
190) Cl7-BZ#193	45.042	394	30645M4	12.738	ng/mL	
191) Cl8-BZ#197	44.082	428	27045	14.524	ng/mL	99
192) Cl7-BZ#191	45.373	394	31093	15.549	ng/mL	97
193) Cl8-BZ#199	45.207	428	26488	14.710	ng/mL	99
194) Cl8-BZ#198	46.747	428	23474	17.273	ng/mL	98
195) Cl8-BZ#201	46.829	428	18853	14.018	ng/mL	99
196) Cl7-BZ#170	46.962	394	22134	16.700	ng/mL	97

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Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	33121	15.230	ng/mL	98
198) Cl8-BZ#196	47.293	428	20904	14.735	ng/mL	98
199) Cl8-BZ#203	47.376	428	23403	15.834	ng/mL	98
200) Cl6-BZ#169-RTW	47.657	360	39463	16.388	ng/mL	100
201) Cl9-BZ#208-RTW	48.816	464	27543	15.297	ng/mL	99
202) Cl9-BZ#207	49.494	464	27746	15.060	ng/mL	97
203) Cl7-BZ#189-RTW	49.660	394	29539	16.345	ng/mL	97
204) Cl8-BZ#195	49.809	428	20560	15.629	ng/mL	97
205) Cl8-BZ#194	51.480	428	21780	16.082	ng/mL	100
206) Cl8-BZ#205-RTW	52.076	428	26782	17.003	ng/mL	96
207) Cl9-BZ#206-Cal/RTW	54.112	464	22473	16.284	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.396	498	22791	15.765	ng/mL#	82
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

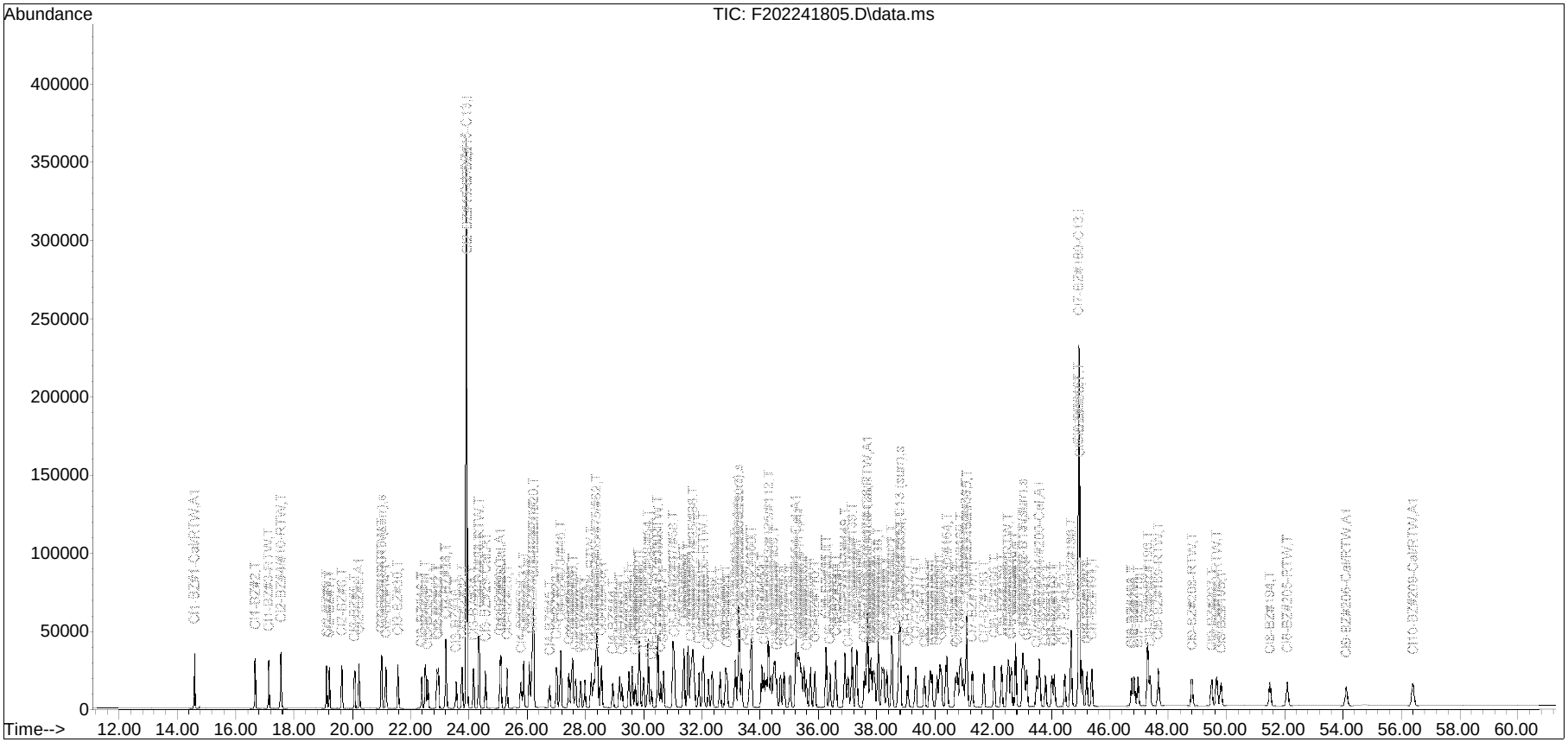
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

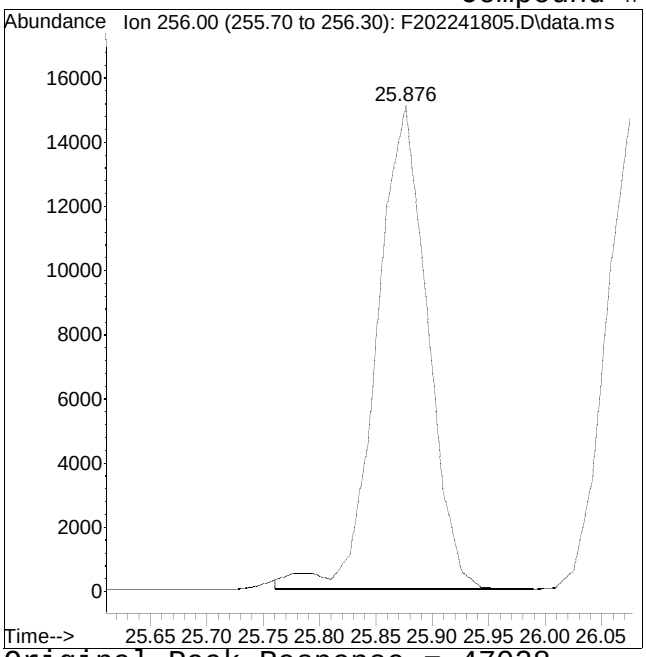
Sub List : Default - All compounds listed

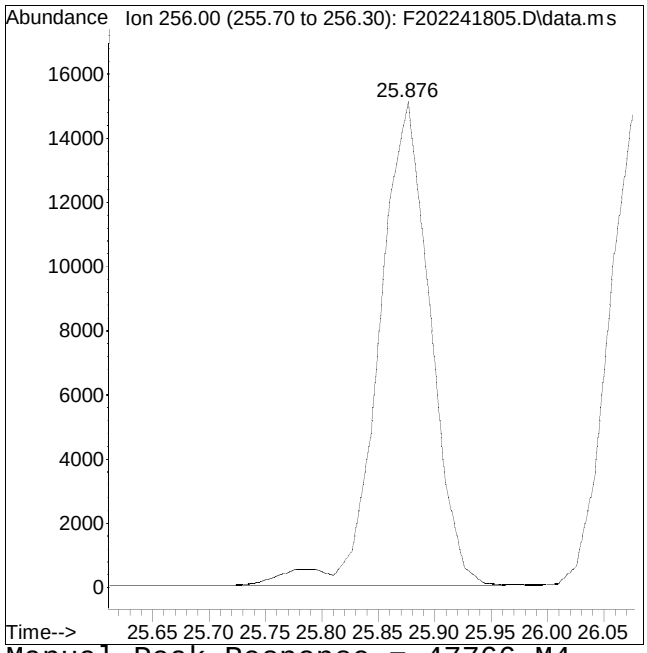


Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #41: Cl3-BZ#-31



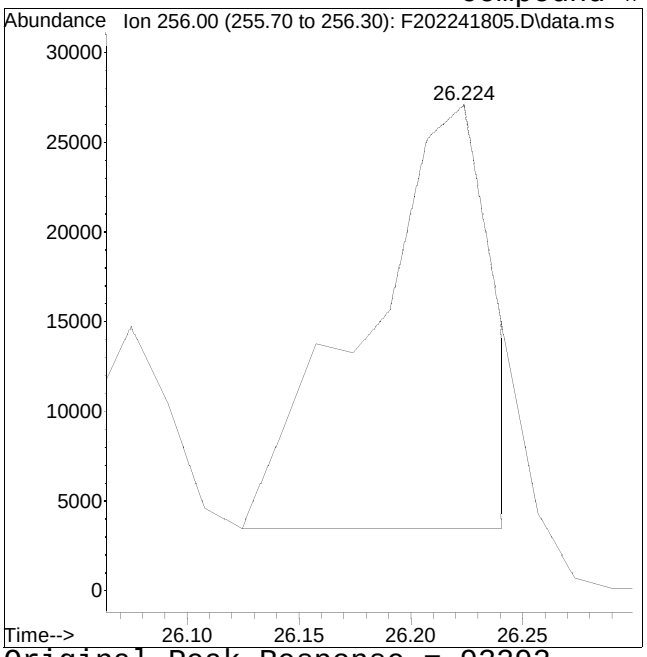


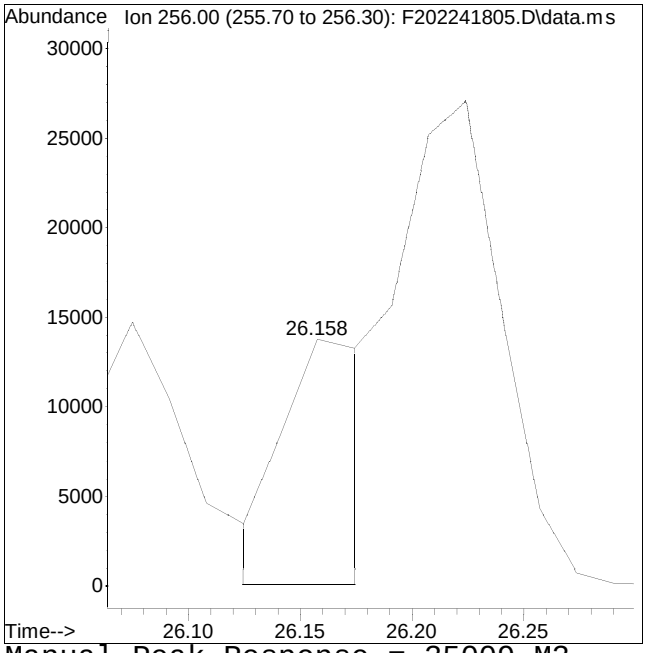
Original Peak Response = 47028 Manual Peak Response = 47766 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #43: Cl3-BZ#33





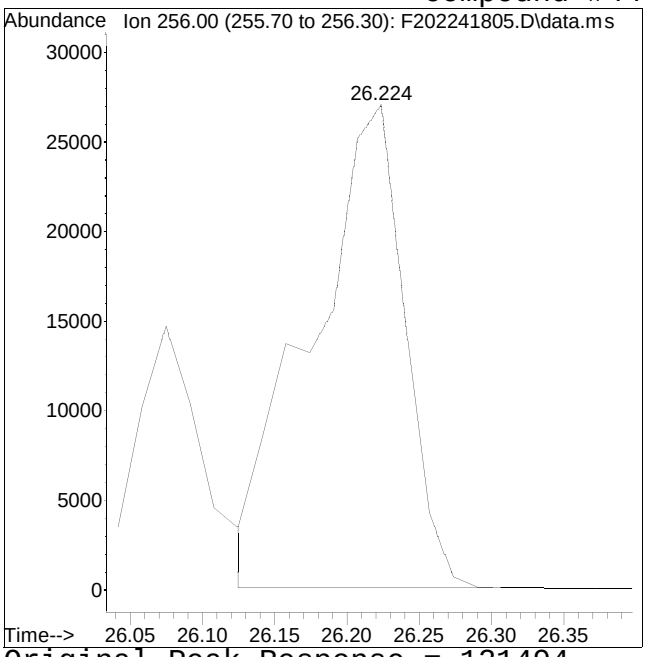
Original Peak Response = 93292 Manual Peak Response = 35009 M3

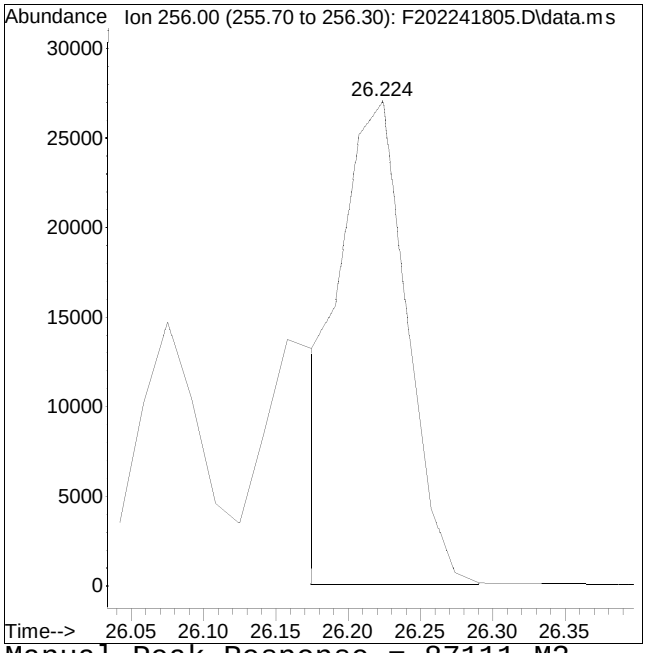
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #44: Cl3-BZ#21/#20





Original Peak Response = 121494 Manual Peak Response = 87111 M3

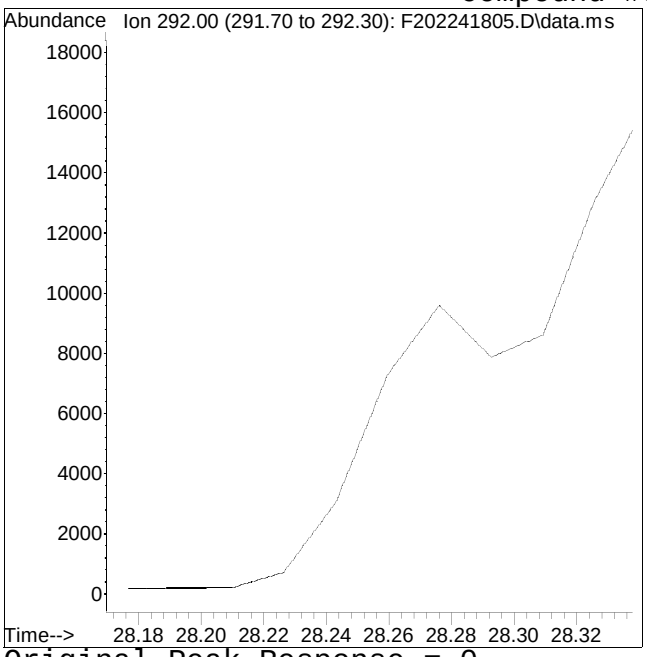
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

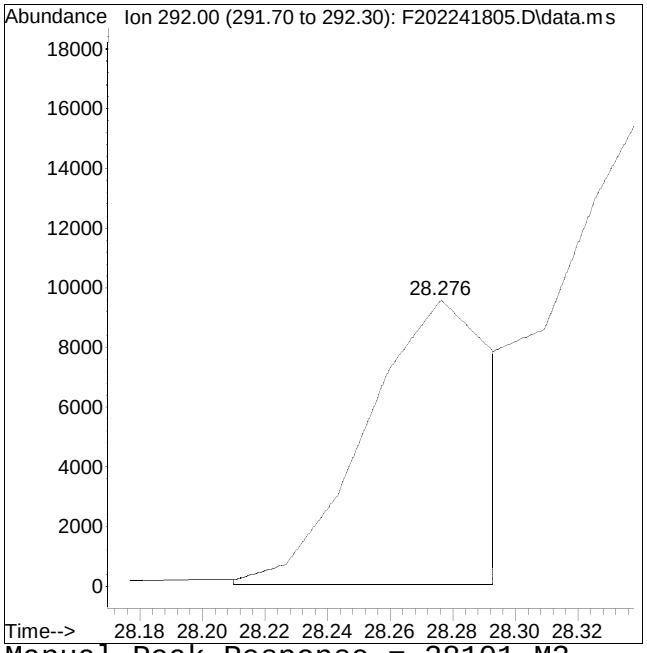
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #56: Cl4-BZ#47



Original Peak Response = 0



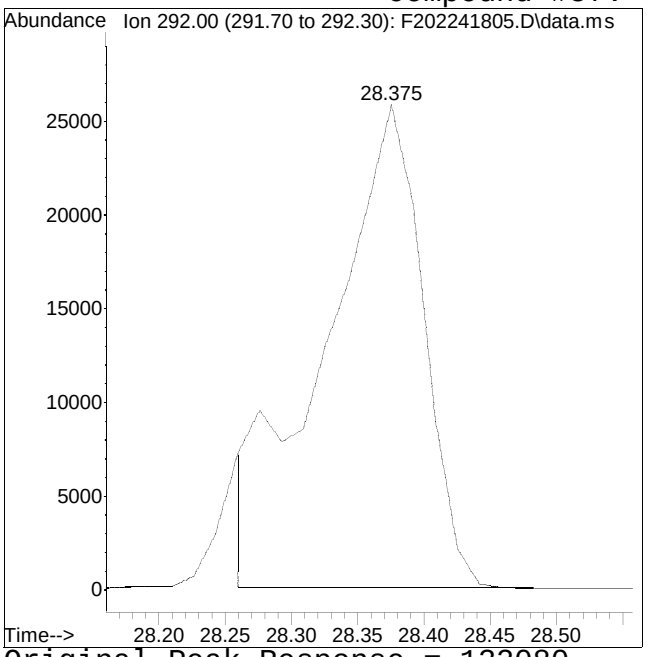
Manual Peak Response = 28101 M3

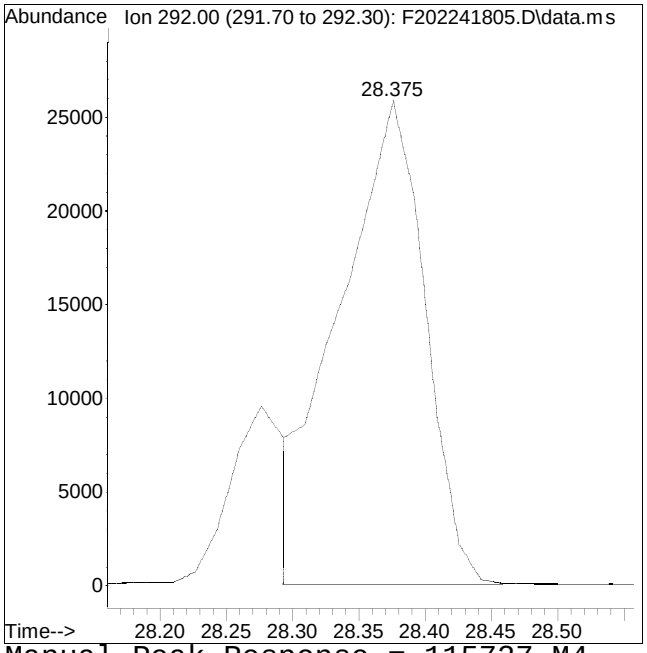
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #57: Cl4-BZ#65/#75/#62



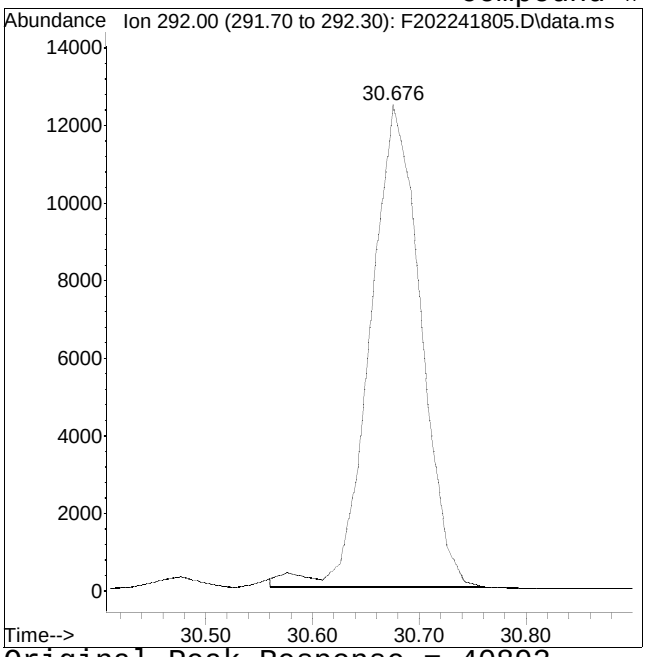


Original Peak Response = 132080 Manual Peak Response = 115727 M4
M4 = Poor automated baseline construction.

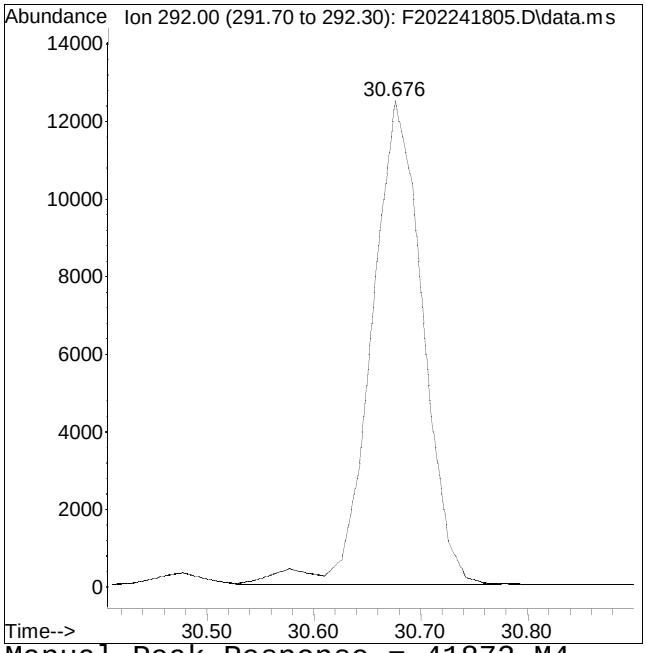
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #74: Cl4-BZ#57



Original Peak Response = 40893



Manual Peak Response = 41872 M4

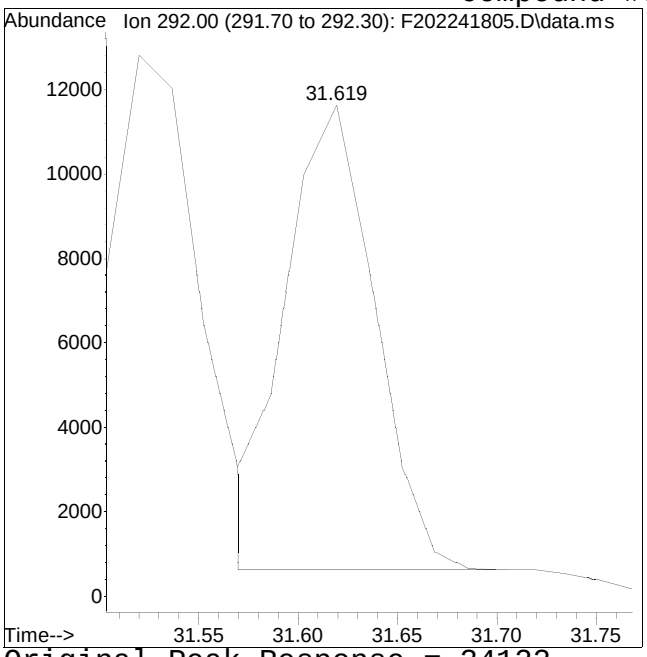
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

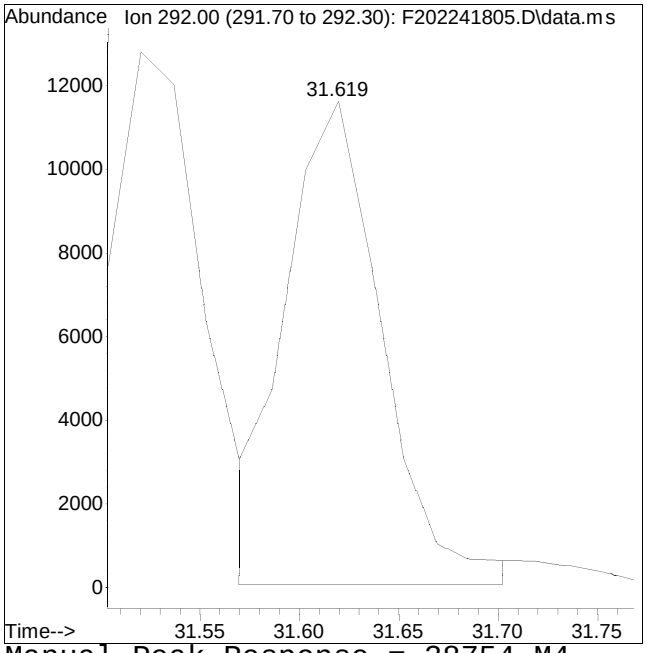
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #81: Cl4-BZ#63



Original Peak Response = 34122



Manual Peak Response = 38754 M4

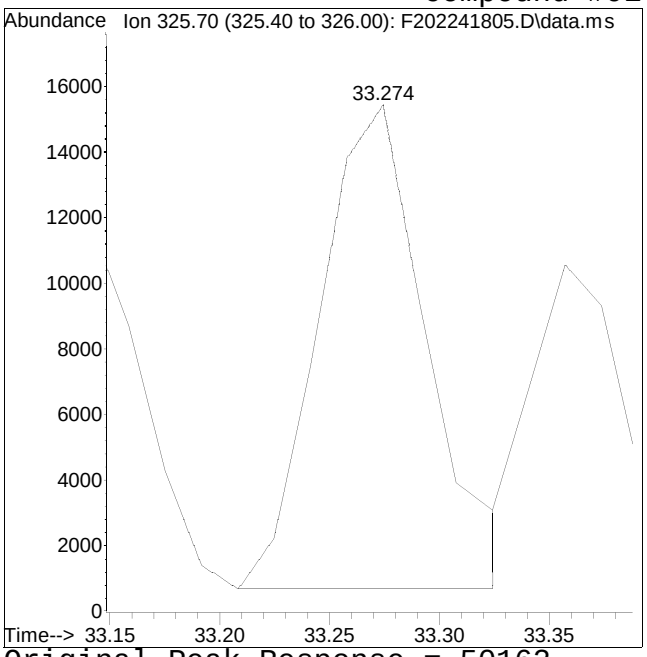
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

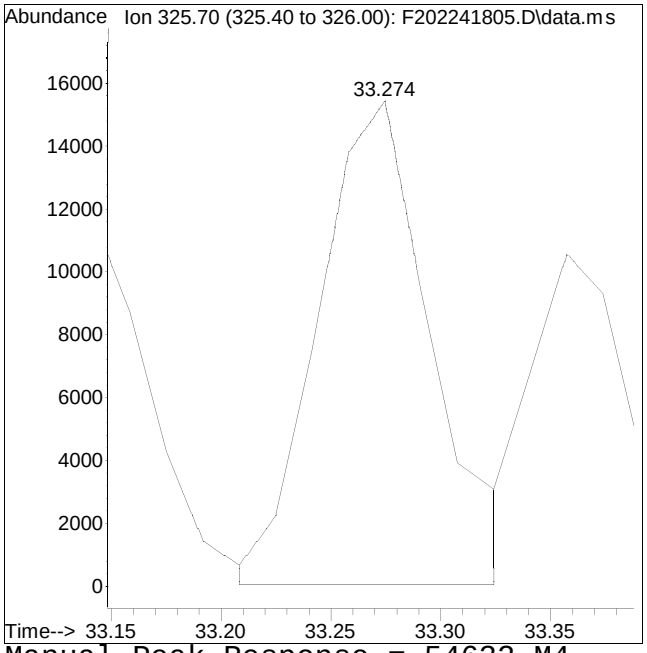
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 50162



Manual Peak Response = 54632 M4

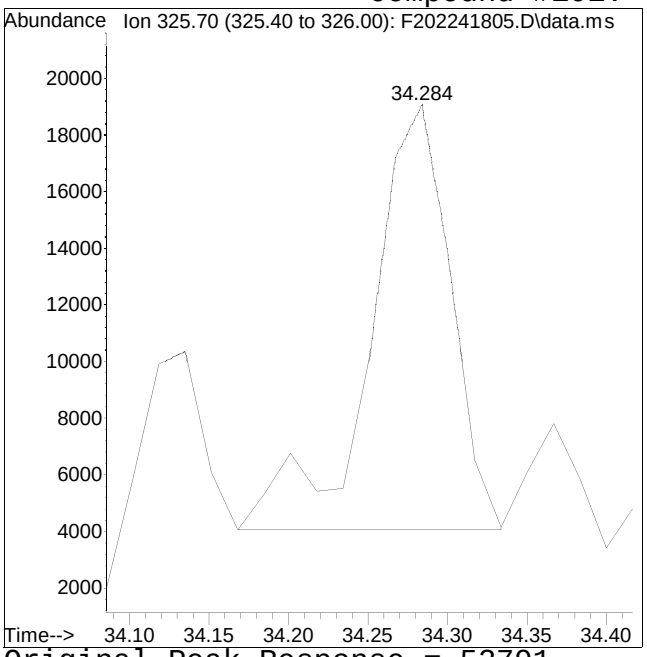
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

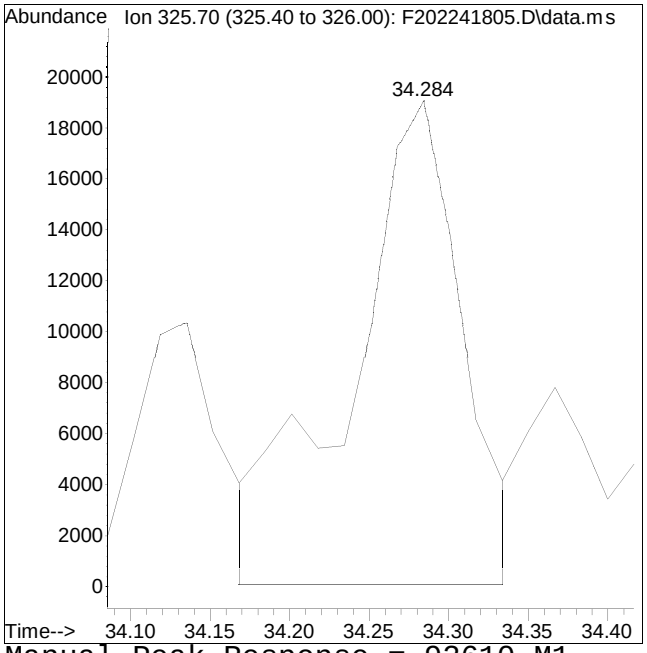
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 52791



Manual Peak Response = 92610 M1

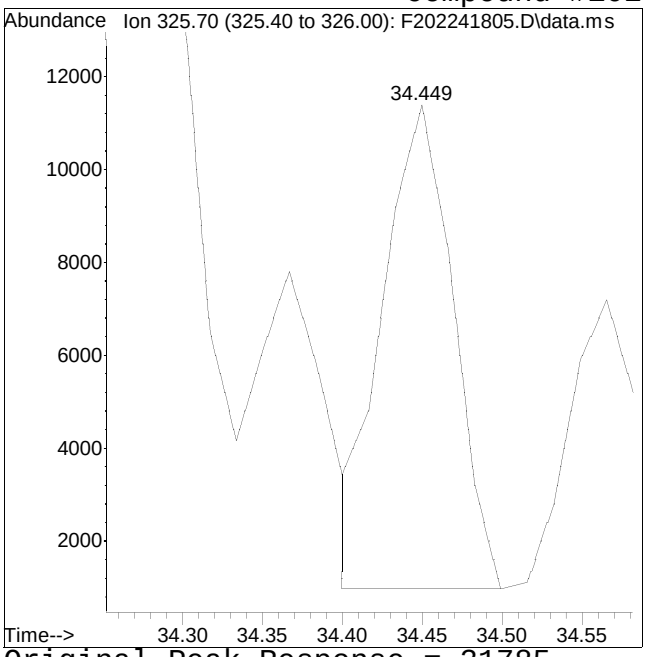
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

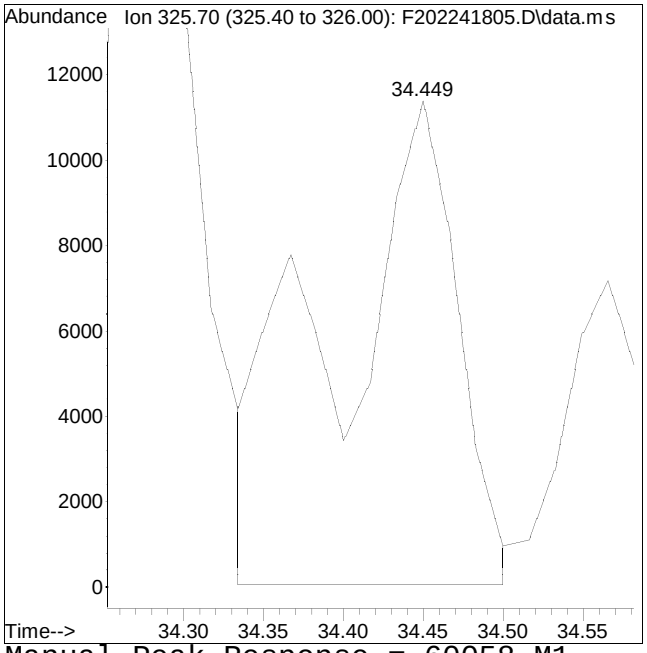
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 31785



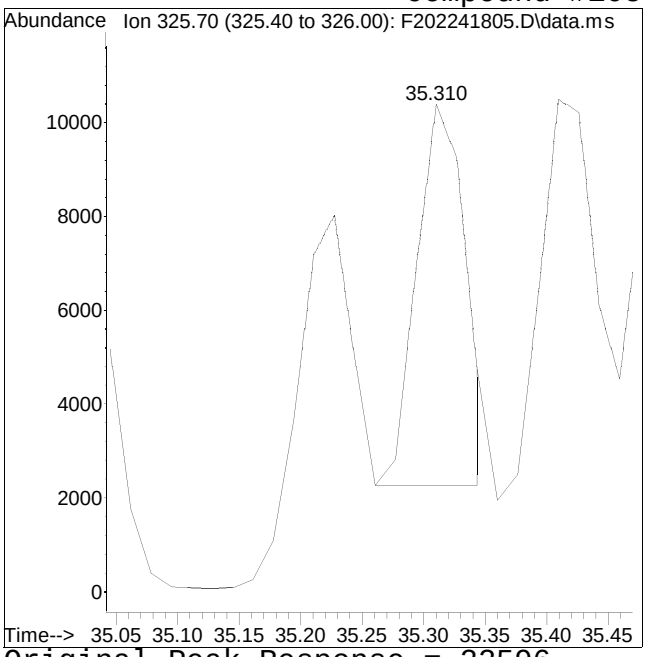
Manual Peak Response = 60058 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

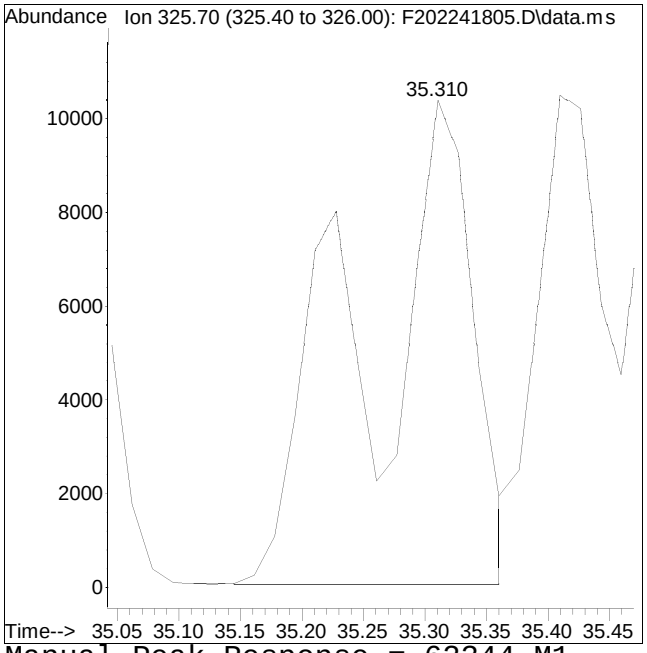
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 22596



Manual Peak Response = 62344 M1

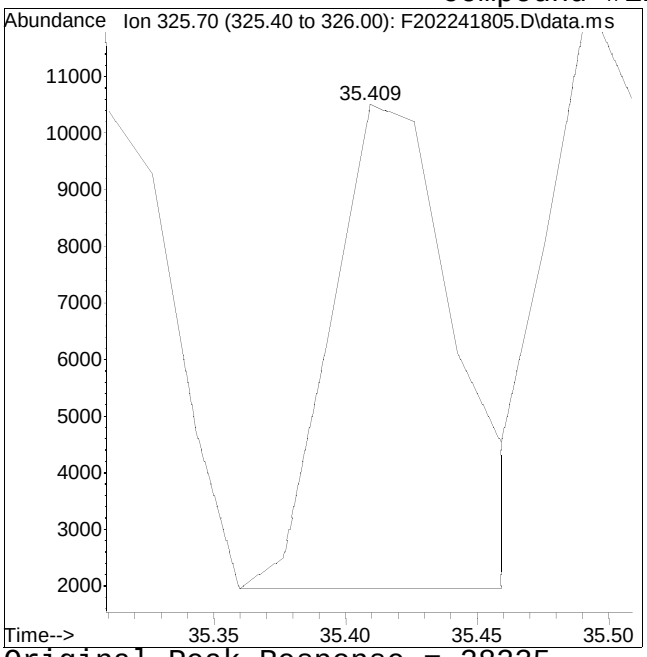
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

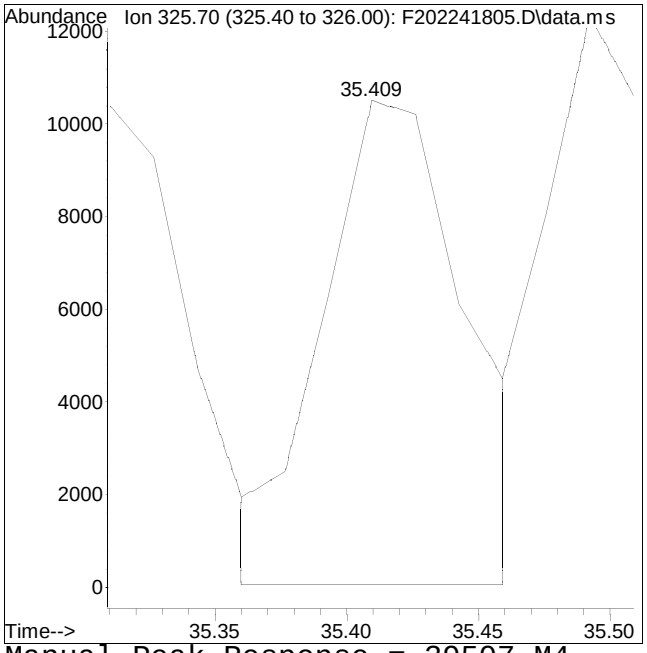
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #116: Cl5-BZ#117





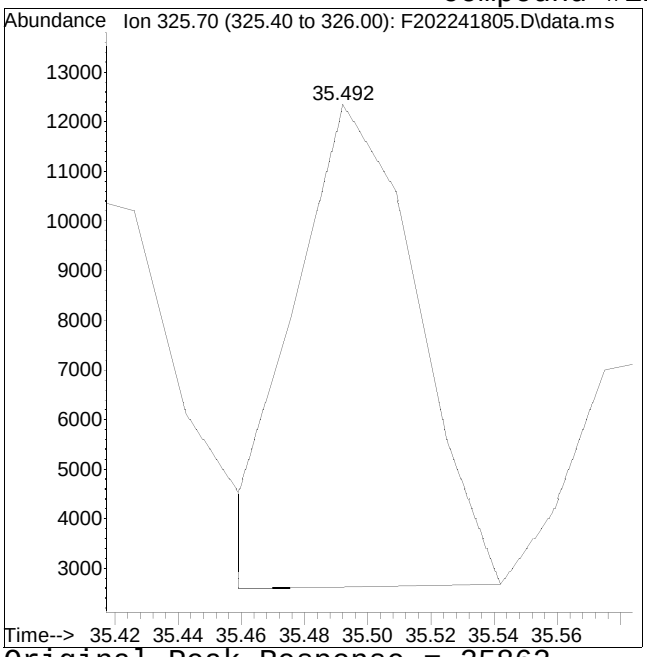
Original Peak Response = 28235 Manual Peak Response = 39507 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

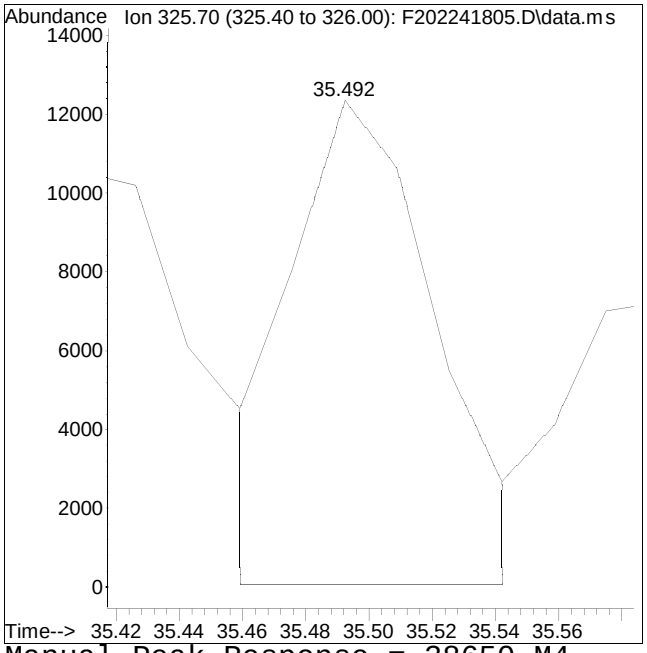
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #117: Cl5-BZ#115



Original Peak Response = 25862



Manual Peak Response = 38650 M4

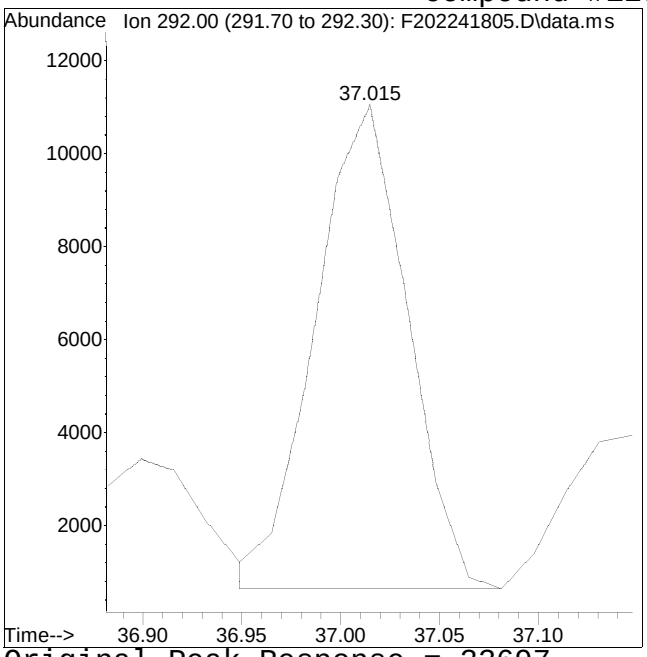
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

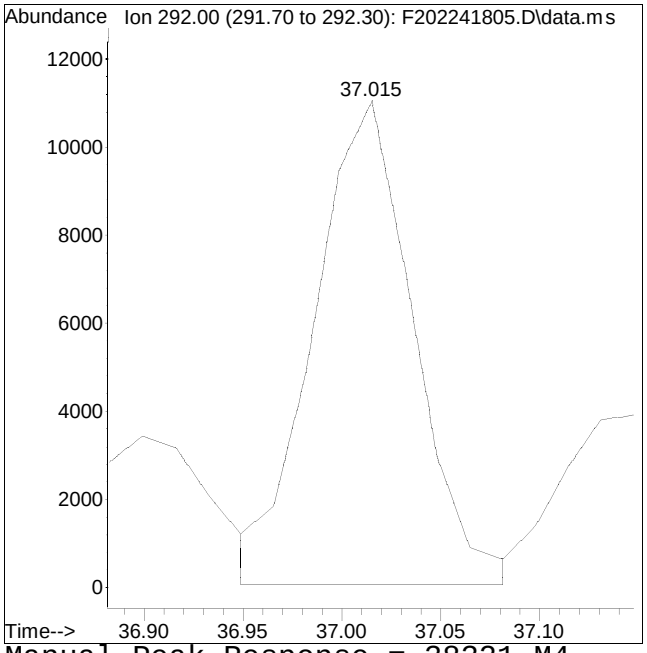
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 33697



Manual Peak Response = 38321 M4

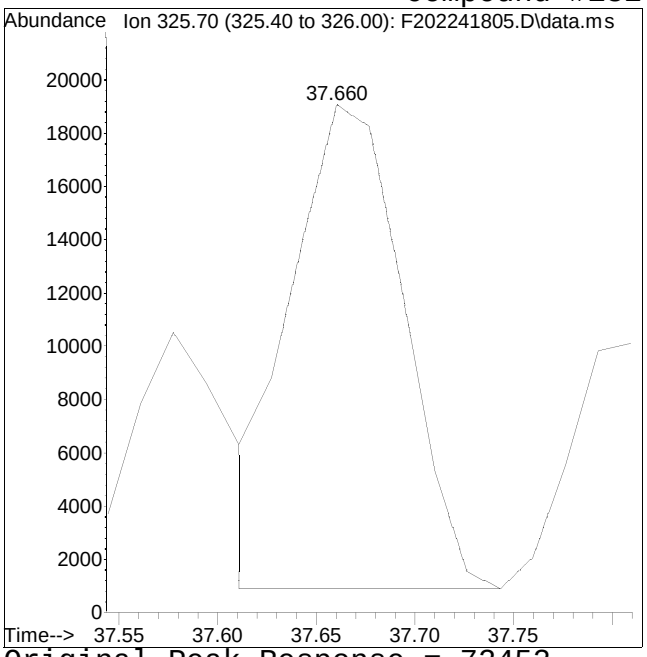
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

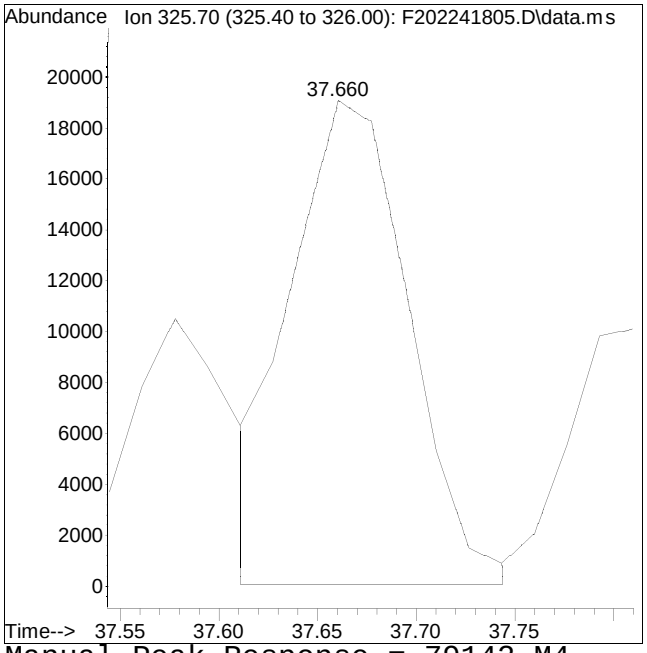
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 72452



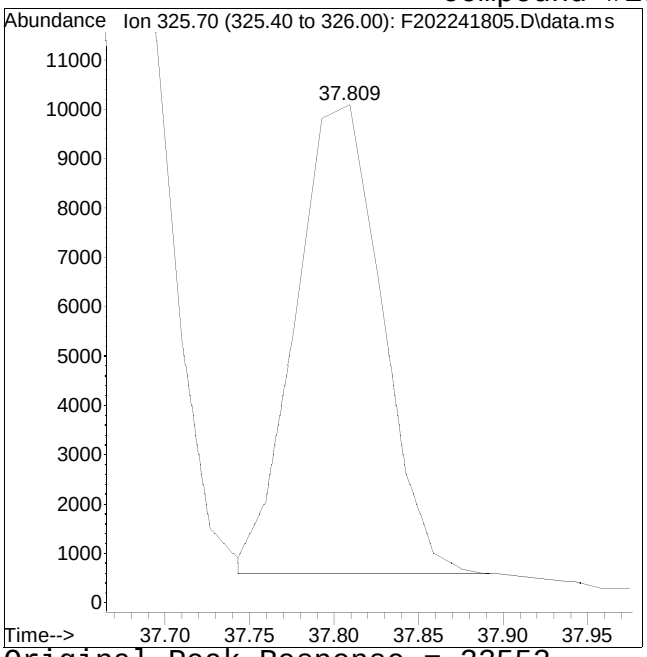
Manual Peak Response = 79142 M4

M4 = Poor automated baseline construction.

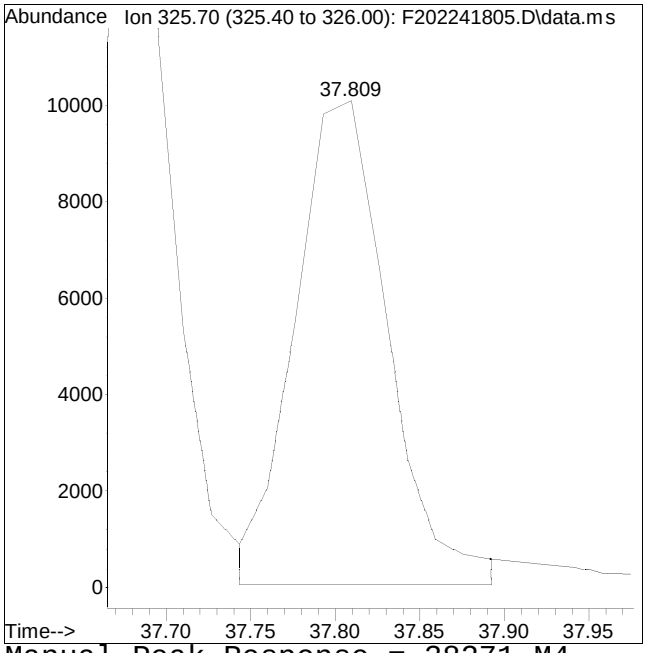
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #138: Cl5-BZ#106



Original Peak Response = 33552



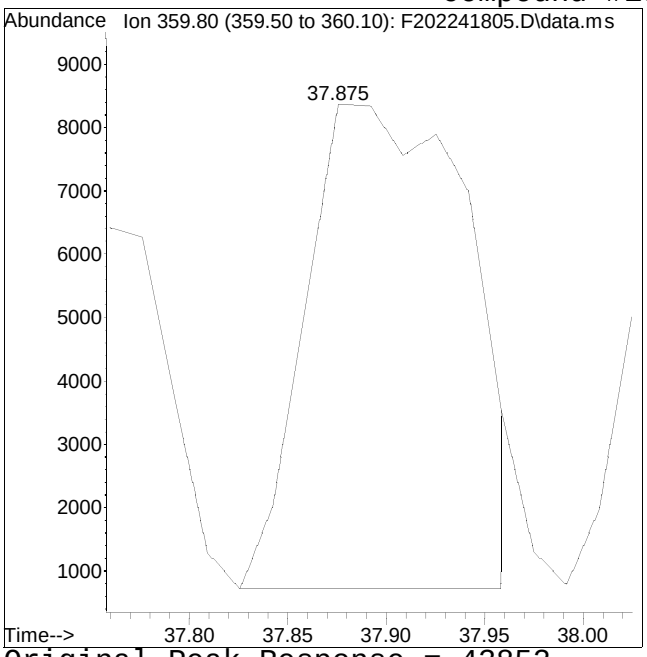
Manual Peak Response = 38271 M4

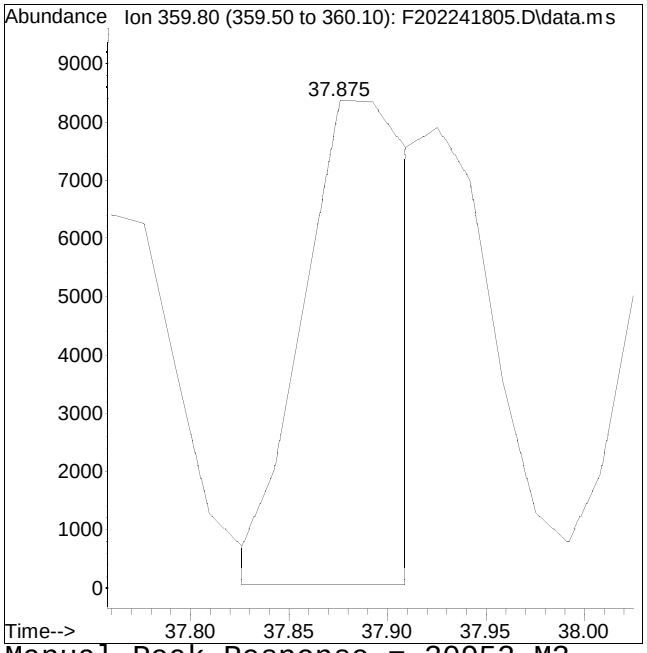
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #139: Cl6-BZ#133





Original Peak Response = 43852 Manual Peak Response = 30952 M3

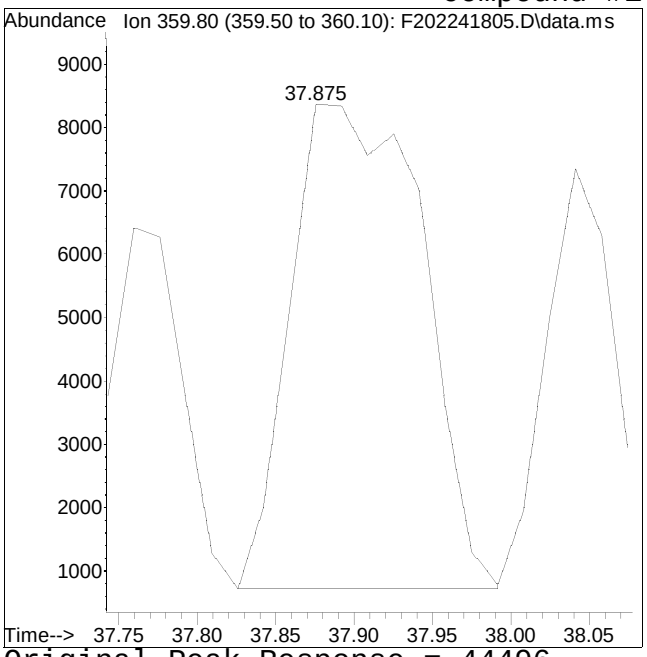
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

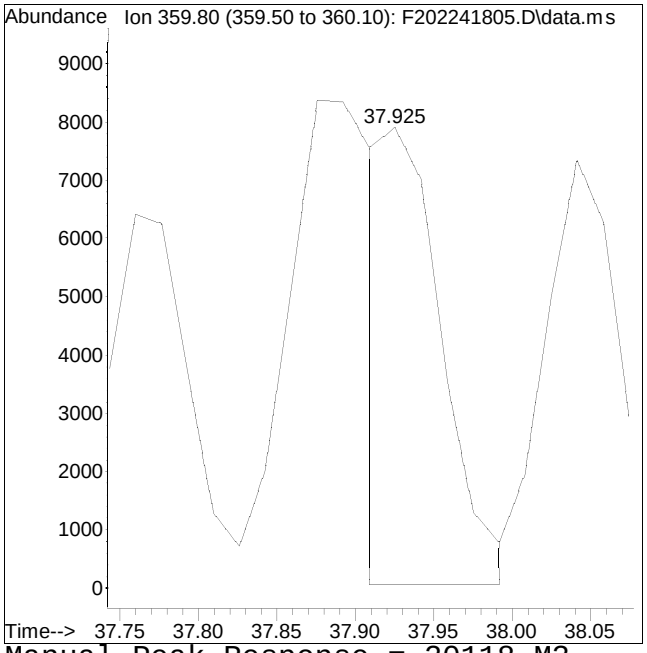
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #140: Cl6-BZ#142





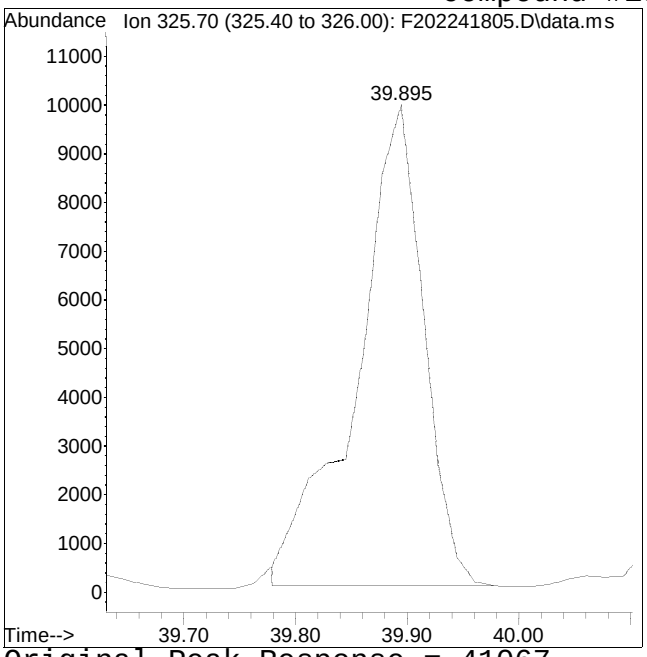
Original Peak Response = 44496 Manual Peak Response = 20118 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

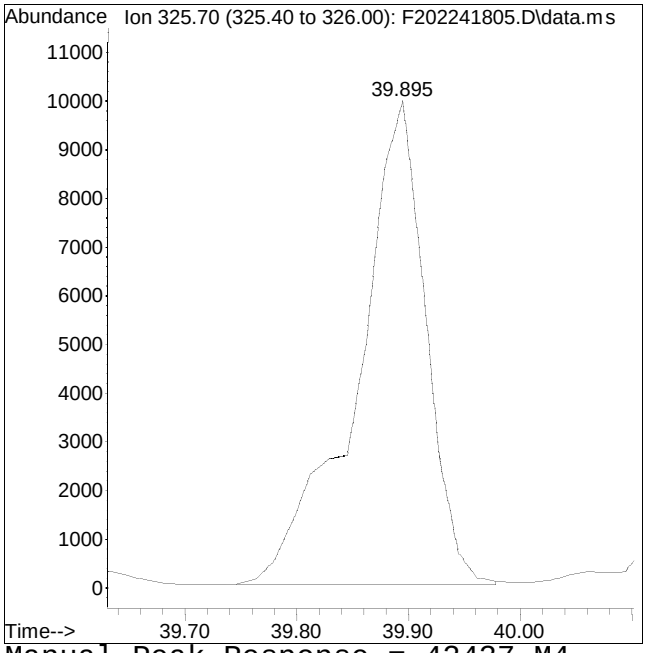
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #156: Cl5-BZ#105



Original Peak Response = 41067



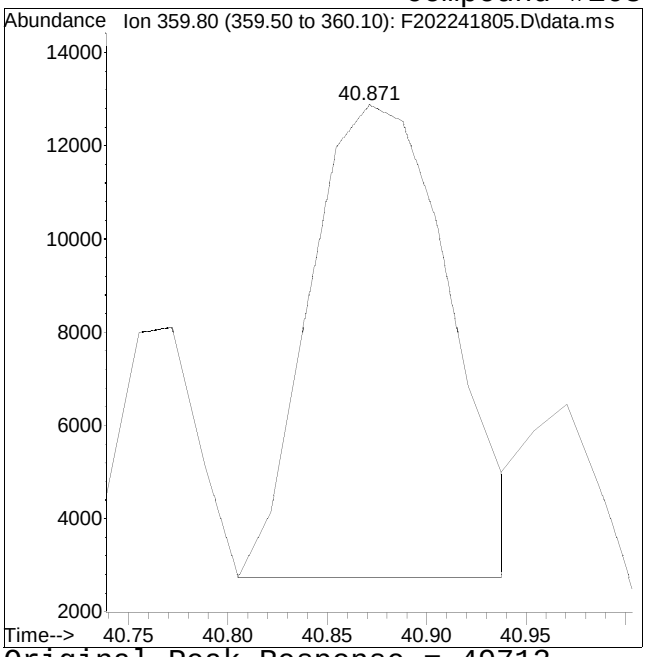
Manual Peak Response = 42437 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

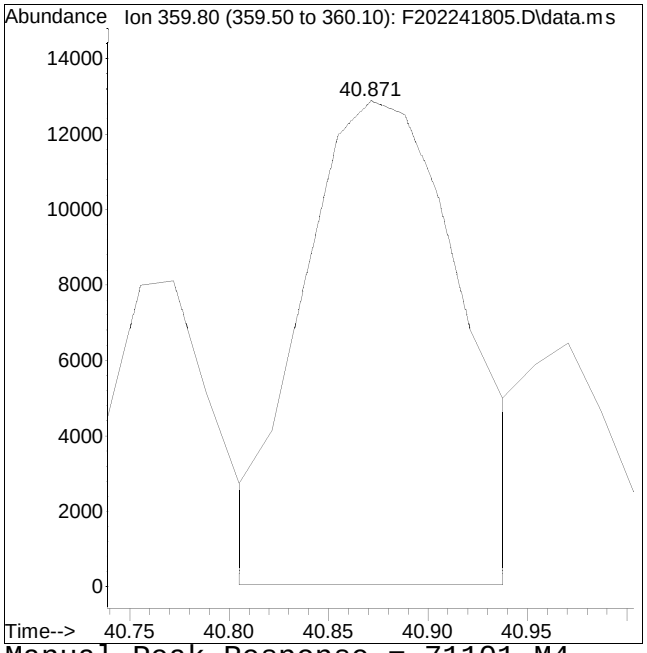
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241805.D
Date Inj'd : 2/24/2018 1:56 pm
Sample : I202241804

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 49713



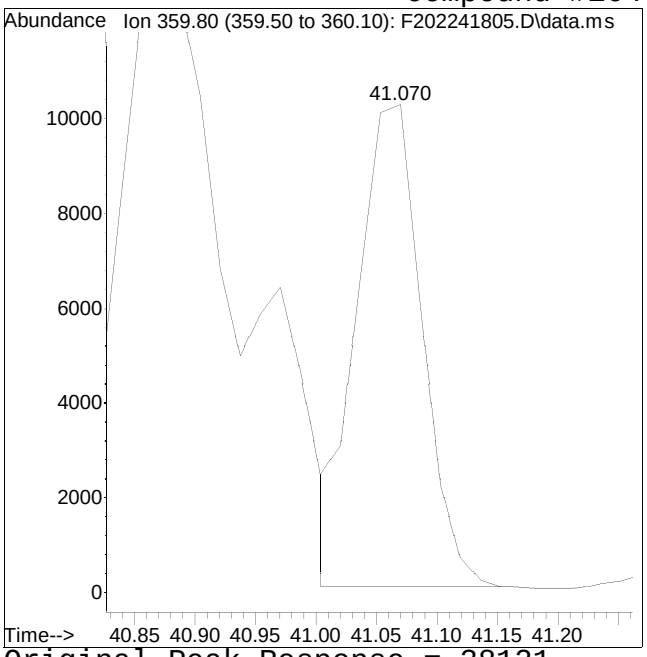
Manual Peak Response = 71101 M4

M4 = Poor automated baseline construction.

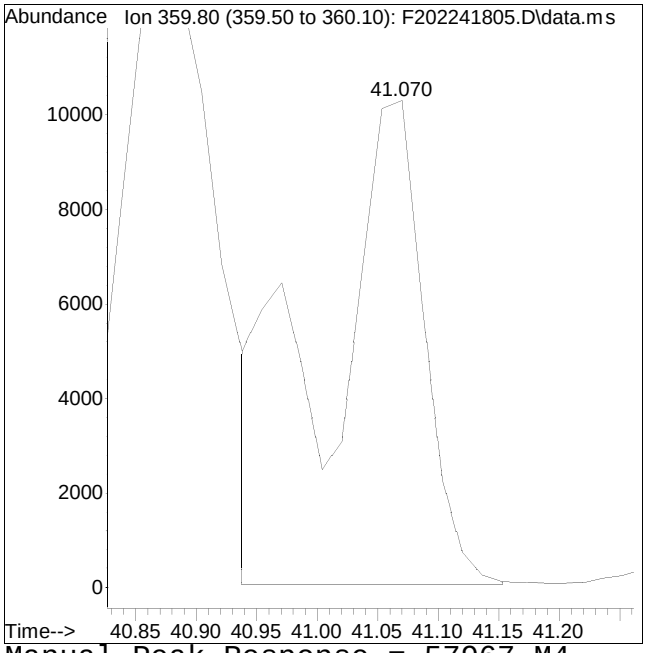
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 38121



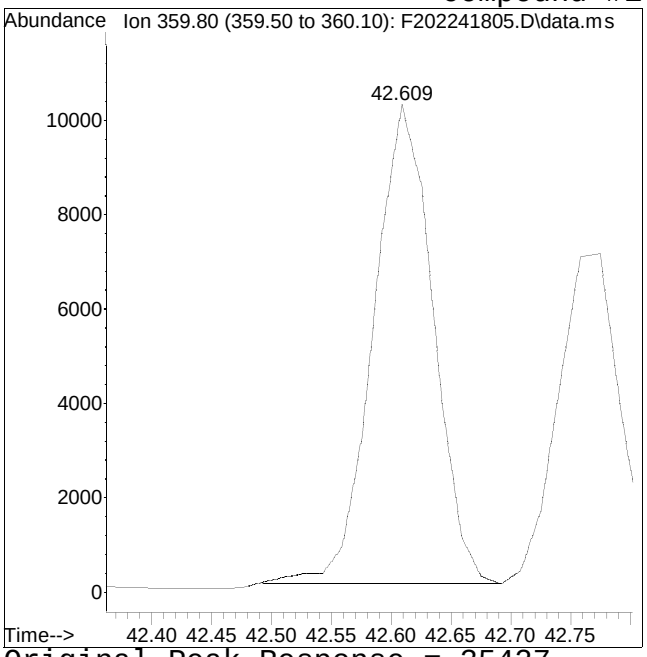
Manual Peak Response = 57967 M4

M4 = Poor automated baseline construction.

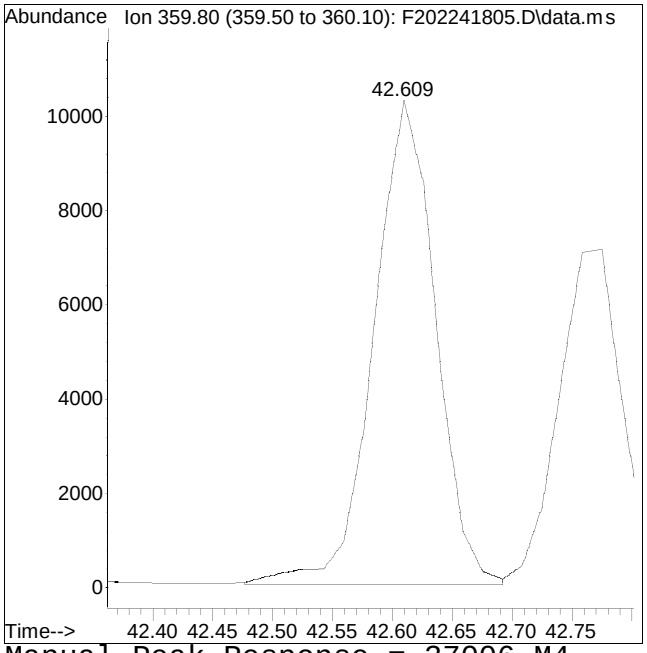
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #172: Cl6-BZ#162



Original Peak Response = 35427



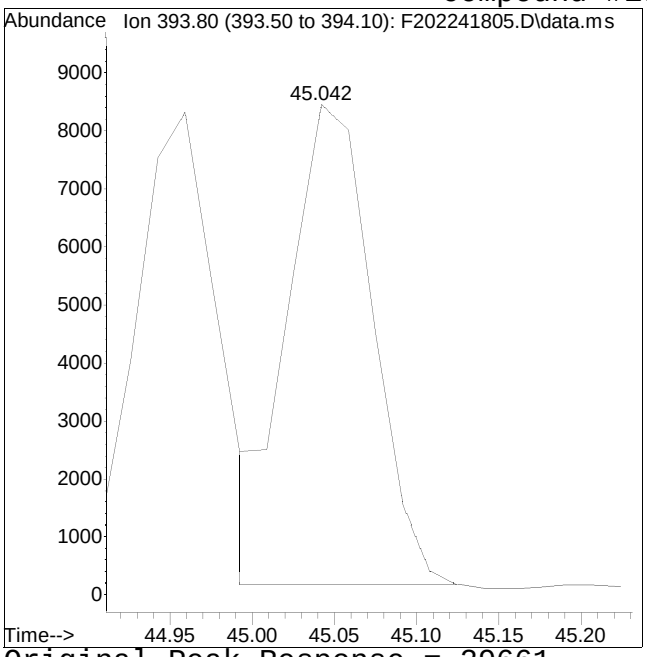
Manual Peak Response = 37006 M4

M4 = Poor automated baseline construction.

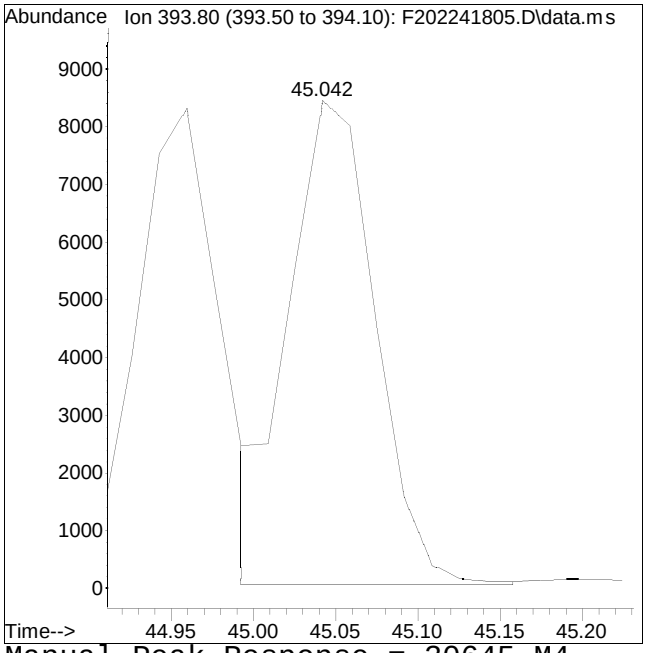
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241805.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 1:56 pm Instrument : BNA2
Sample : I202241804 Quant Date : 2/25/2018 10:50 am

Compound #190: Cl7-BZ#193



Original Peak Response = 29661



Manual Peak Response = 30645 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	579114	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.926	406	311271	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	50749	35.060	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 35.06%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	77484	36.415	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 36.41%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	73576	32.974	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 32.97%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	73224	37.592	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 37.59%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.583	188	132871	33.922	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D. d		
5) Cl1- conf Ion	0.000		0	N.D. d		
6) Cl1-BZ#2	16.666	188	139950	36.625	ng/mL	100
7) Cl1-BZ#3-RTW	17.125	188	138430	36.407	ng/mL	98
8) Cl2-BZ#4/#10-RTW	17.551	222	162178	66.505	ng/mL	99
9) Cl2-BZ#9	19.111	222	104121	36.241	ng/mL	99
10) Cl2-BZ#7	19.207	222	102862	37.122	ng/mL	100
11) Cl2-BZ#6	19.634	222	111565	36.629	ng/mL	100
12) Cl2-BZ#5	20.076	222	100530	34.226	ng/mL	100
13) Cl2-BZ#8	20.229	222	115514	35.768	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D. d		
15) Cl2-Conf Ion	0.000		0	N.D. d		
16) Cl3-BZ#19-RTW	21.009	256	56380	33.282	ng/mL	99
17) Cl2-BZ#14	21.146	222	112120	37.829	ng/mL	97
18) Cl3-BZ#30	21.564	256	91195	35.139	ng/mL	99
19) Cl3-BZ#18	22.376	256	62072	34.676	ng/mL	97
20) Cl2-BZ#11	22.505	222	121714	37.426	ng/mL	98
21) Cl3-BZ#17	22.585	256	58857	34.791	ng/mL	100
22) Cl2-BZ#12	22.899	222	106919	37.728	ng/mL	98
23) Cl3-BZ#27	22.947	256	82654	35.401	ng/mL	99
24) Cl2-BZ#13	23.196	222	122748	37.655	ng/mL	99
25) Cl3-BZ#24	23.220	256	84686	36.785	ng/mL	99
26) Cl3-BZ#16	23.558	256	50932	34.563	ng/mL	96
27) Cl3-BZ#32	23.759	256	89360	35.470	ng/mL	98
28) Cl2-BZ#15-RTW	23.928	222	122325	36.334	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.161	256	84755	36.336	ng/mL	100
30) Cl3-BZ#23	24.338	256	84038	36.473	ng/mL	100
31) Cl4-BZ#54-RTW	24.346	292	77916	33.901	ng/mL	99
32) Cl3-BZ#29-Cal	24.563	256	83762	36.846	ng/mL	100
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	64630	34.678	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.094	256	93336	37.908	ng/mL	98
39) Cl3-BZ#25	25.303	256	91143	36.677	ng/mL	99
40) Cl4-BZ#53	25.794	292	70577	34.918	ng/mL	99
41) Cl3-BZ#-31	25.876	256	125085M4	39.786	ng/mL	
42) Cl3-BZ#28	26.075	256	124179	38.828	ng/mL	99
43) Cl3-BZ#33	26.158	256	93216M3	32.300	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	230055M3	80.217	ng/mL	
45) Cl4-BZ#51	26.207	292	81198	36.758	ng/mL	98
46) Cl4-BZ#45	26.770	292	62111	37.314	ng/mL	100
47) Cl3-BZ#22	27.002	256	111510	38.669	ng/mL	100
48) Cl4-BZ#73/#46	27.151	292	169762	74.798	ng/mL	100
49) Cl4-BZ#69	27.432	292	99454	37.662	ng/mL	99
50) Cl4-BZ#43	27.531	292	64748	34.593	ng/mL	97
51) Cl3-BZ#36	27.564	256	125586	37.807	ng/mL	100
52) Cl4-BZ#52	27.664	292	79097	35.361	ng/mL	98
53) Cl4-BZ#48	27.829	292	72590	38.700	ng/mL	97
54) Cl4-BZ#49	27.978	292	76192	37.259	ng/mL	99
55) Cl5-BZ#104-RTW	28.193	326	79355	35.780	ng/mL	98
56) Cl4-BZ#47	28.276	292	76048M3	34.747	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	305405M3	114.325	ng/mL	
58) Cl3-BZ#39	28.425	256	113139	37.987	ng/mL	99
59) Cl3-BZ#38	28.541	256	112330	38.319	ng/mL	97
60) Cl4-BZ#44	28.938	292	66316	36.900	ng/mL	99
61) Cl4-BZ#59	29.170	292	95600	36.732	ng/mL	98
62) Cl4-BZ#42	29.253	292	65609	38.381	ng/mL	97
63) Cl4-BZ#71	29.484	292	102165	36.647	ng/mL	100
64) Cl3-BZ#35	29.600	256	115327	40.003	ng/mL	100
65) Cl4-BZ#41	29.716	292	63027	38.734	ng/mL	99
66) Cl4-BZ#72	29.832	292	111735	38.740	ng/mL	99
67) Cl5-BZ#96	29.865	326	87513	36.617	ng/mL	97
68) Cl5-BZ#103	29.981	326	67383	39.575	ng/mL	98
69) Cl4-BZ#68/#64	30.146	292	206439	77.255	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	49049	37.868	ng/mL	98
71) Cl3-BZ#37-RTW	30.477	256	153869	40.584	ng/mL	99
72) Cl5-BZ#100	30.477	326	72522	37.610	ng/mL	99
73) Cl5-BZ#94	30.577	326	54635	37.047	ng/mL	100
74) Cl4-BZ#57	30.676	292	111752M4	38.867	ng/mL	
75) Cl4-BZ#67/#58	31.007	292	221792	77.065	ng/mL	99
76) Cl5-BZ#102	31.057	326	77305	36.358	ng/mL	100
77) Cl4-BZ#61	31.355	292	107463	38.102	ng/mL	98
78) Cl5-BZ#98	31.388	326	71006	37.310	ng/mL	99
79) Cl4-BZ#76	31.520	292	115360	37.274	ng/mL	99
80) Cl5-BZ#93	31.520	326	57208	36.675	ng/mL	99
81) Cl4-BZ#63	31.619	292	102595M4	37.864	ng/mL	
82) Cl5-BZ#121/#95/#88	31.669	326	230250	112.668	ng/mL	99
83) Cl4-BZ#74	31.884	292	113049	38.543	ng/mL	99
84) Cl6-BZ#155-RTW	32.033	360	83238	36.691	ng/mL	99
85) Cl4-BZ#70	32.066	292	116718	34.049	ng/mL	96
86) Cl4-BZ#66	32.348	292	106489	38.661	ng/mL	99
87) Cl5-BZ#91	32.215	326	65004	36.207	ng/mL	100
88) Cl4-BZ#80	32.612	292	110197	39.889	ng/mL	98
89) Cl4-BZ#55	32.811	292	112907	39.565	ng/mL	99
90) Cl5-BZ#92	32.861	326	64943	37.629	ng/mL	100
91) Cl5-BZ#89/#84	33.142	326	124256	68.356	ng/mL	99
92) Cl5-BZ#101/#90	33.274	326	145000M4	77.803	ng/mL	
94) Cl4-BZ#56	33.258	292	112631	38.420	ng/mL	99
95) Cl5-BZ#113	33.357	326	83886	37.059	ng/mL	98
96) Cl5-BZ#99	33.622	326	79680	38.094	ng/mL	99
97) Cl6-BZ#150	33.688	360	89573	37.320	ng/mL	99
98) Cl4-BZ#60	33.688	292	119681	36.478	ng/mL	98
99) Cl6-BZ#152	34.052	360	96567	36.537	ng/mL	99
100) Cl5-BZ#119	34.119	326	99243	37.757	ng/mL	95
101) Cl5-BZ#83/#125/#112	34.284	326	245792M1	114.438	ng/mL	
102) Cl5-BZ#86/#109	34.450	326	160157M1	75.877	ng/mL	
103) Cl5-BZ#97	34.565	326	62570	38.263	ng/mL	98
104) Cl5-BZ#116	35.012	326	83443	38.228	ng/mL	99
105) Cl5-BZ#87/#111	35.310	326	165165M1	76.182	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	99118	37.020	ng/mL	99
109) Cl6-BZ#148	34.698	360	67566	38.042	ng/mL	98
110) Cl4-BZ#79	34.814	292	109630	40.547	ng/mL	100
111) Cl6-BZ#154-Cal	35.227	360	78169	38.746	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	138382	39.493	ng/mL	84
115) Cl6-BZ#136	35.360	360	87291	36.547	ng/mL	98
116) Cl5-BZ#117	35.410	326	104528M4	38.152	ng/mL	
117) Cl5-BZ#115	35.492	326	101732M4	39.832	ng/mL	
118) Cl5-BZ#85	35.592	326	61311	36.916	ng/mL	98
119) Cl5-BZ#120	35.724	326	99612	39.461	ng/mL	100
120) Cl5-BZ#110	35.873	326	94676	38.457	ng/mL	100
121) Cl4-BZ#81	36.254	292	109159	41.110	ng/mL	99
123) Cl6-BZ#151	36.254	360	66679	36.980	ng/mL	98
124) Cl6-BZ#135	36.386	360	72860	38.121	ng/mL	100
125) Cl5-BZ#82	36.568	326	61998	35.124	ng/mL	98
126) Cl6-BZ#144	36.601	360	70183	36.103	ng/mL	99
127) Cl6-BZ#147/#149	36.899	360	147933	74.016	ng/mL	98
128) Cl4-BZ#77-RTW	37.015	292	102337M4	39.157	ng/mL	
129) Cl6-BZ#143/#139	37.131	360	145979	71.754	ng/mL	99
130) Cl5-BZ#124	37.296	326	97659	37.386	ng/mL	99
131) Cl5-BZ#108	37.578	326	101854	38.808	ng/mL	99
132) Cl5-BZ#107/#123	37.660	326	207685M4	74.563	ng/mL	
133) Cl6-BZ#140	37.313	360	69198	35.868	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.677	394	83031	35.090	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.760	360	60735	36.528	ng/mL	95
138) Cl5-BZ#106	37.793	326	103746M4	37.398	ng/mL	
139) Cl6-BZ#133	37.876	360	84016M3	39.109	ng/mL	
140) Cl6-BZ#142	37.925	360	49950M3	32.058	ng/mL	
141) Cl5-BZ#118	38.041	326	92480	37.063	ng/mL	97
142) Cl6-BZ#131	38.041	360	61798	37.642	ng/mL	98
143) Cl7-BZ#184	38.173	394	80115	34.858	ng/mL	98
144) Cl6-BZ#165	38.240	360	88182	37.177	ng/mL	98
145) Cl6-BZ#146	38.339	360	75928	37.621	ng/mL	99
146) Cl6-BZ#161	38.505	360	98174	36.958	ng/mL	100
147) Cl5-BZ#122	38.505	326	85126	37.307	ng/mL	99
148) Cl6-BZ#168	38.736	360	96529	38.653	ng/mL	99
149) Cl5-BZ#114	38.786	326	94356	36.302	ng/mL	99
150) Cl6-BZ#153	38.802	360	79663	34.626	ng/mL	97
152) Cl6-BZ#132	39.067	360	65897	35.477	ng/mL	98
153) Cl7-BZ#179	39.332	394	81882	36.287	ng/mL	99
154) Cl6-BZ#141	39.630	360	66339	39.835	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.829	394	77304	36.146	ng/mL	99
156) Cl5-BZ#105	39.895	326	110489M4	38.058	ng/mL	
157) Cl6-BZ#137	40.060	360	69266	37.963	ng/mL	98
158) Cl5-BZ#127	40.209	326	122830	37.940	ng/mL#	76
159) Cl7-BZ#186	40.143	394	88477	35.771	ng/mL	100
160) Cl6-BZ#130/#164	40.391	360	160372	76.303	ng/mL	98
161) Cl7-BZ#178	40.689	394	59739	37.866	ng/mL	98
162) Cl6-BZ#138	40.755	360	80255	36.450	ng/mL	97
163) Cl6-BZ#163/#160	40.871	360	187163M4	77.344	ng/mL	
164) Cl6-BZ#129/#158	41.053	360	150742M4	70.477	ng/mL	
165) Cl7-BZ#182/#175	41.086	394	140835	73.201	ng/mL	99
166) Cl7-BZ#187	41.268	394	69719	36.766	ng/mL	96
167) Cl7-BZ#183	41.666	394	67459	41.476	ng/mL	100
168) Cl6-BZ#166	42.030	360	99123	38.721	ng/mL	98
169) Cl6-BZ#159	42.278	360	99343	40.151	ng/mL	100
170) Cl5-BZ#126-RTW	42.493	326	122645	39.606	ng/mL	89
171) Cl7-BZ#185	42.526	394	61956	37.732	ng/mL	98
172) Cl6-BZ#162	42.609	360	92479	38.742	ng/mL	98
173) Cl7-BZ#174	42.758	394	62330	36.571	ng/mL	100
174) Cl6-BZ#128	42.758	360	68344	36.345	ng/mL	100
175) Cl6-BZ#167	43.056	360	122335	38.874	ng/mL	92
176) Cl8-BZ#202-RTW	43.006	428	71002	37.518	ng/mL	99
178) Cl7-BZ#181	43.139	394	71575	38.546	ng/mL	97
179) Cl7-BZ#177	43.470	394	60620	38.247	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.569	428	138791	73.217	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	59341	41.359	ng/mL	97
184) Cl7-BZ#173	43.999	394	57938	38.032	ng/mL	100
185) Cl7-BZ#172	44.446	394	61508	37.929	ng/mL	98
186) Cl7-BZ#192	44.661	394	86510	38.902	ng/mL	99
187) Cl6-BZ#156	44.661	360	94299	38.586	ng/mL	100
188) Cl6-BZ#157	44.910	360	97075	38.370	ng/mL	99
189) Cl7-BZ#180	44.943	394	74802	34.812	ng/mL	97
190) Cl7-BZ#193	45.042	394	79385M4	32.337	ng/mL	
191) Cl8-BZ#197	44.082	428	70400	37.052	ng/mL	99
192) Cl7-BZ#191	45.373	394	81014	39.703	ng/mL	97
193) Cl8-BZ#199	45.208	428	69047	37.578	ng/mL	99
194) Cl8-BZ#198	46.747	428	54730	39.467	ng/mL	100
195) Cl8-BZ#201	46.830	428	54548	39.747	ng/mL	98
196) Cl7-BZ#170	46.962	394	58063	42.933	ng/mL	96

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	86051	38.777	ng/mL	97
198) Cl8-BZ#196	47.293	428	56111	38.762	ng/mL	97
199) Cl8-BZ#203	47.376	428	59894	39.712	ng/mL	99
200) Cl6-BZ#169-RTW	47.657	360	103529	42.134	ng/mL	98
201) Cl9-BZ#208-RTW	48.799	464	70838	38.556	ng/mL	98
202) Cl9-BZ#207	49.478	464	72198	38.404	ng/mL	96
203) Cl7-BZ#189-RTW	49.660	394	76803	41.649	ng/mL	98
204) Cl8-BZ#195	49.809	428	52914	39.420	ng/mL	96
205) Cl8-BZ#194	51.480	428	56726	41.048	ng/mL	96
206) Cl8-BZ#205-RTW	52.076	428	68934	42.888	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.112	464	58301	41.401	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.396	498	58050	39.351	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

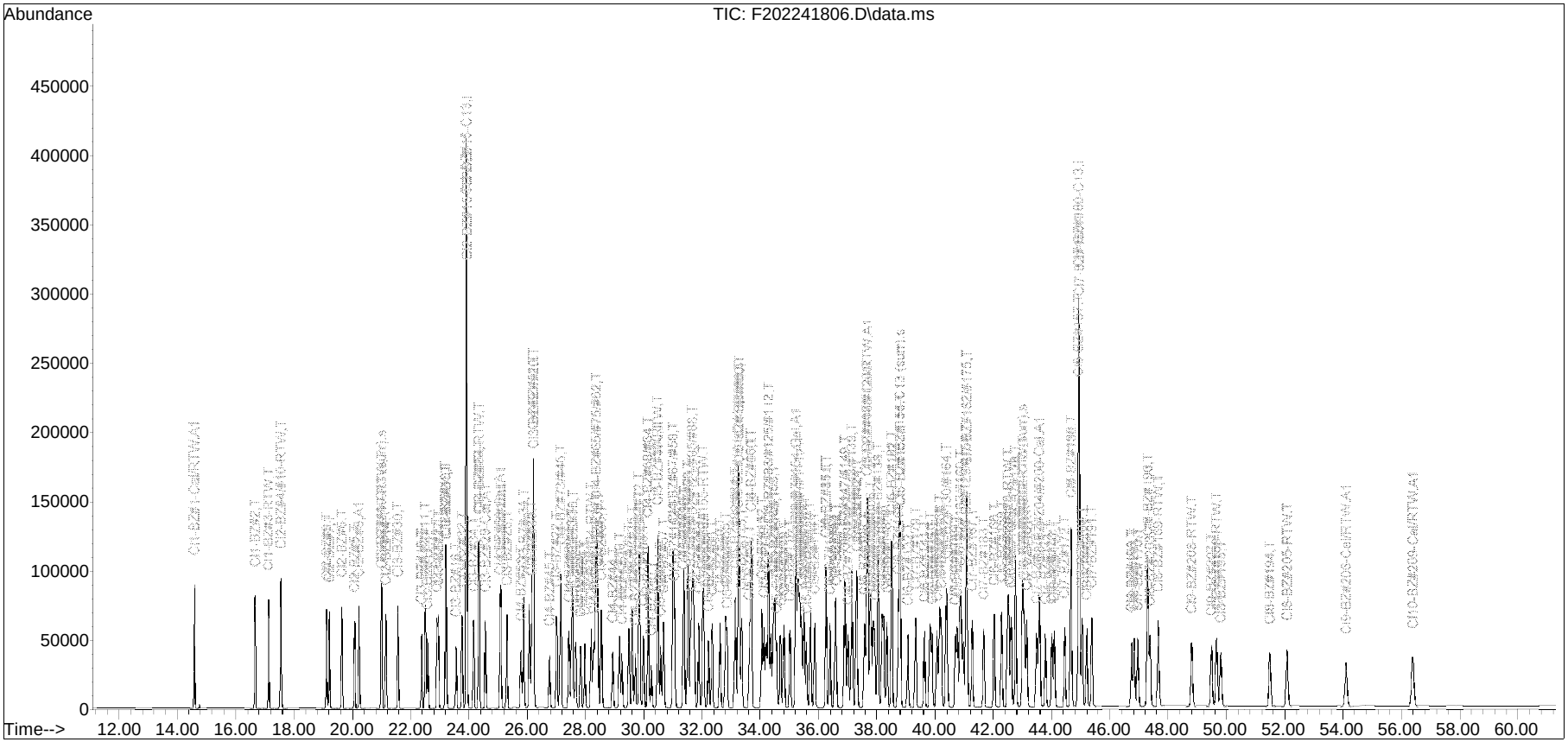
(#) = qualifier out of range (m) = manual integration (+) = signals summed

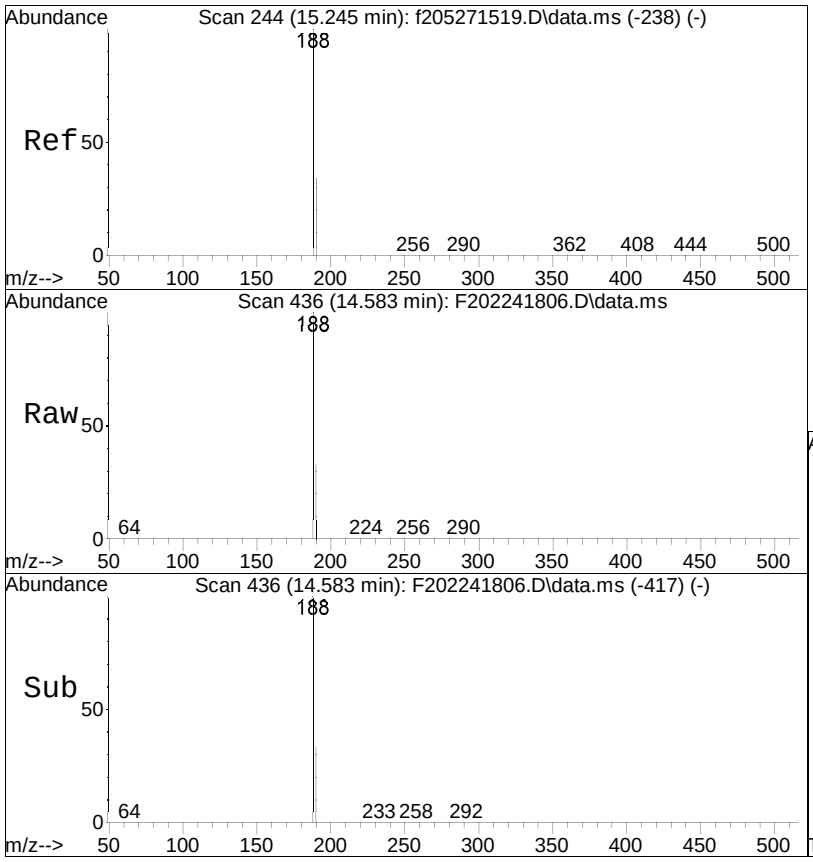
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241806.D
Acq On : 24 Feb 2018 3:10 pm
Operator : BNA2:JT
Sample : I202241805
Misc : wg1092764,MSAT57,50ug/l
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 16:05:05 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

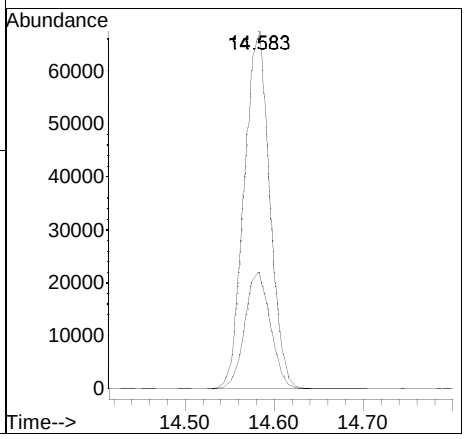


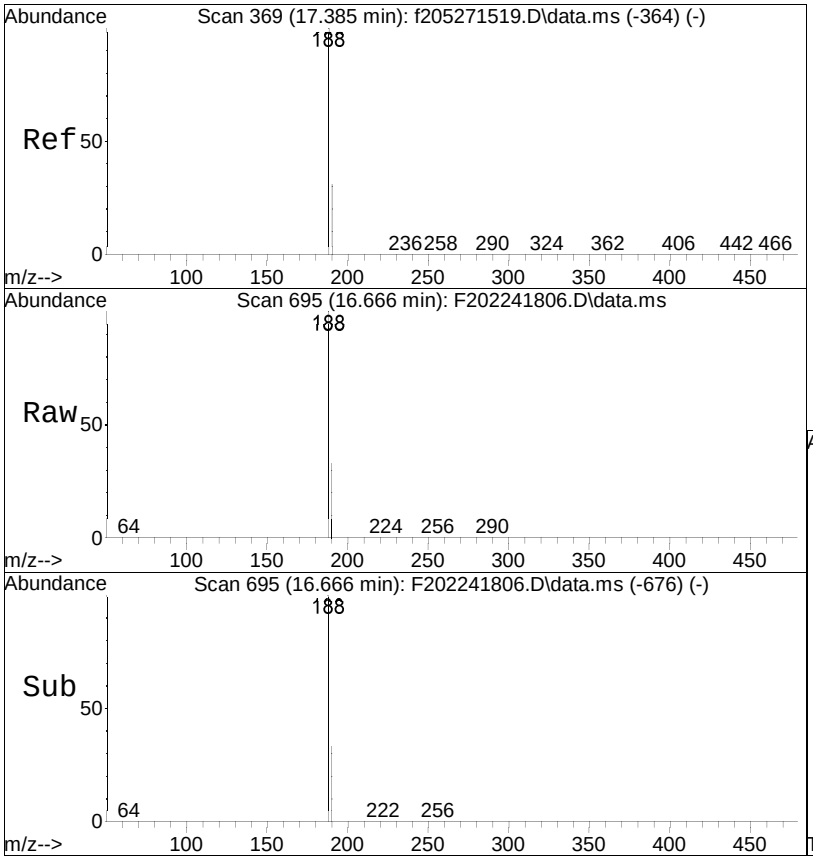


#3
Cl1-BZ#1-Cal/RTW
Concen: 33.92 ng/mL
RT: 14.583 min Scan# 436
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:188 Resp: 132871

Ion	Ratio	Lower	Upper
188	100		
190	32.8	26.2	39.4

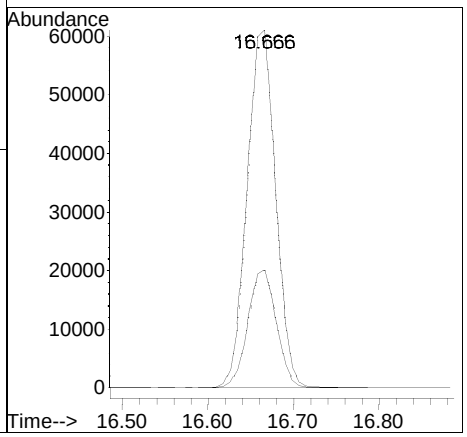


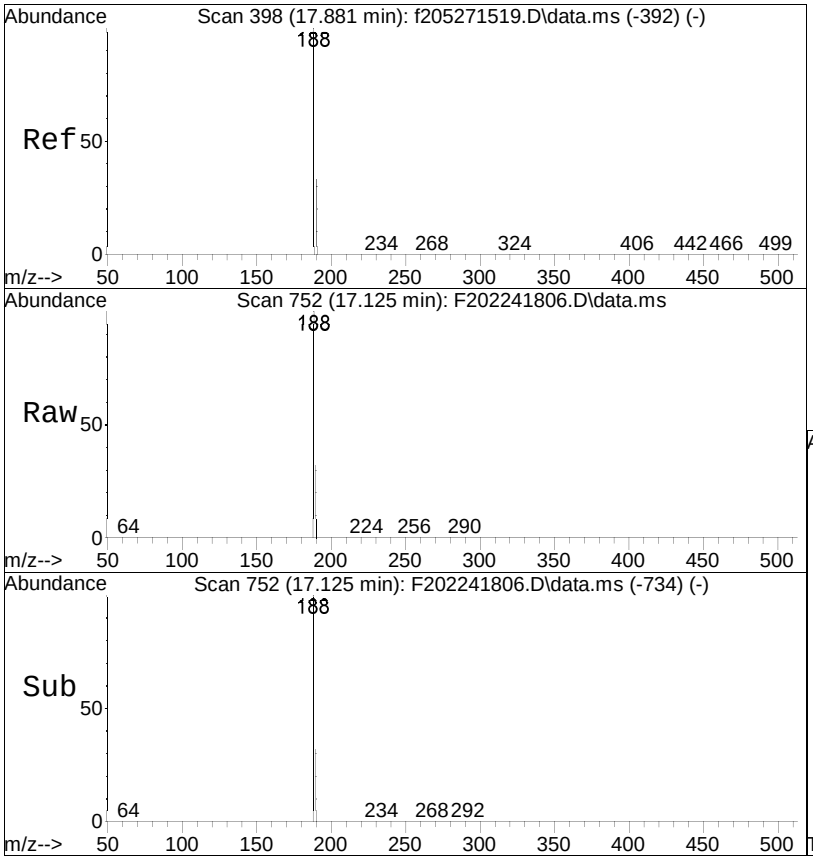


#6
Cl1-BZ#2
Concen: 36.63 ng/mL
RT: 16.666 min Scan# 695
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:188 Resp: 139950

Ion	Ratio	Lower	Upper
188	100		
190	32.8	26.1	39.1

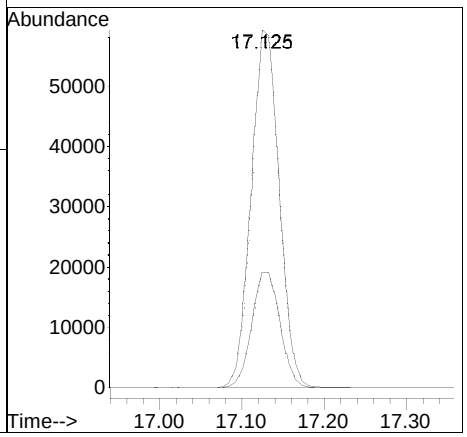


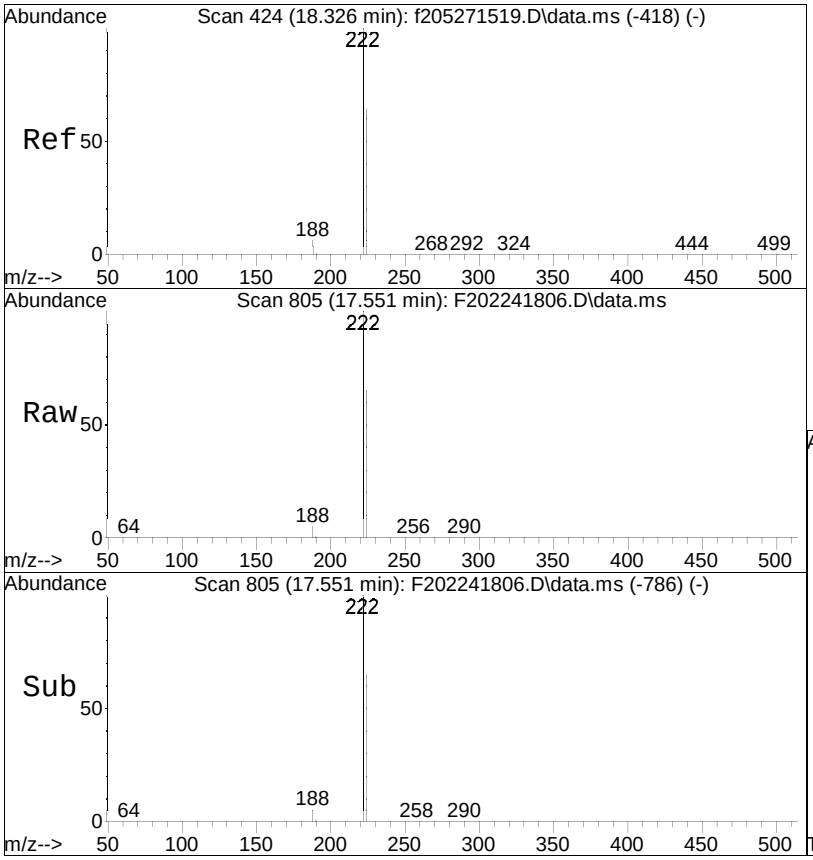


#7
Cl1-BZ#3-RTW
Concen: 36.41 ng/mL
RT: 17.125 min Scan# 752
Delta R.T. -0.008 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:188 Resp: 138430

Ion	Ratio	Lower	Upper
188	100		
190	32.3	26.7	40.1

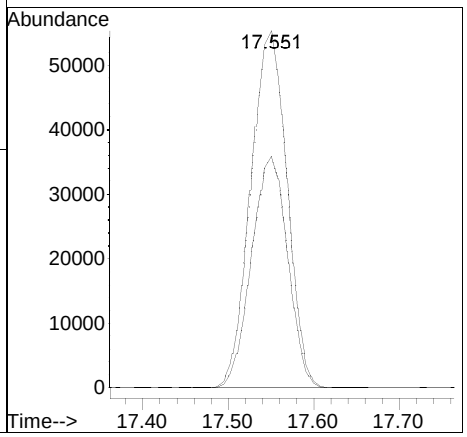


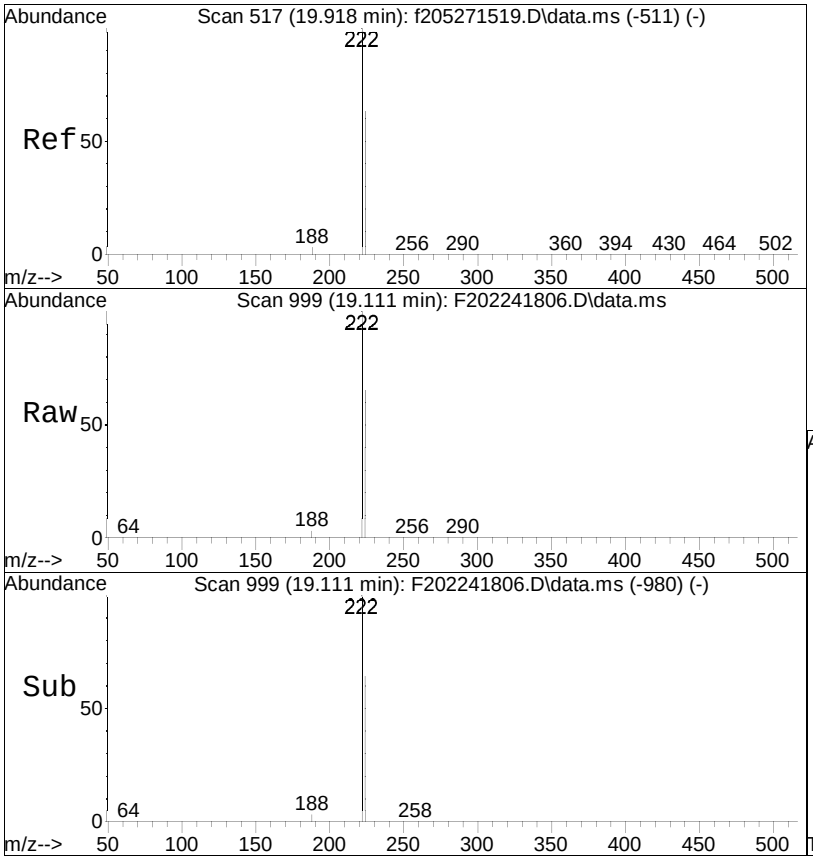


#8
Cl2-BZ#4/#10-RTW
Concen: 66.51 ng/mL
RT: 17.551 min Scan# 805
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 162178

Ion	Ratio	Lower	Upper
222	100		
224	64.7	52.4	78.6

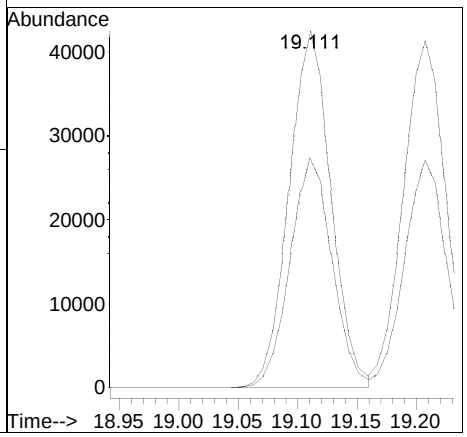


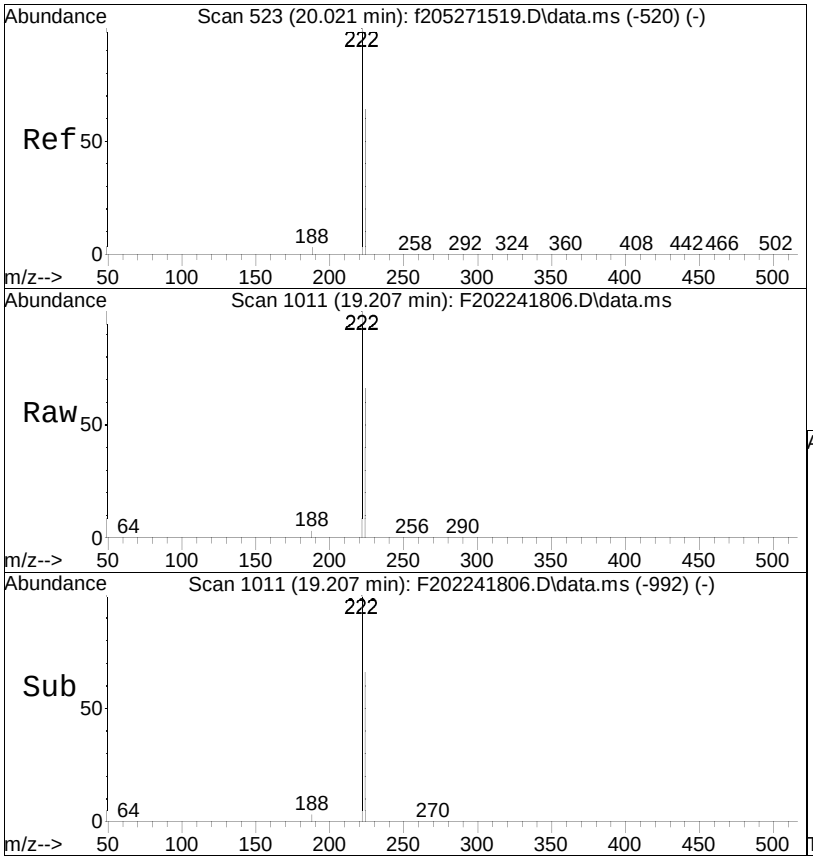


#9
Cl2-BZ#9
Concen: 36.24 ng/mL
RT: 19.111 min Scan# 999
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 104121

Ion	Ratio	Lower	Upper
222	100		
224	64.6	52.1	78.1

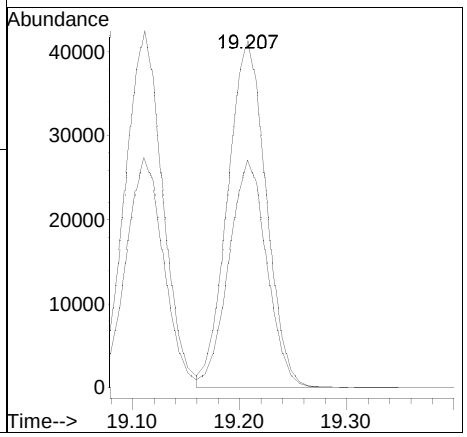


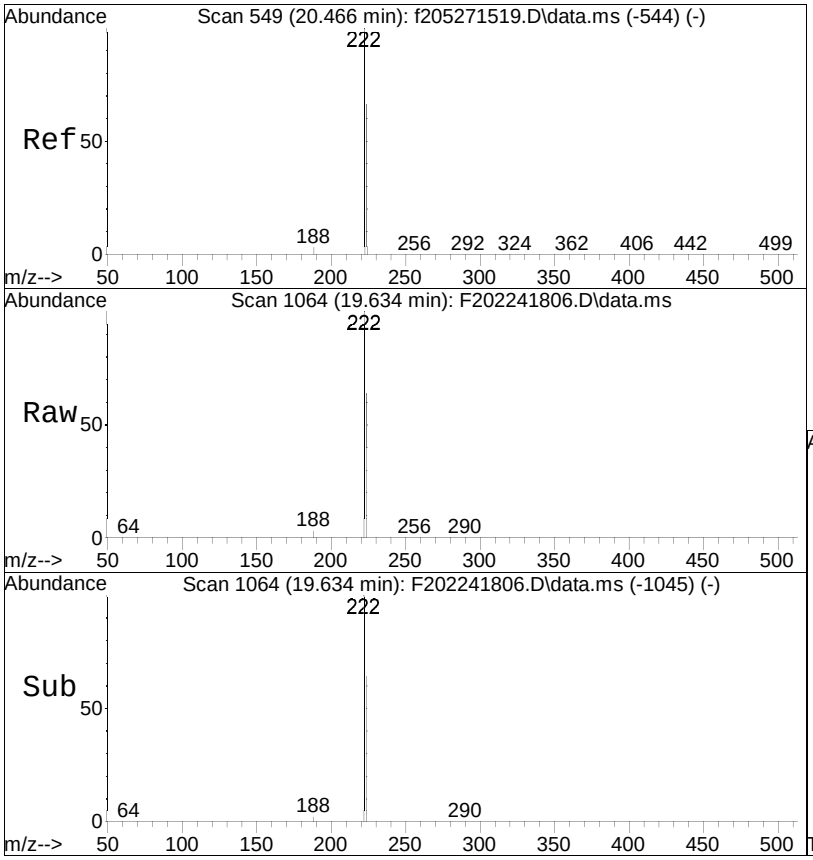


#10
Cl2-BZ#7
Concen: 37.12 ng/mL
RT: 19.207 min Scan# 1011
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 102862

Ion	Ratio	Lower	Upper
222	100		
224	65.6	52.3	78.5

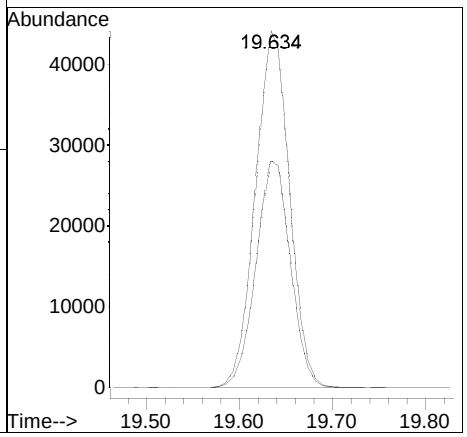


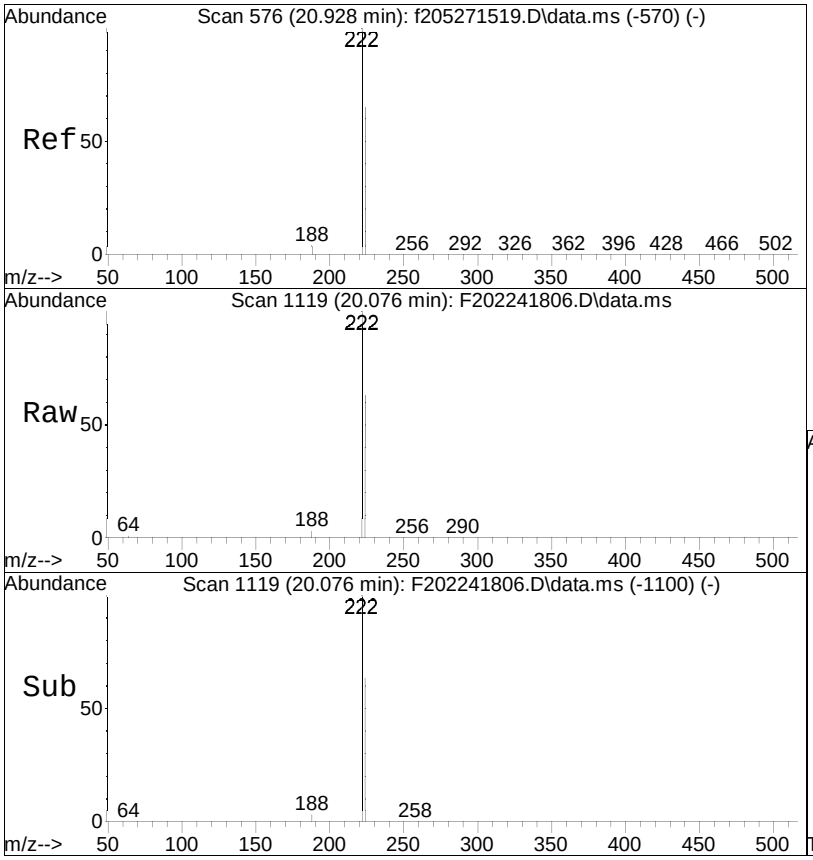


#11
Cl2-BZ#6
Concen: 36.63 ng/mL
RT: 19.634 min Scan# 1064
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 111565

Ion	Ratio	Lower	Upper
222	100		
224	63.8	51.1	76.7

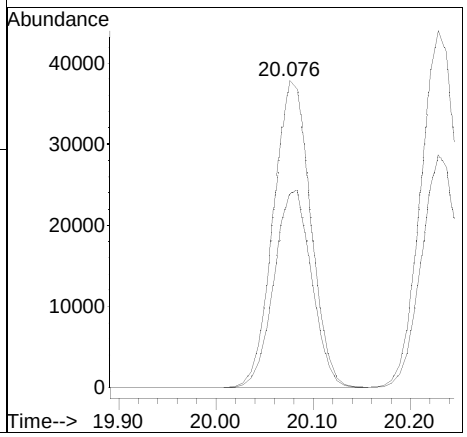


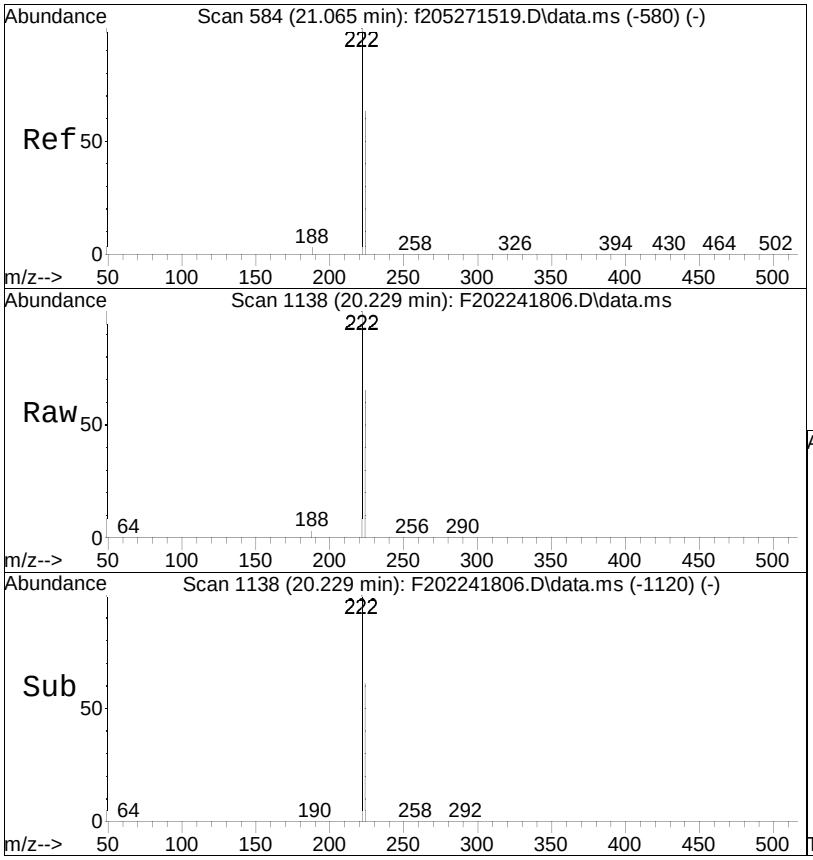


#12
Cl2-BZ#5
Concen: 34.23 ng/mL
RT: 20.076 min Scan# 1119
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 100530

Ion	Ratio	Lower	Upper
222	100		
224	64.6	51.8	77.6

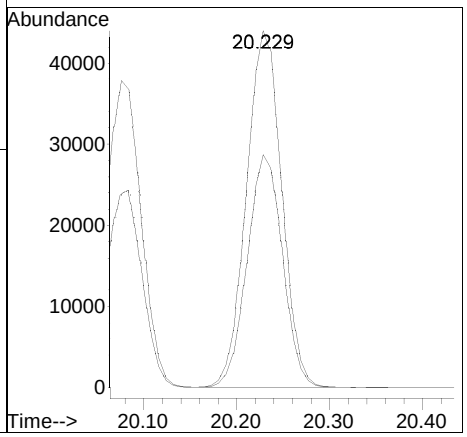


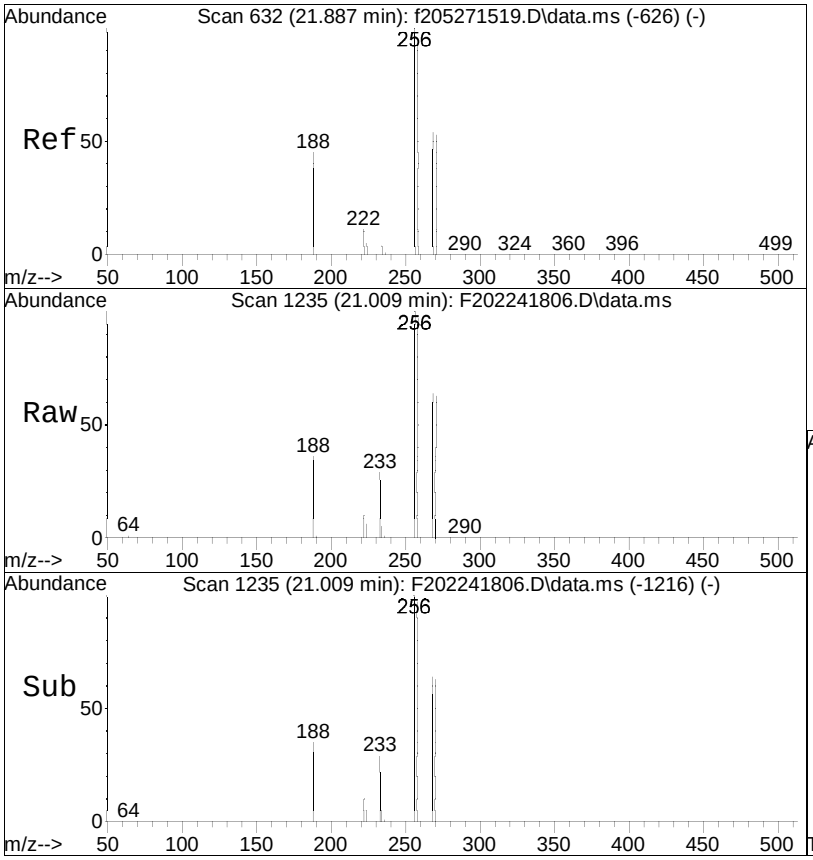


#13
Cl2-BZ#8
Concen: 35.77 ng/mL
RT: 20.229 min Scan# 1138
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 115514

Ion	Ratio	Lower	Upper
222	100		
224	65.3	52.2	78.4

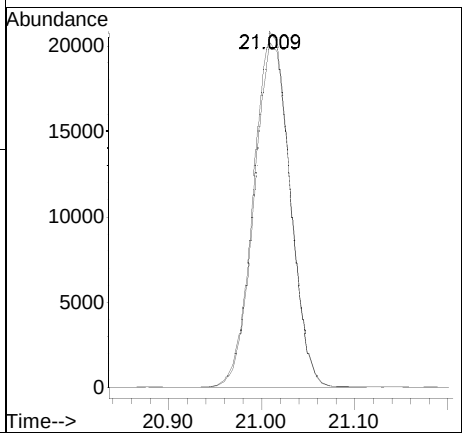


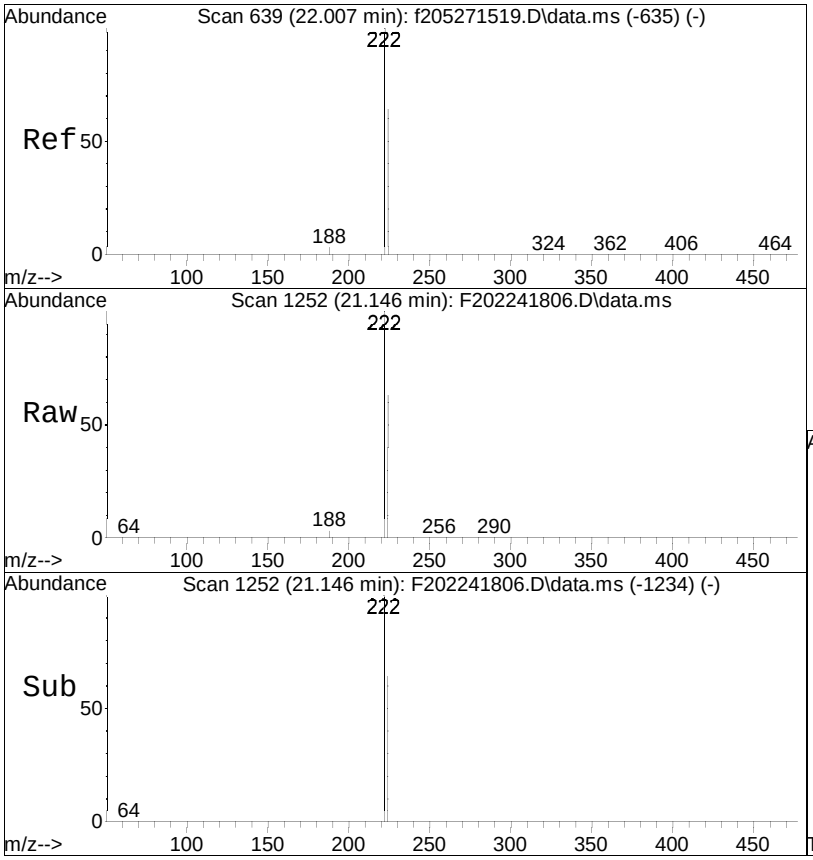


#16
Cl3-BZ#19-RTW
Concen: 33.28 ng/mL
RT: 21.009 min Scan# 1235
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 56380

Ion	Ratio	Lower	Upper
256	100		
258	96.7	76.5	114.7

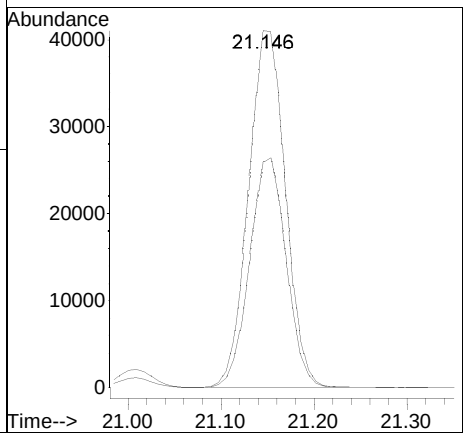


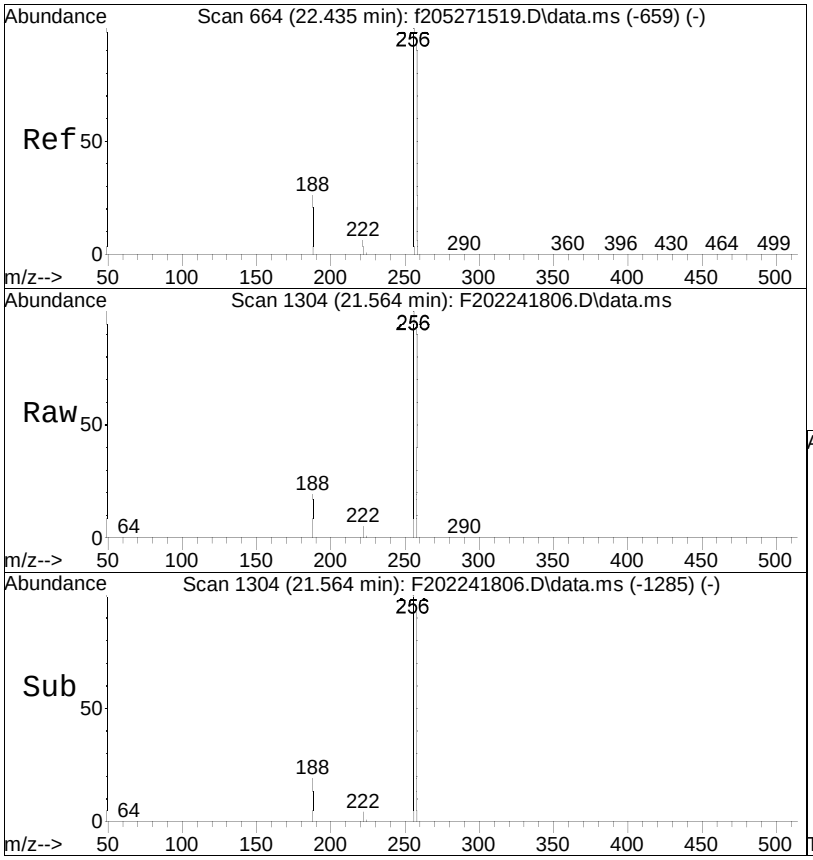


#17
Cl2-BZ#14
Concen: 37.83 ng/mL
RT: 21.146 min Scan# 1252
Delta R.T. -0.008 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 112120

Ion	Ratio	Lower	Upper
222	100		
224	63.9	53.3	79.9

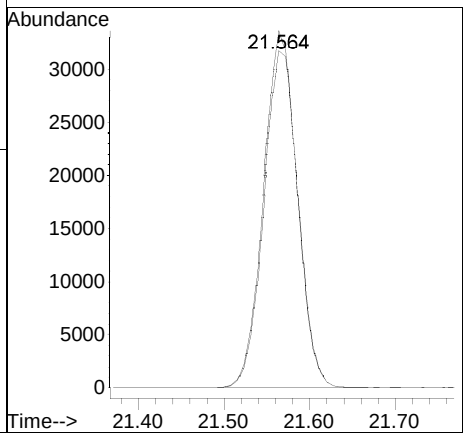


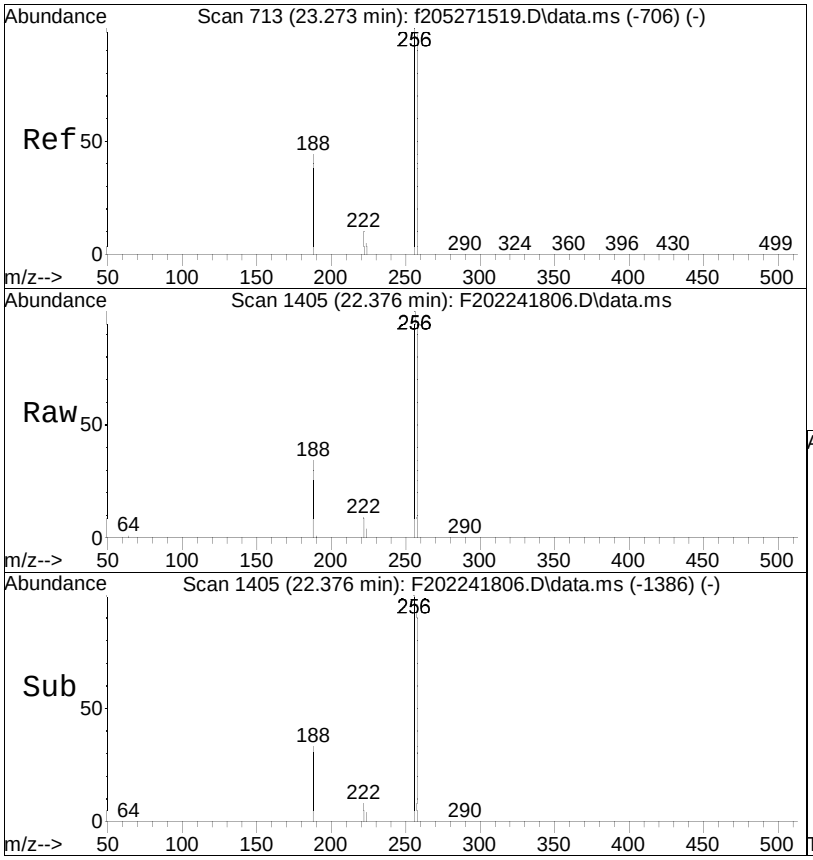


#18
Cl3-BZ#30
Concen: 35.14 ng/mL
RT: 21.564 min Scan# 1304
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 91195

Ion	Ratio	Lower	Upper
256	100		
258	96.3	76.4	114.6

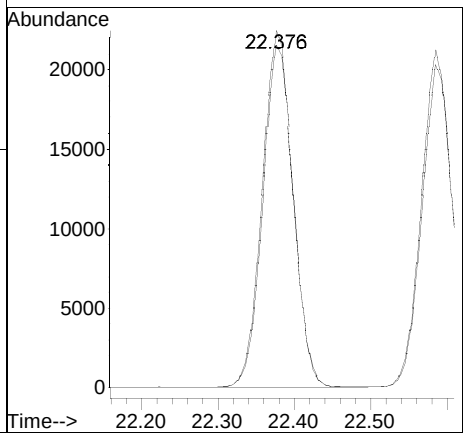


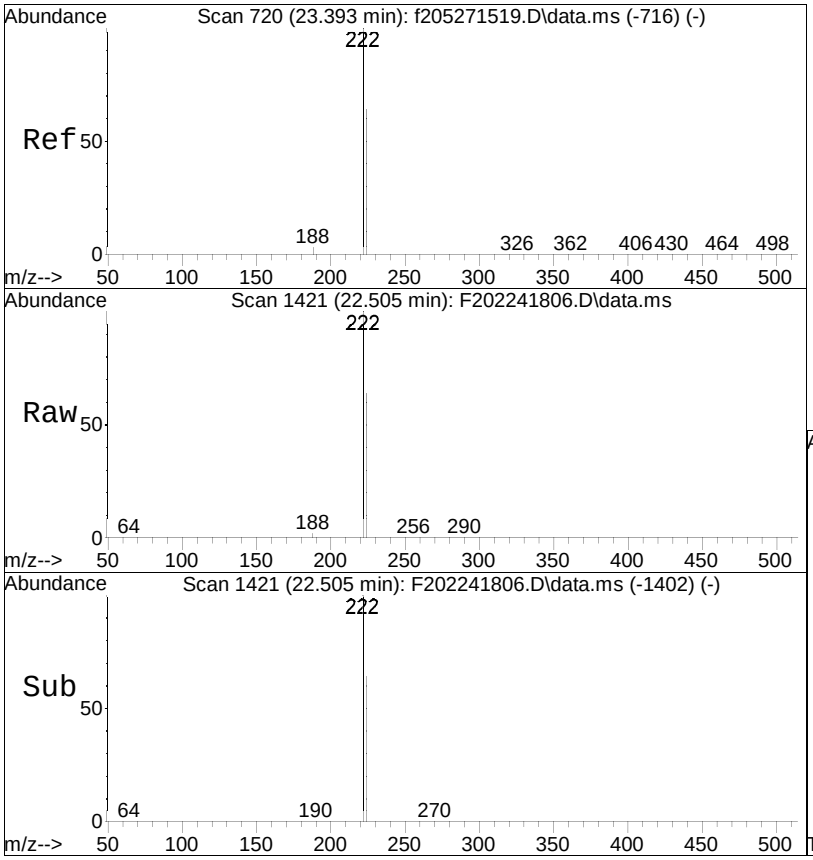


#19
Cl3-BZ#18
Concen: 34.68 ng/mL
RT: 22.376 min Scan# 1405
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 62072

Ion	Ratio	Lower	Upper
256	100		
258	96.2	74.7	112.1

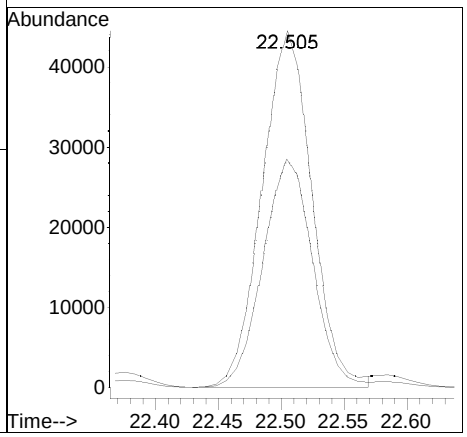


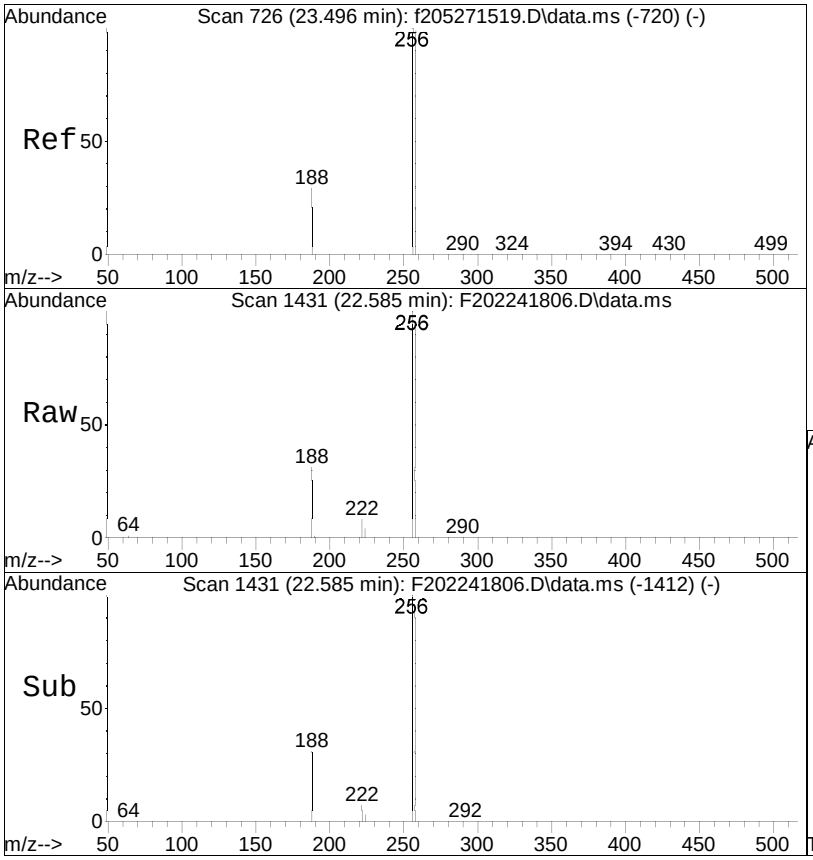


#20
Cl2-BZ#11
Concen: 37.43 ng/mL
RT: 22.505 min Scan# 1421
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 121714

Ion	Ratio	Lower	Upper
222	100		
224	65.3	50.9	76.3

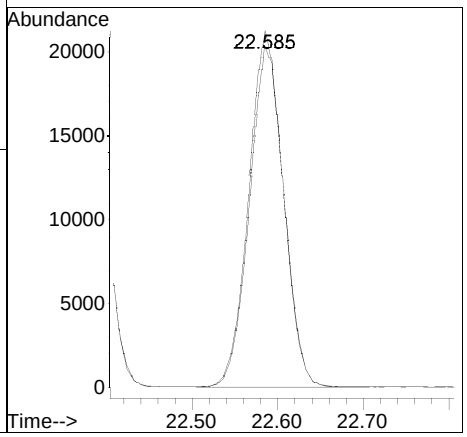


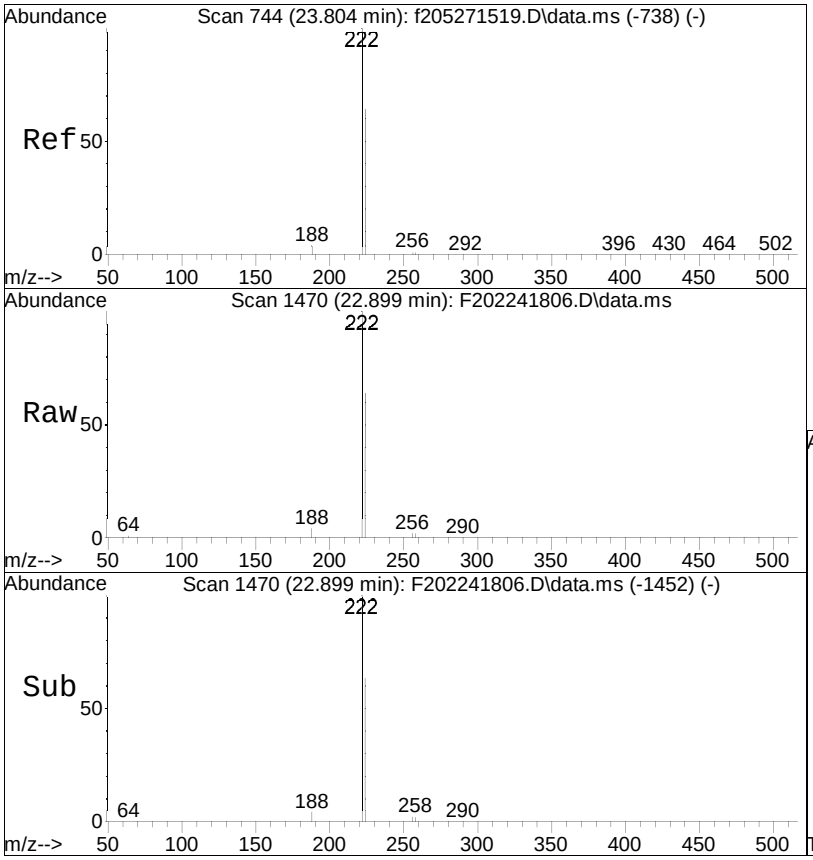


#21
Cl3-BZ#17
Concen: 34.79 ng/mL
RT: 22.585 min Scan# 1431
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 58857

Ion	Ratio	Lower	Upper
256	100		
258	95.7	76.3	114.5

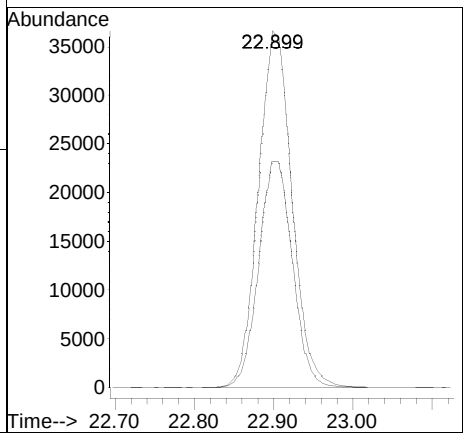


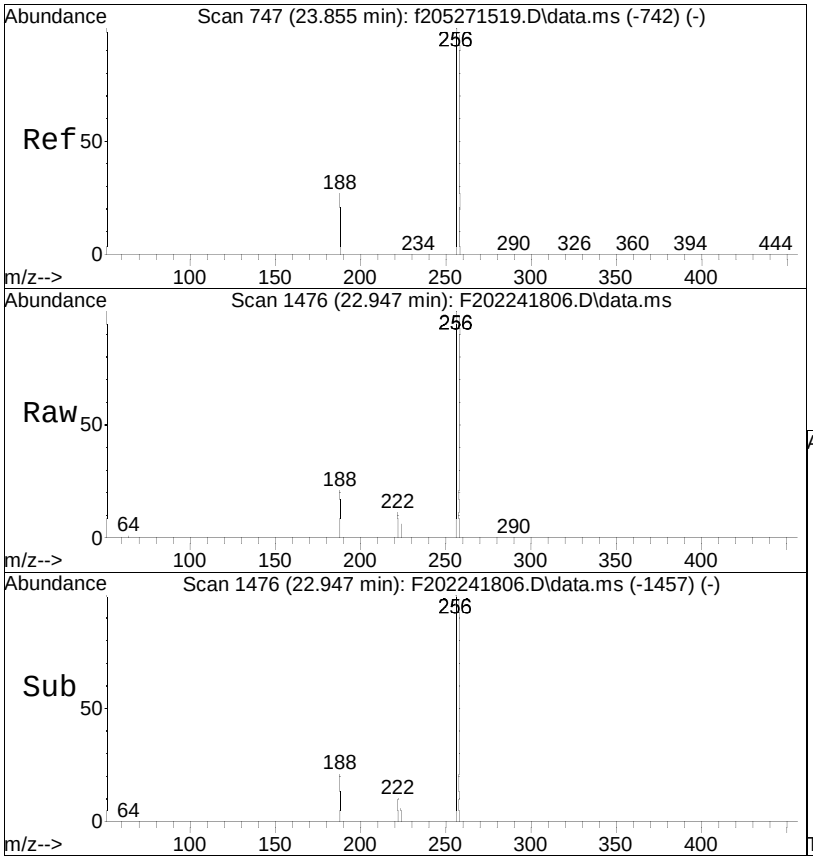


#22
Cl2-BZ#12
Concen: 37.73 ng/mL
RT: 22.899 min Scan# 1470
Delta R.T. -0.008 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 106919

Ion	Ratio	Lower	Upper
222	100		
224	63.8	52.2	78.4

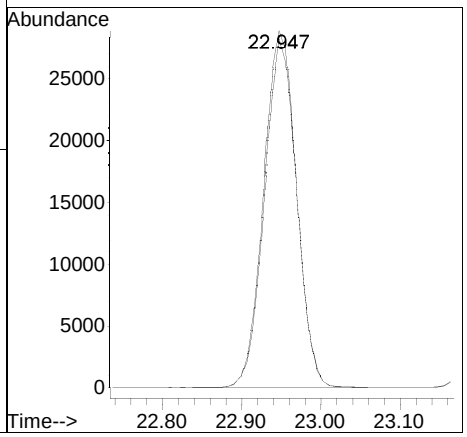


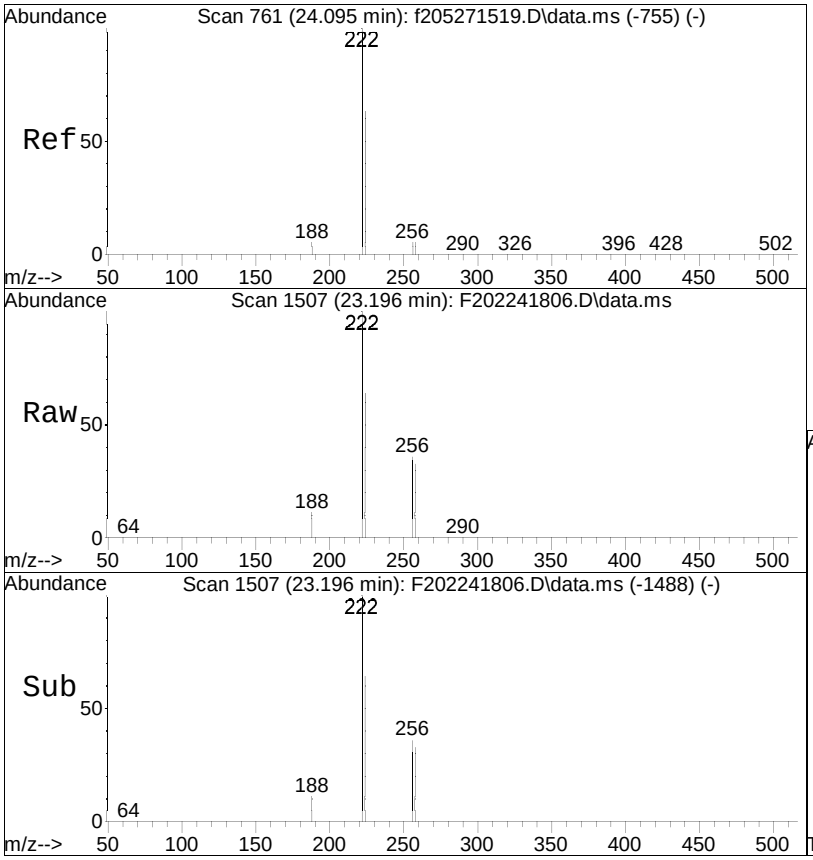


#23
Cl3-BZ#27
Concen: 35.40 ng/mL
RT: 22.947 min Scan# 1476
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 82654

Ion	Ratio	Lower	Upper
256	100		
258	95.8	75.5	113.3

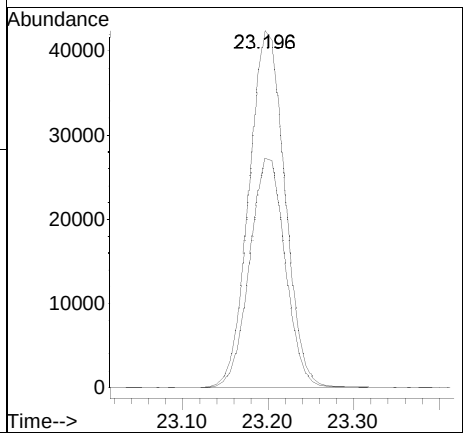


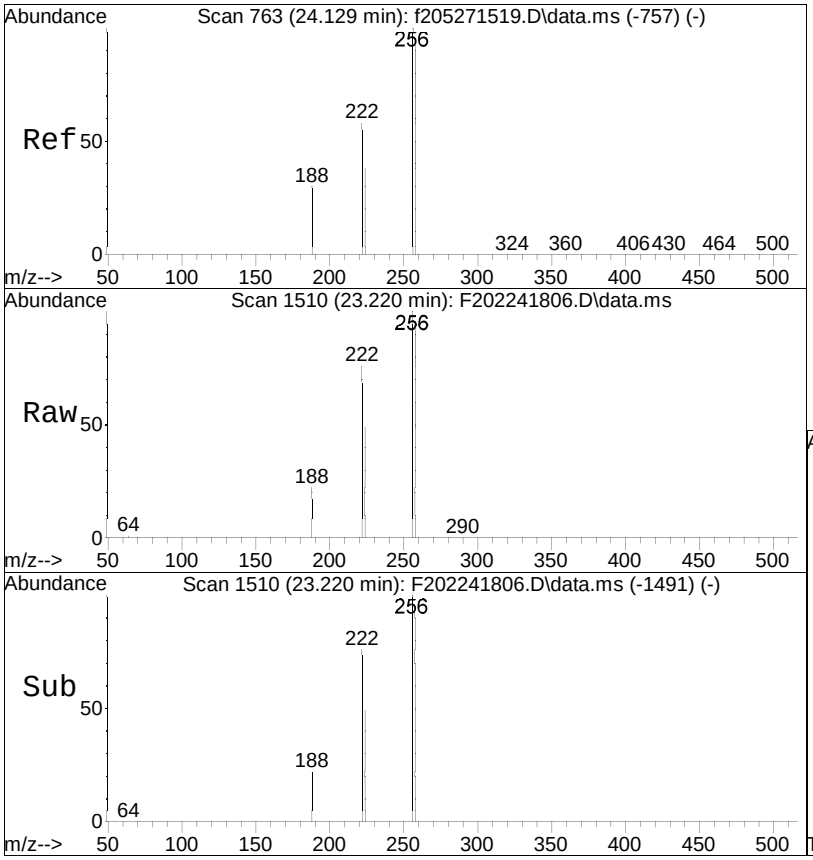


#24
Cl2-BZ#13
Concen: 37.66 ng/mL
RT: 23.196 min Scan# 1507
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 122748

Ion	Ratio	Lower	Upper
222	100		
224	63.7	51.4	77.2

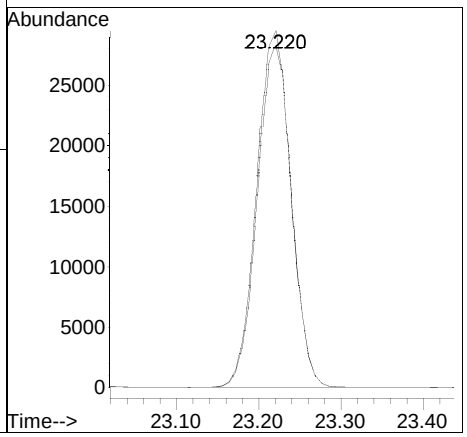


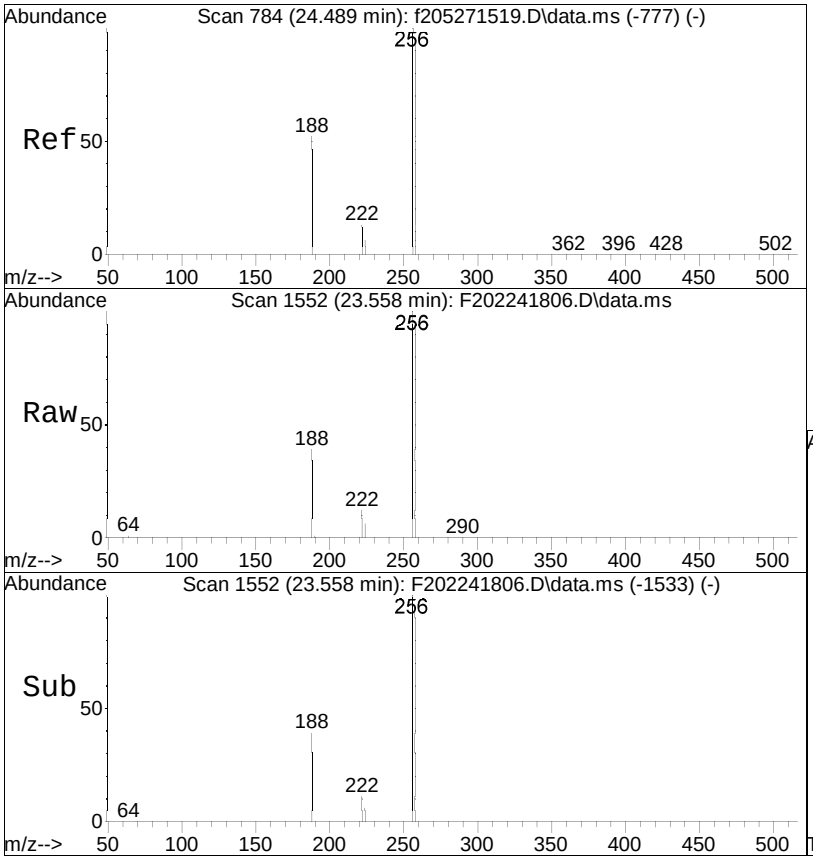


#25
Cl3-BZ#24
Concen: 36.79 ng/mL
RT: 23.220 min Scan# 1510
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 84686

Ion	Ratio	Lower	Upper
256	100		
258	96.1	75.8	113.6

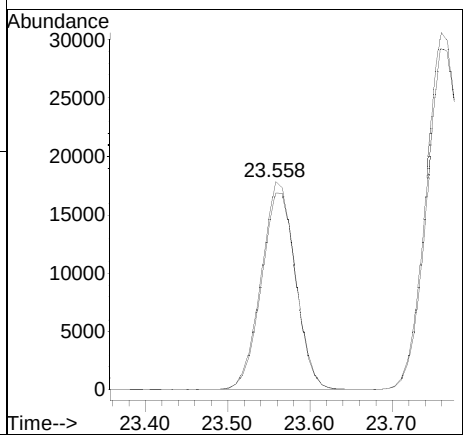


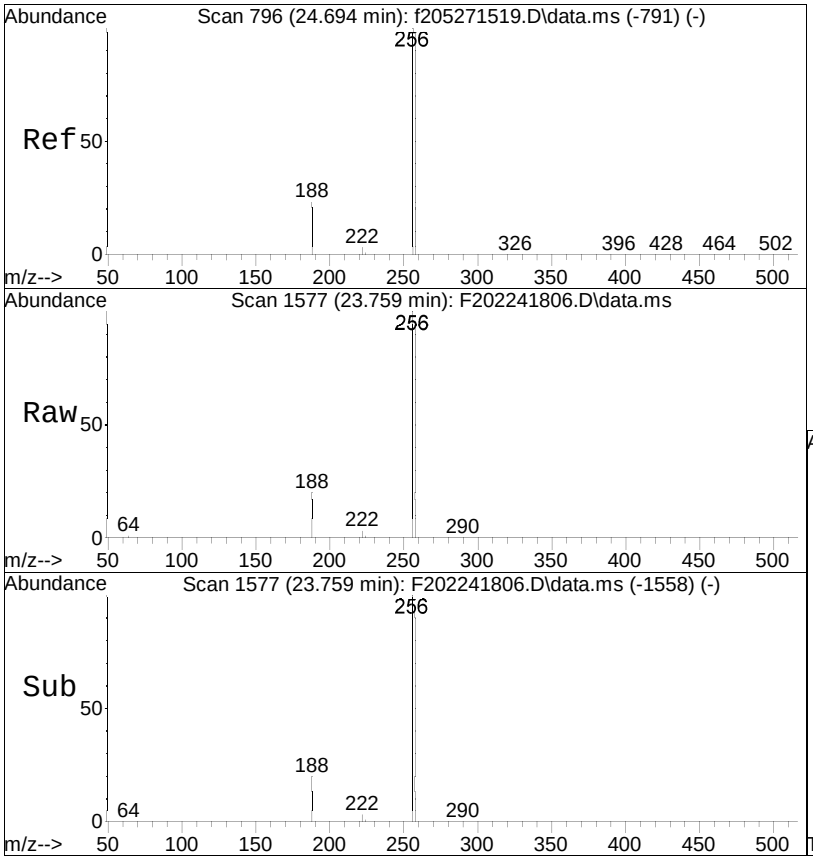


#26
Cl3-BZ#16
Concen: 34.56 ng/mL
RT: 23.558 min Scan# 1552
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 50932

Ion	Ratio	Lower	Upper
256	100		
258	96.3	74.2	111.4

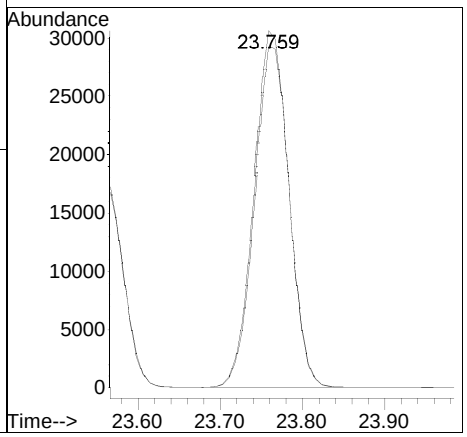


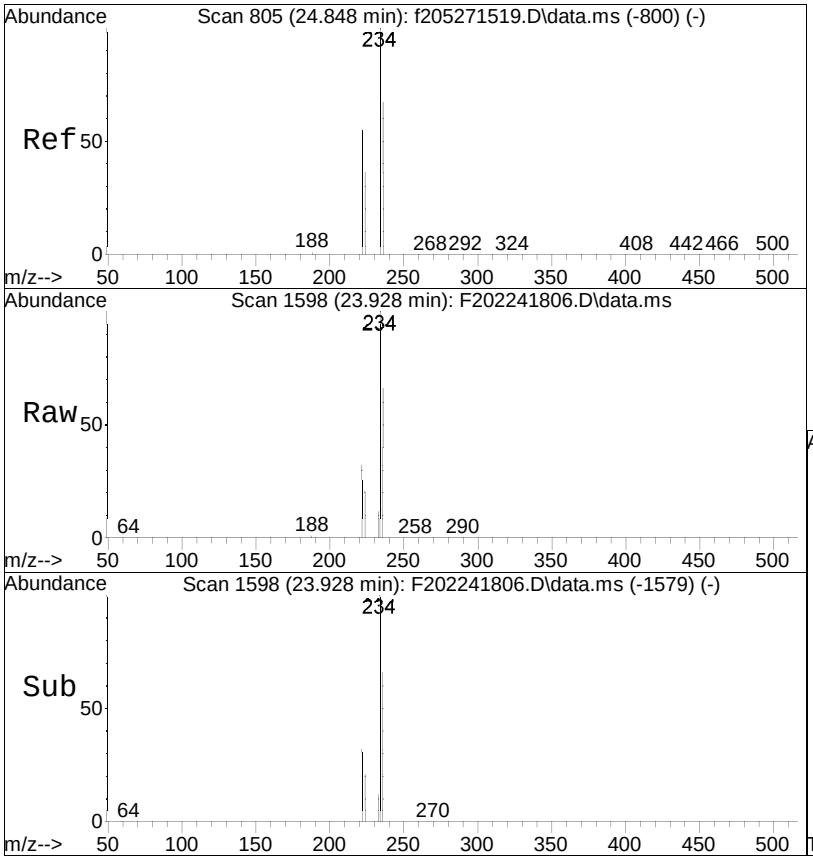


#27
Cl3-BZ#32
Concen: 35.47 ng/mL
RT: 23.759 min Scan# 1577
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 89360

Ion	Ratio	Lower	Upper
256	100		
258	96.1	75.0	112.4

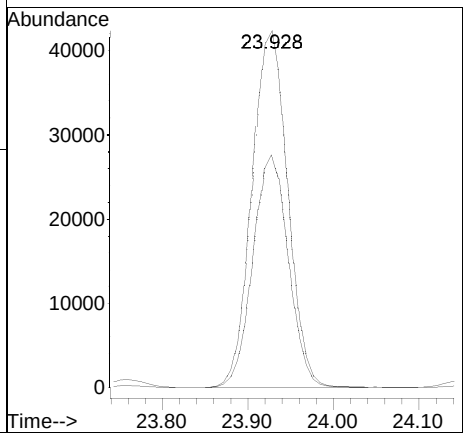


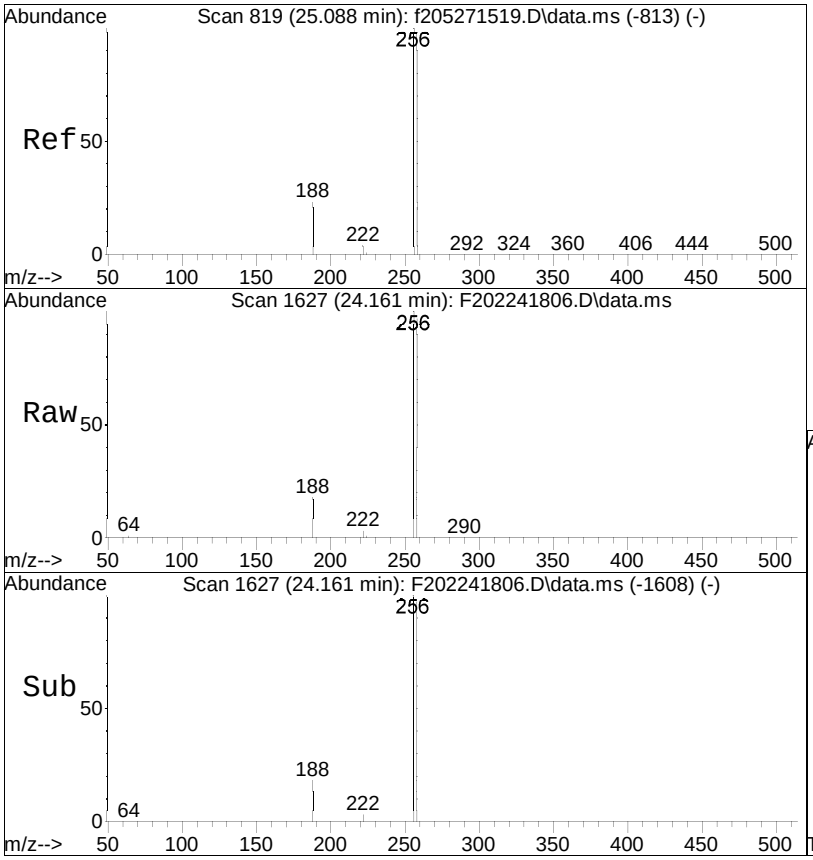


#28
Cl2-BZ#15-RTW
Concen: 36.33 ng/mL
RT: 23.928 min Scan# 1598
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:222 Resp: 122325

Ion	Ratio	Lower	Upper
222	100		
224	65.2	51.7	77.5

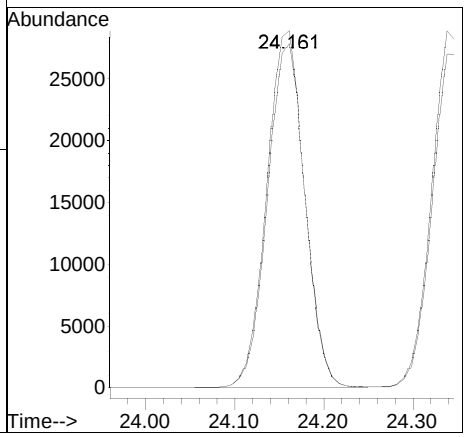


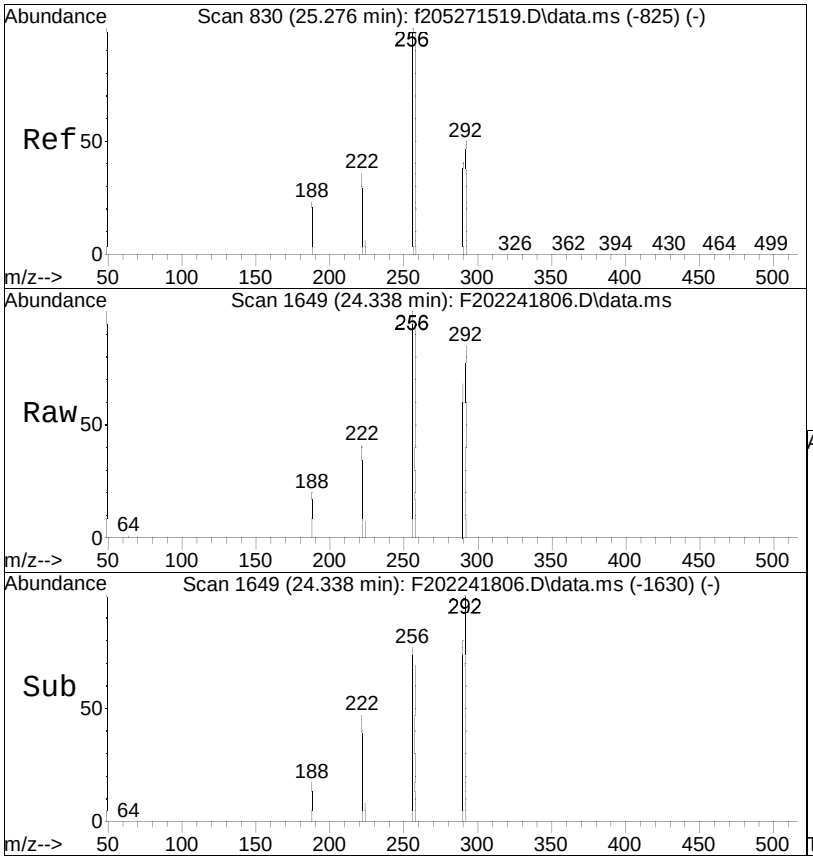


#29
Cl3-BZ#34
Concen: 36.34 ng/mL
RT: 24.161 min Scan# 1627
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 84755

Ion	Ratio	Lower	Upper
256	100		
258	96.1	77.1	115.7

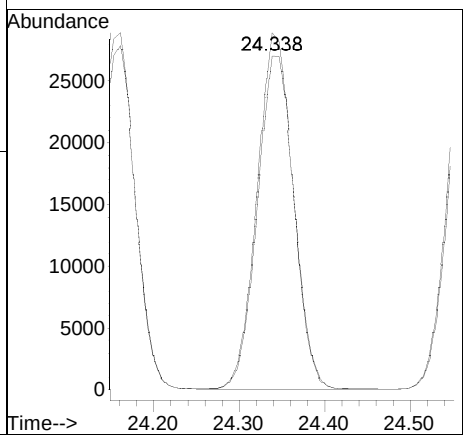


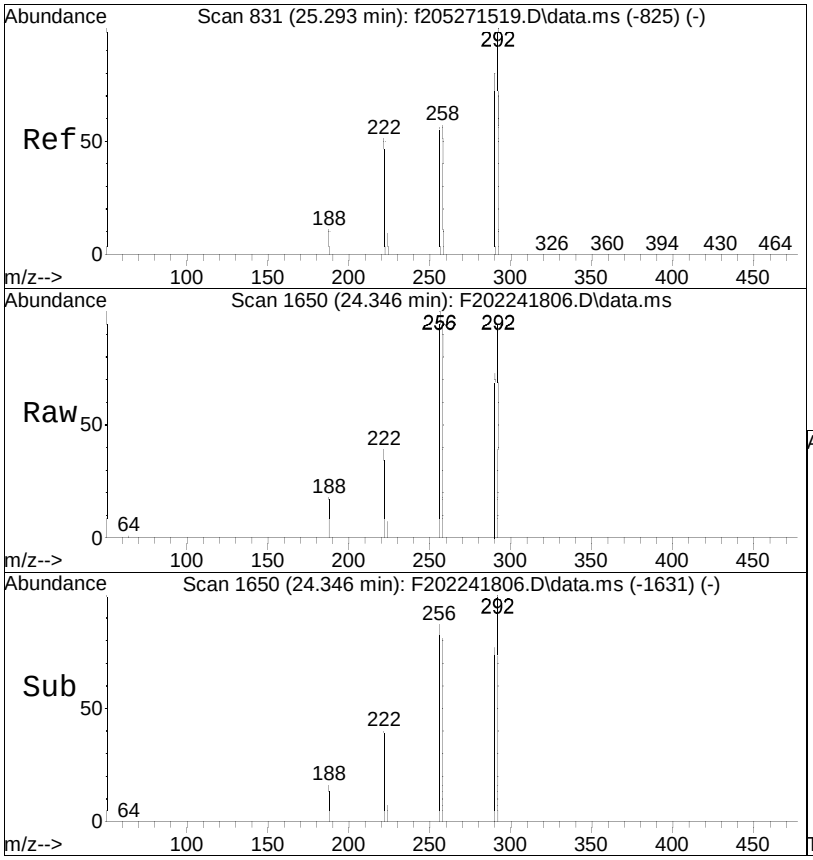


#30
Cl3-BZ#23
Concen: 36.47 ng/mL
RT: 24.338 min Scan# 1649
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 84038

Ion	Ratio	Lower	Upper
256	100		
258	95.7	76.7	115.1

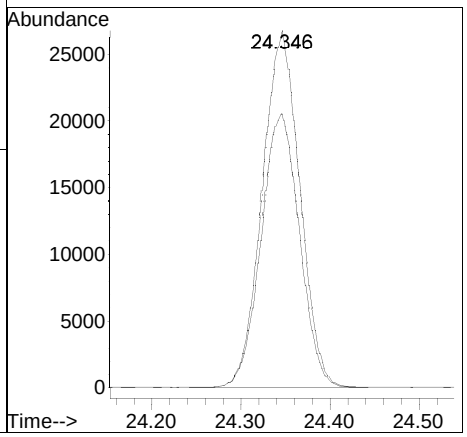


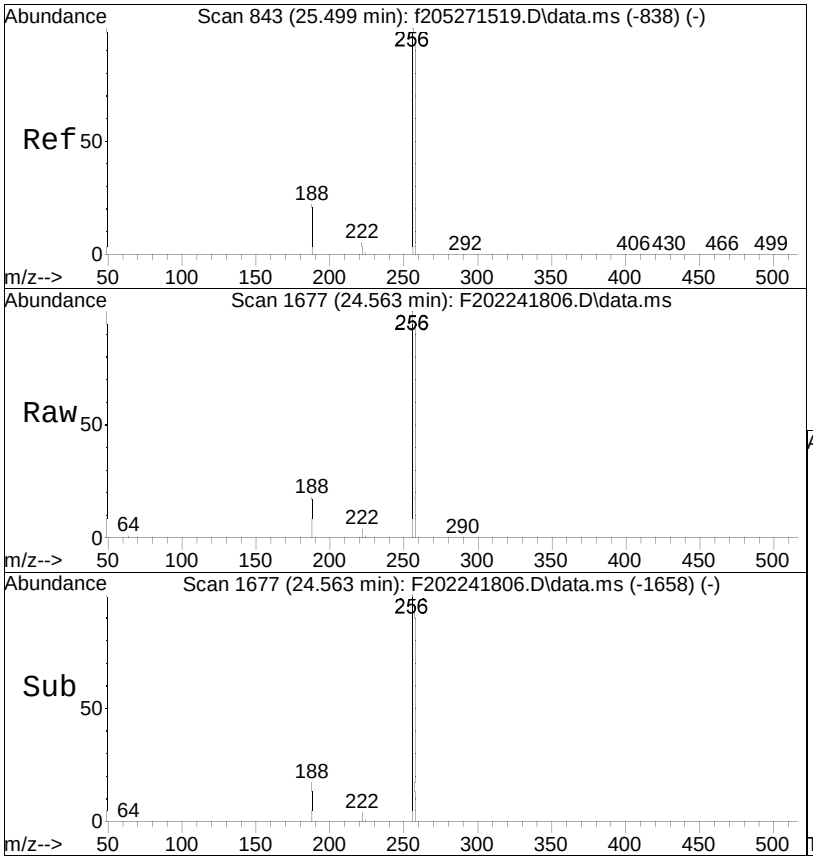


#31
Cl4-BZ#54-RTW
Concen: 33.90 ng/mL
RT: 24.346 min Scan# 1650
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 77916

Ion	Ratio	Lower	Upper
292	100		
290	78.3	63.5	95.3

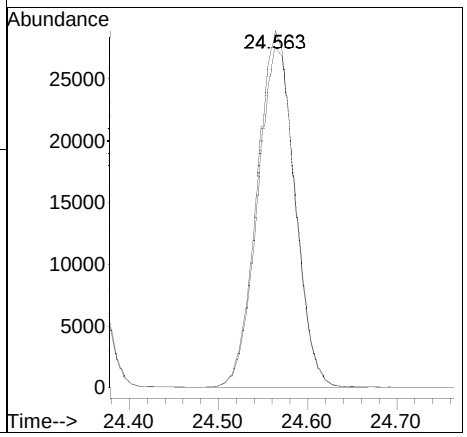


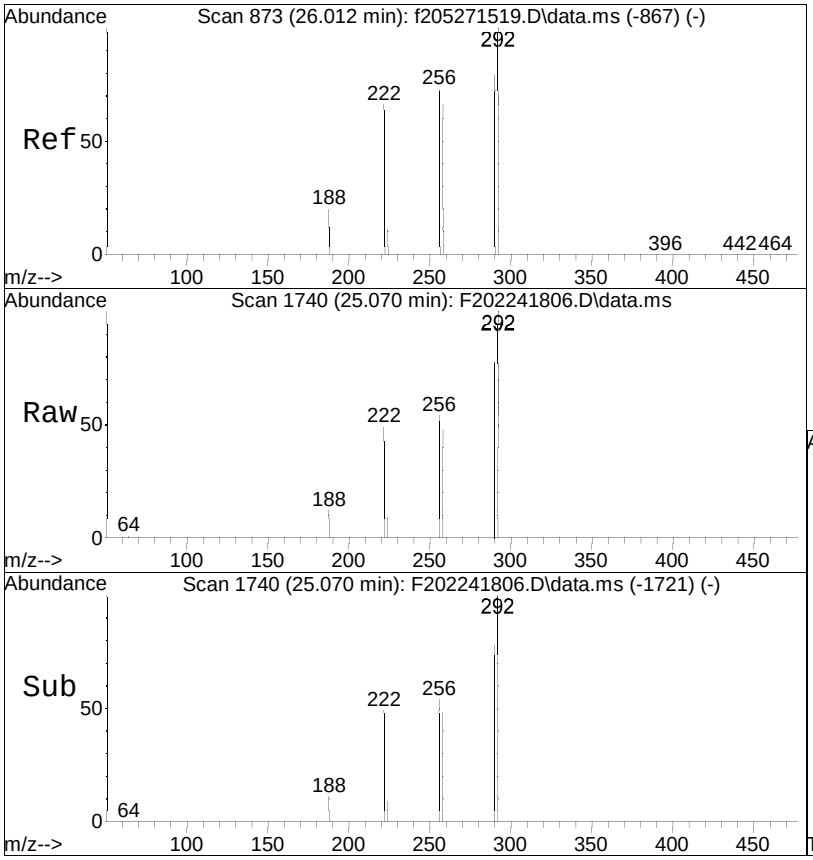


#32
Cl3-BZ#29-Cal
Concen: 36.85 ng/mL
RT: 24.563 min Scan# 1677
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 83762

Ion	Ratio	Lower	Upper
256	100		
258	95.4	76.6	115.0

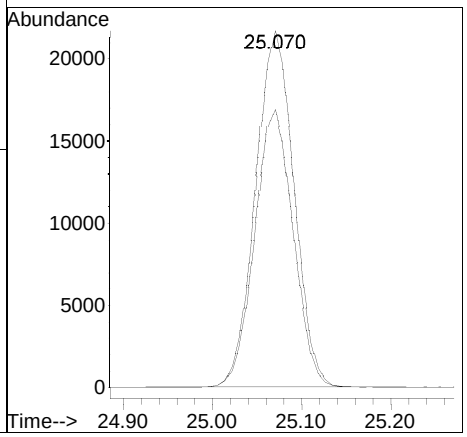


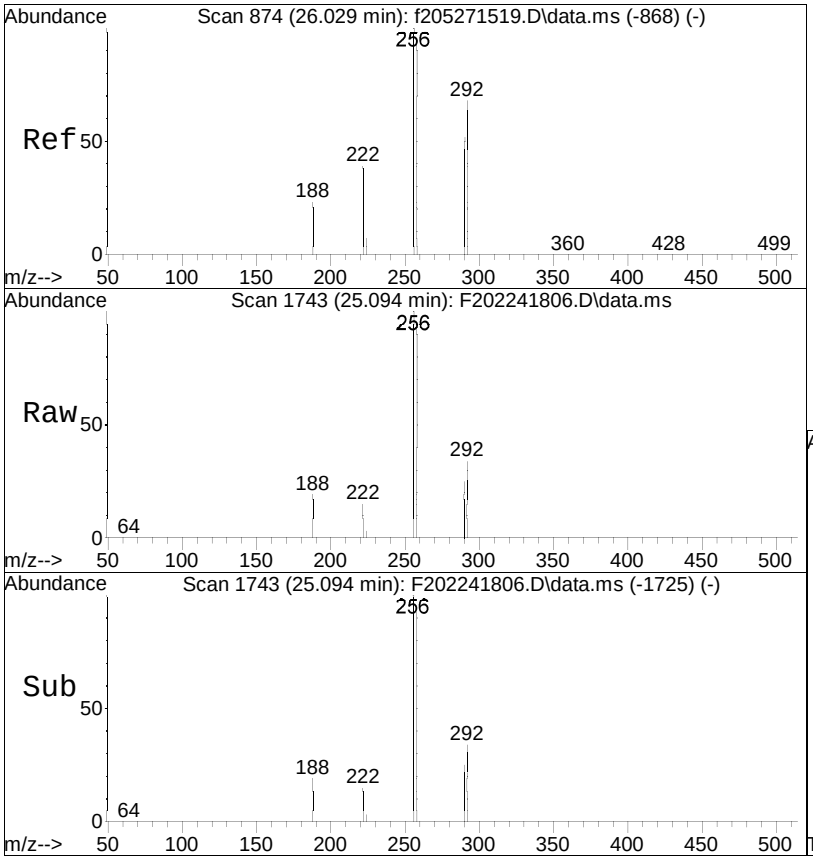


#35
Cl4-BZ#50-Cal
Concen: 34.68 ng/mL
RT: 25.070 min Scan# 1740
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 64630

Ion	Ratio	Lower	Upper
292	100		
290	78.1	63.6	95.4

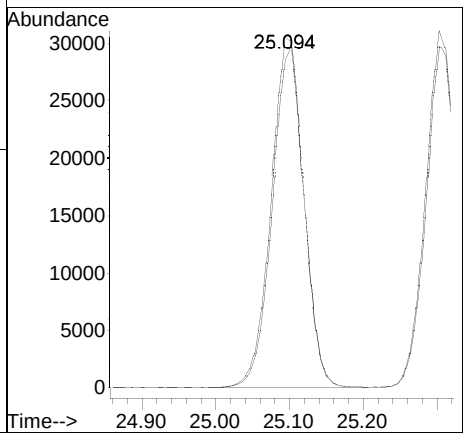


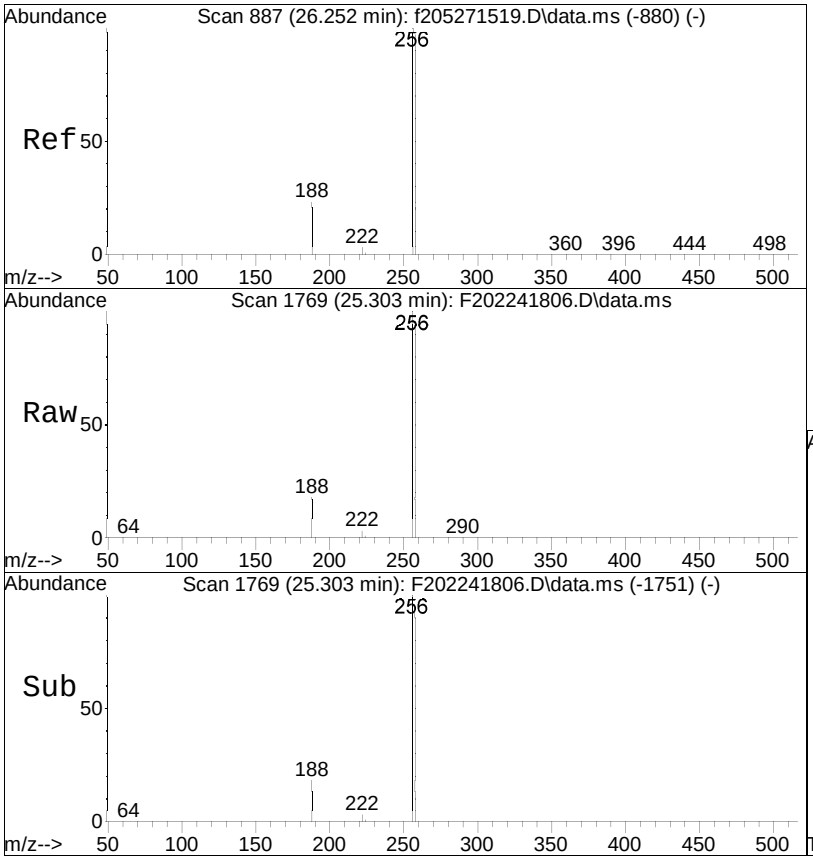


#38
Cl3-BZ#26
Concen: 37.91 ng/mL
RT: 25.094 min Scan# 1743
Delta R.T. -0.008 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 93336

Ion	Ratio	Lower	Upper
256	100		
258	93.4	76.6	115.0

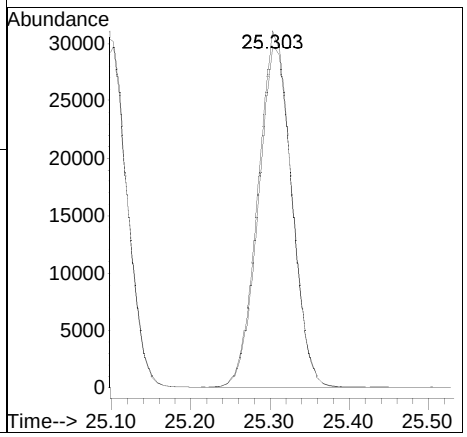


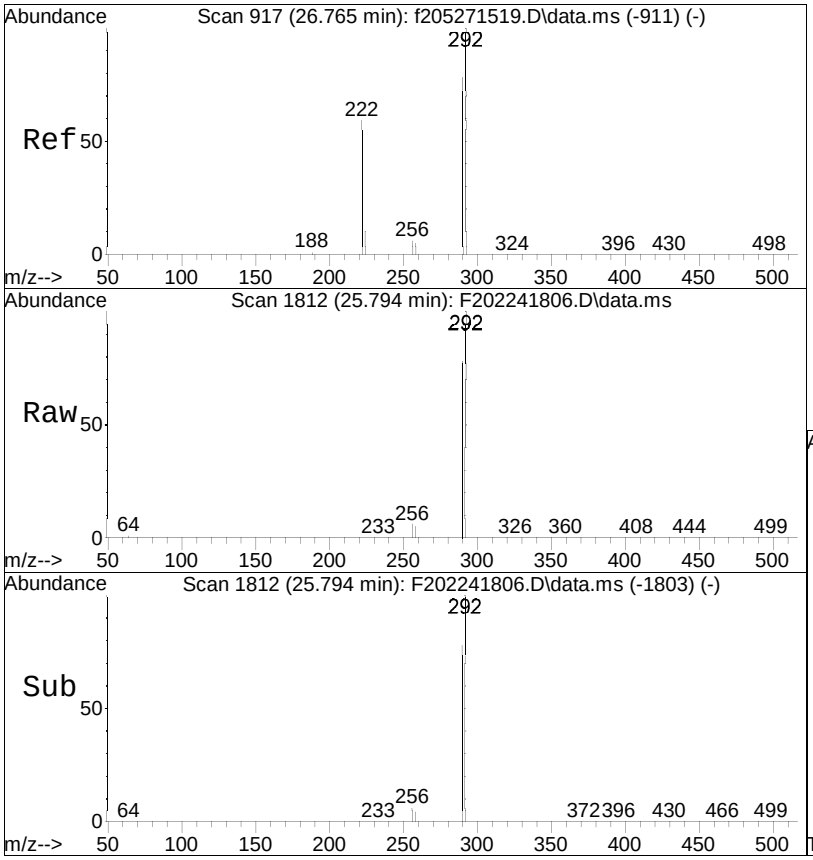


#39
Cl3-BZ#25
Concen: 36.68 ng/mL
RT: 25.303 min Scan# 1769
Delta R.T. -0.008 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 91143

Ion	Ratio	Lower	Upper
256	100		
258	95.9	77.5	116.3

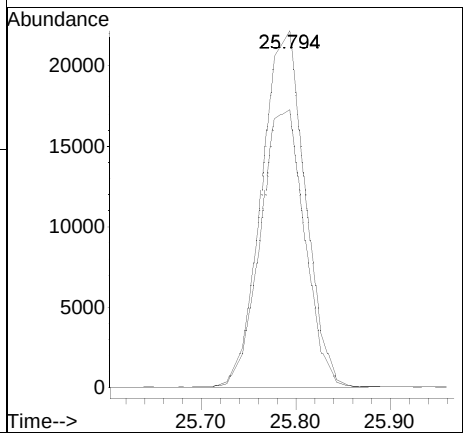


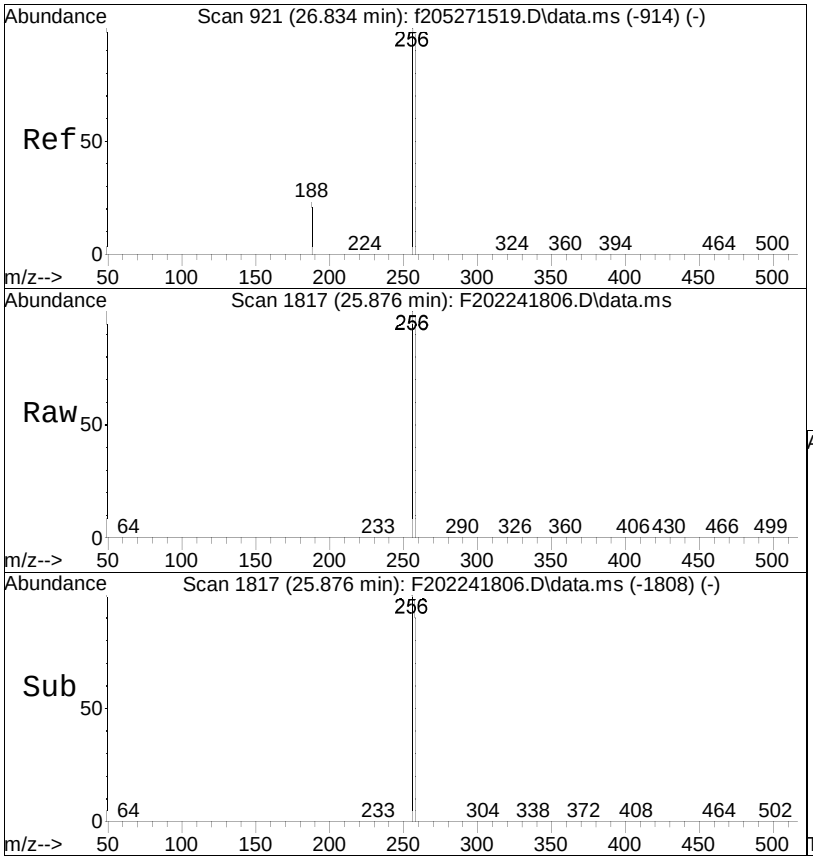


#40
Cl4-BZ#53
Concen: 34.92 ng/mL
RT: 25.794 min Scan# 1812
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 70577

Ion	Ratio	Lower	Upper
292	100		
290	78.9	62.4	93.6

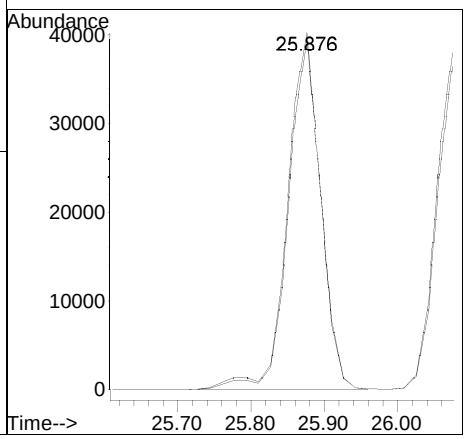


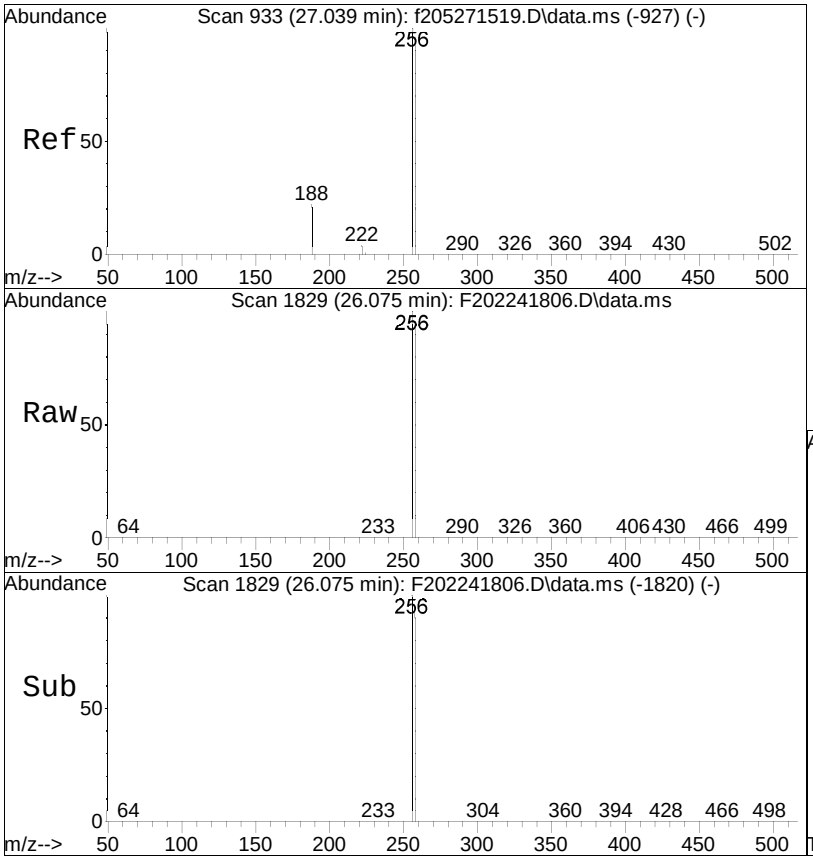


#41
Cl3-BZ#-31
Concen: 39.79 ng/mL M4
RT: 25.876 min Scan# 1817
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 125085

Ion	Ratio	Lower	Upper
256	100		
258	95.3	78.6	117.8

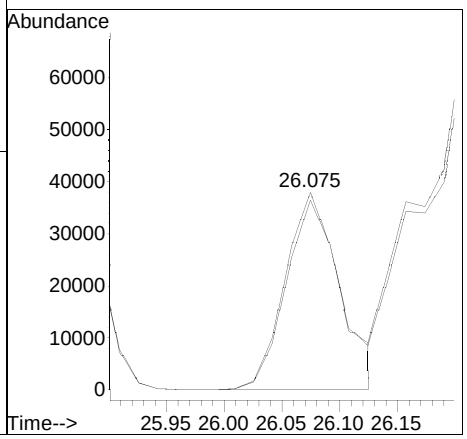


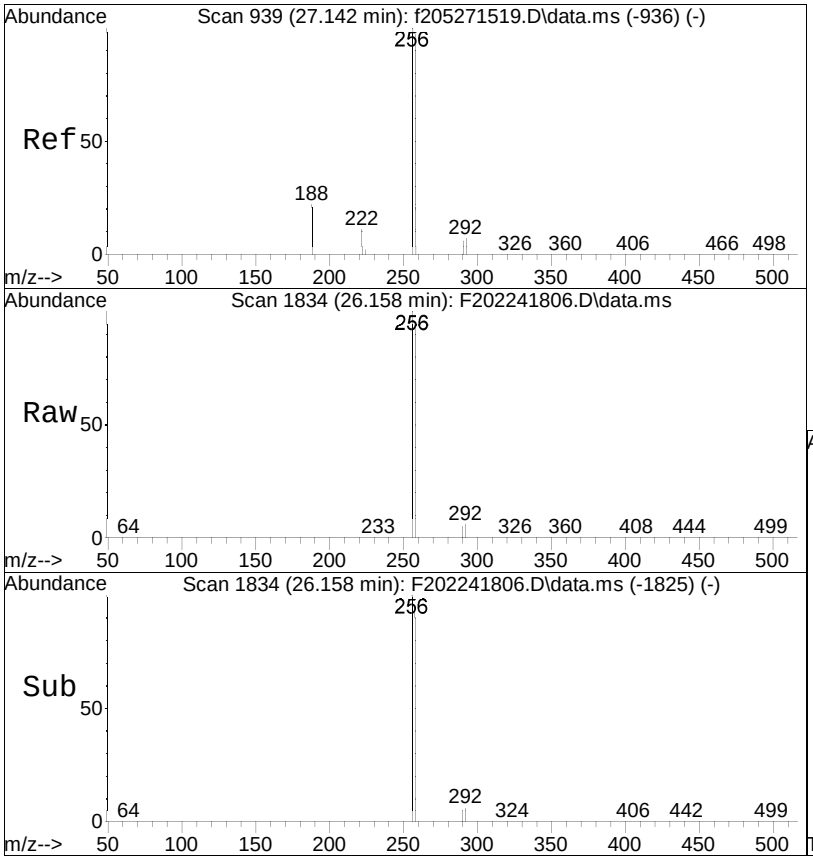


#42
Cl3-BZ#28
Concen: 38.83 ng/mL
RT: 26.075 min Scan# 1829
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 124179

Ion	Ratio	Lower	Upper
256	100		
258	96.1	77.5	116.3

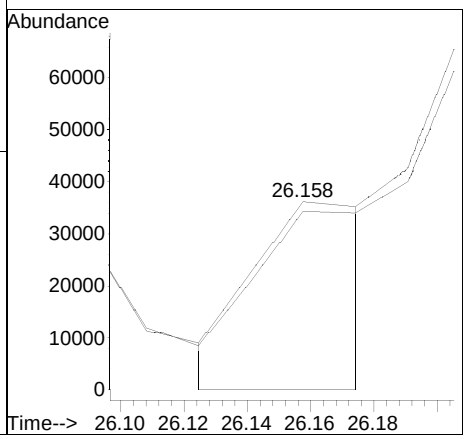


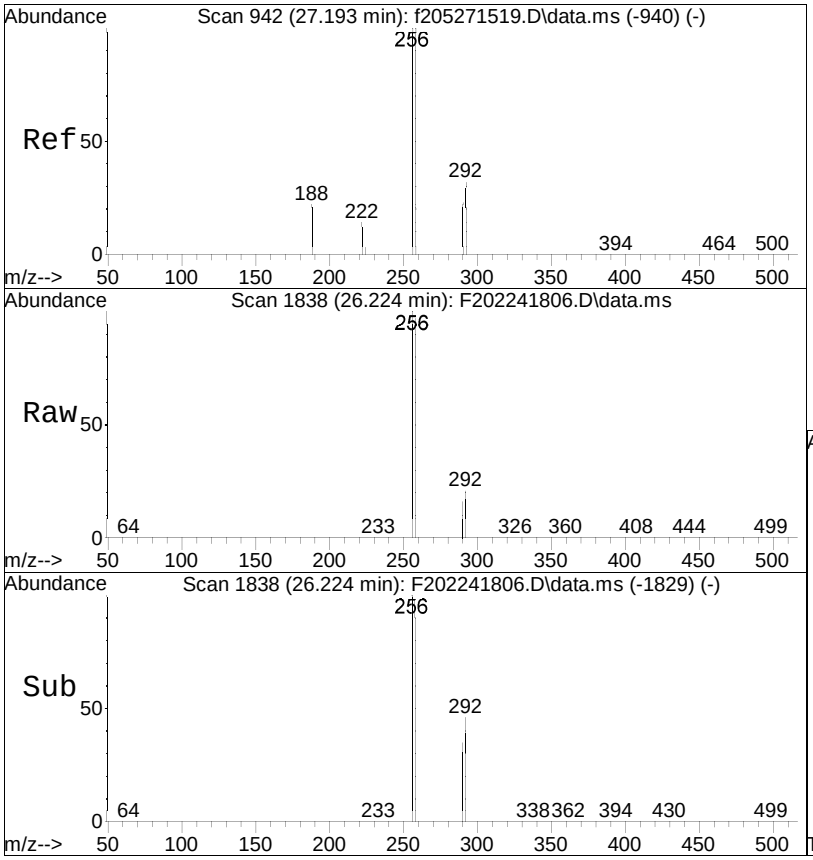


#43
Cl3-BZ#33
Concen: 32.30 ng/mL M3
RT: 26.158 min Scan# 1834
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 93216

Ion	Ratio	Lower	Upper
256	100		
258	95.0	76.2	114.4

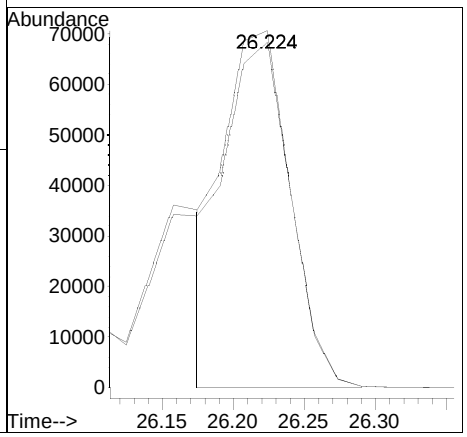


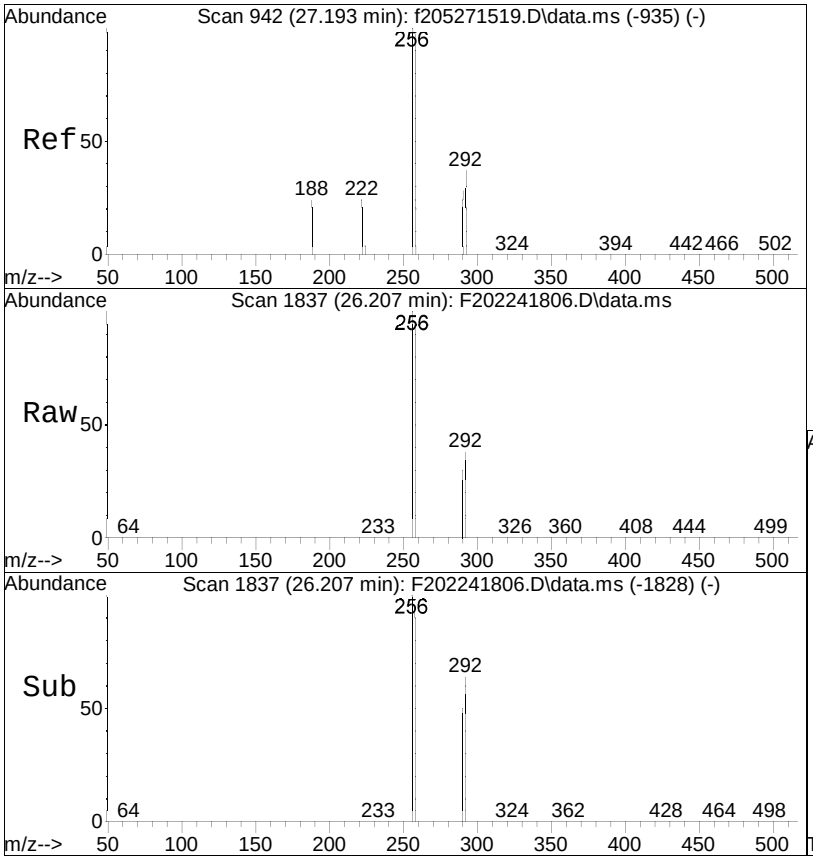


#44
Cl3-BZ#21/#20
Concen: 80.22 ng/mL M3
RT: 26.224 min Scan# 1838
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 230055

Ion	Ratio	Lower	Upper
256	100		
258	134.2	77.8	116.8#

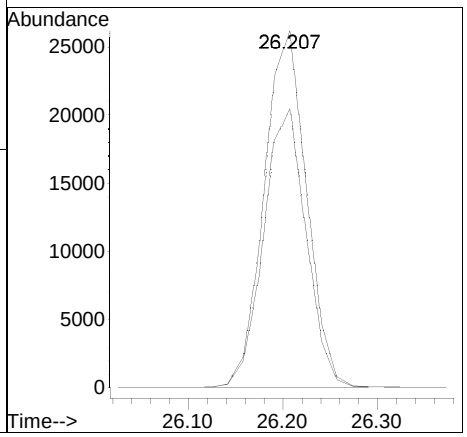


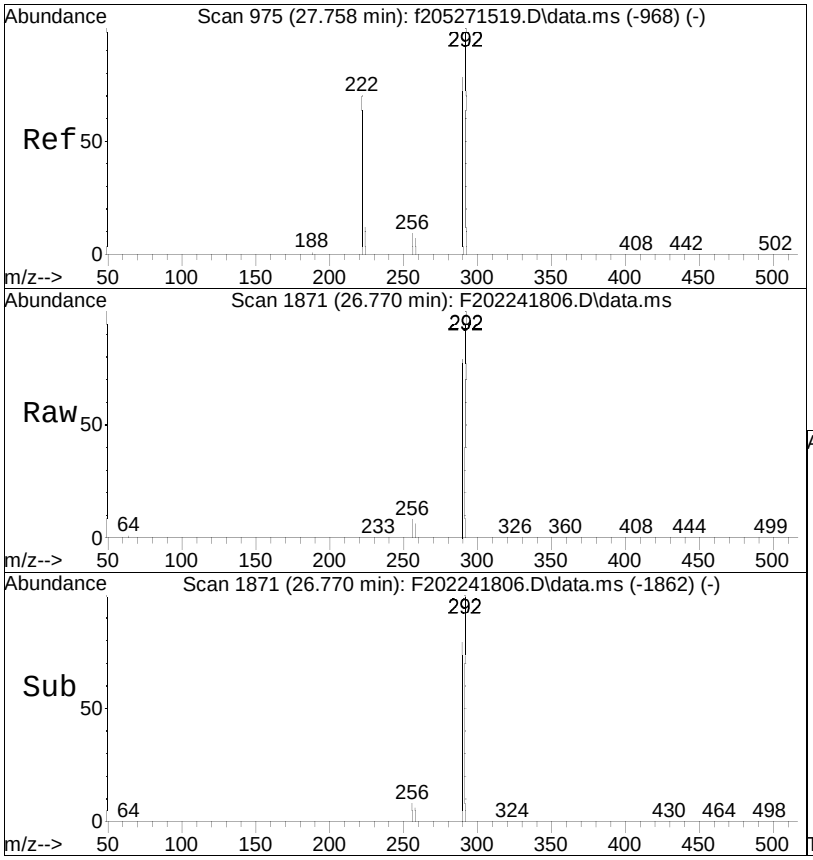


#45
Cl4-BZ#51
Concen: 36.76 ng/mL
RT: 26.207 min Scan# 1837
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 81198

Ion	Ratio	Lower	Upper
292	100		
290	78.5	61.4	92.2

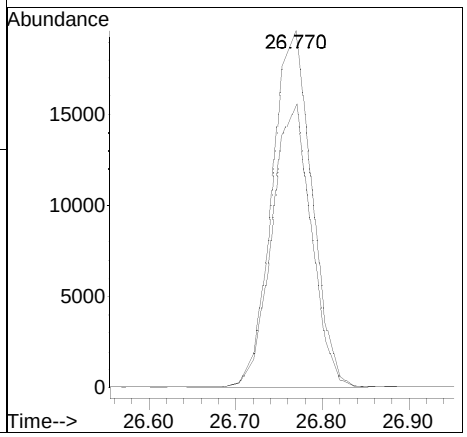


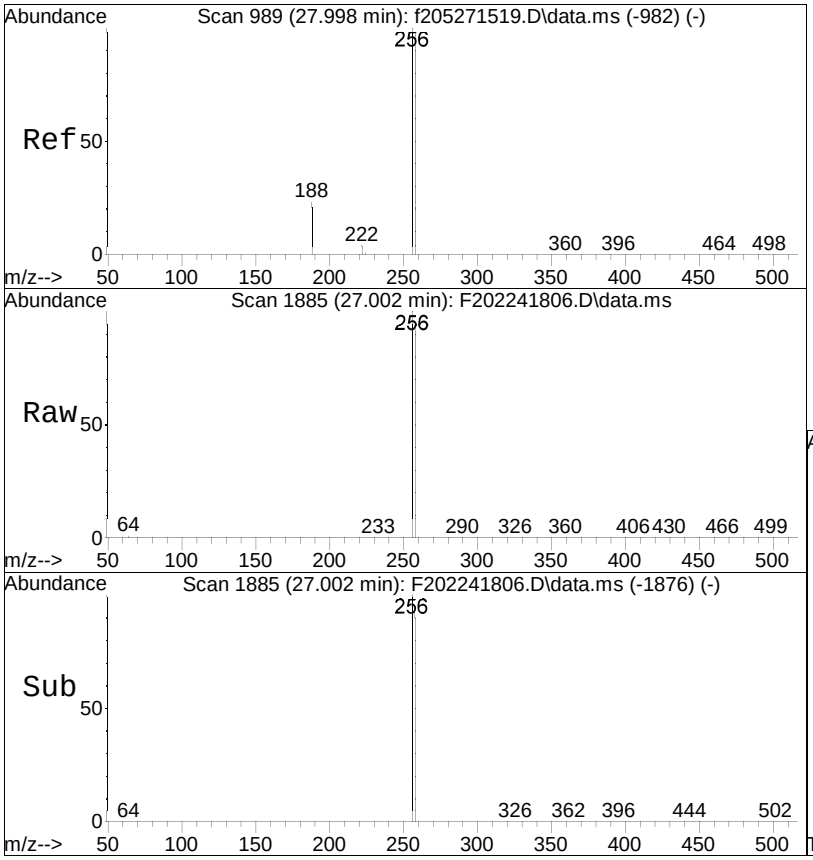


#46
Cl4-BZ#45
Concen: 37.31 ng/mL
RT: 26.770 min Scan# 1871
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 62111

Ion	Ratio	Lower	Upper
292	100		
290	78.6	62.6	93.8

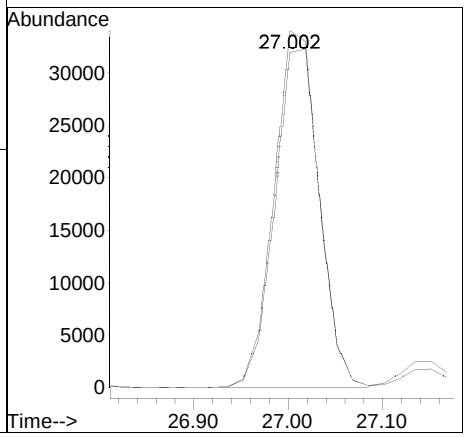


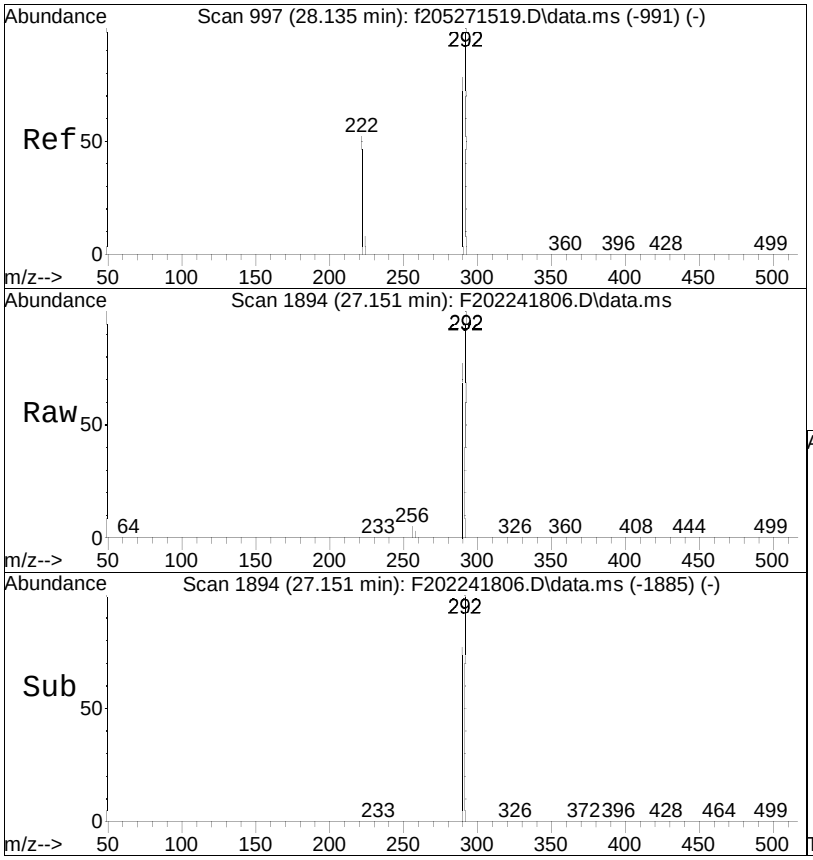


#47
Cl3-BZ#22
Concen: 38.67 ng/mL
RT: 27.002 min Scan# 1885
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 111510

Ion	Ratio	Lower	Upper
256	100		
258	93.9	75.4	113.0

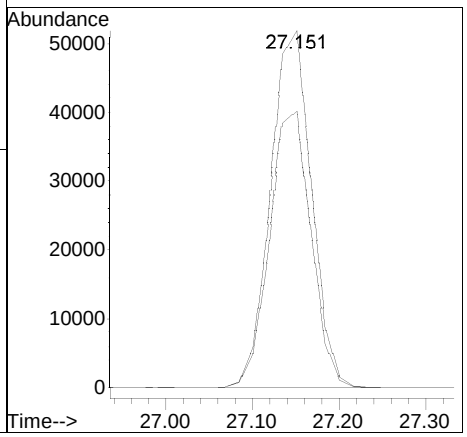


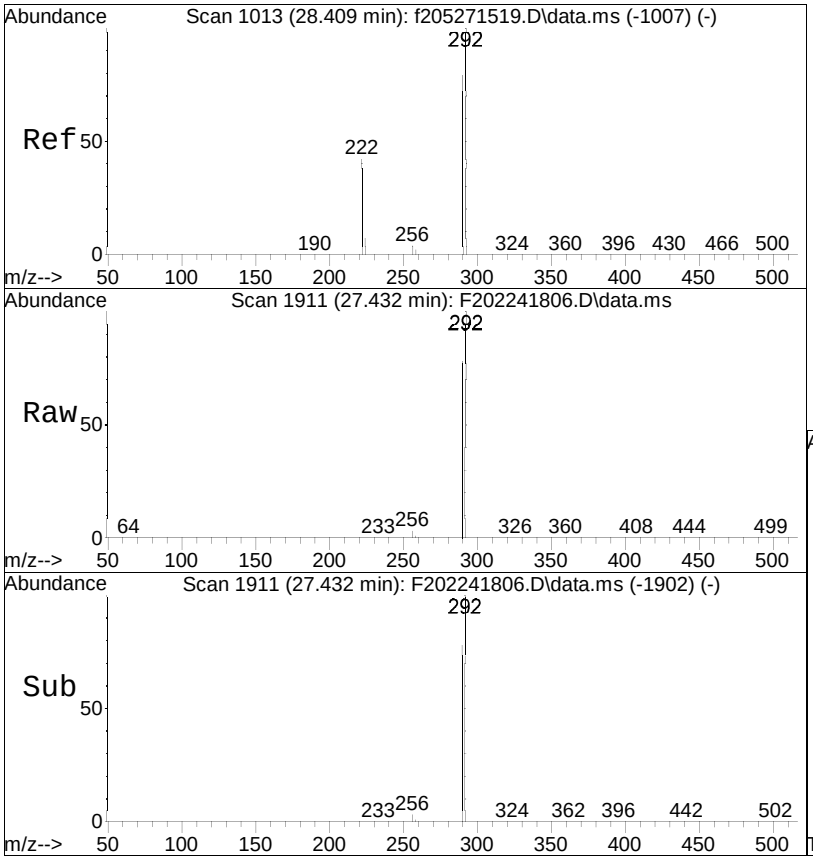


#48
Cl4-BZ#73/#46
Concen: 74.80 ng/mL
RT: 27.151 min Scan# 1894
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 169762

Ion	Ratio	Lower	Upper
292	100		
290	78.3	62.4	93.6

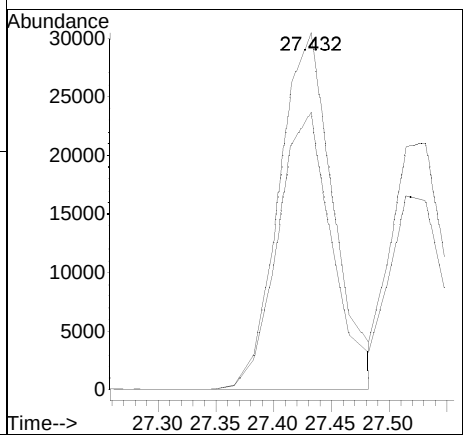


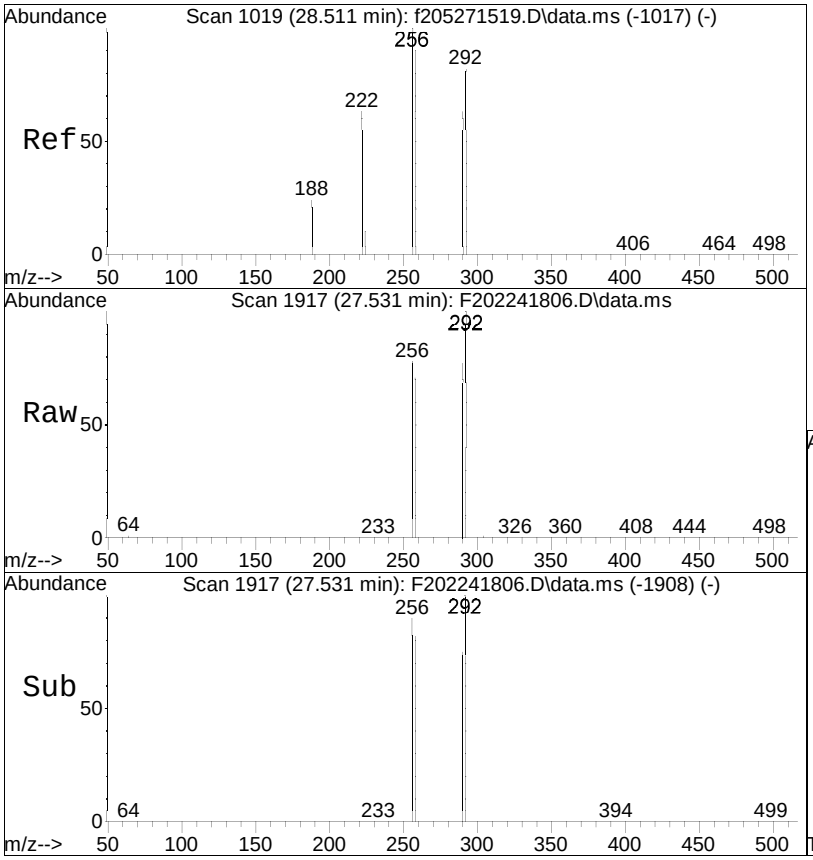


#49
Cl4-BZ#69
Concen: 37.66 ng/mL
RT: 27.432 min Scan# 1911
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 99454

Ion	Ratio	Lower	Upper
292	100		
290	78.2	62.0	93.0

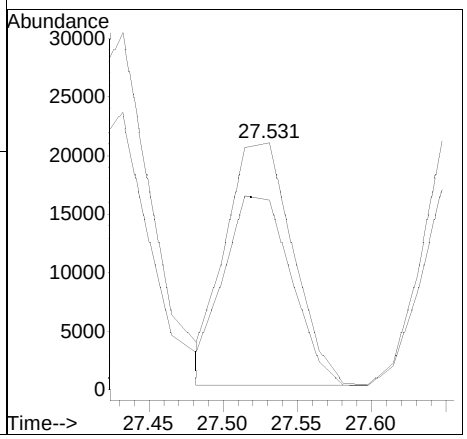


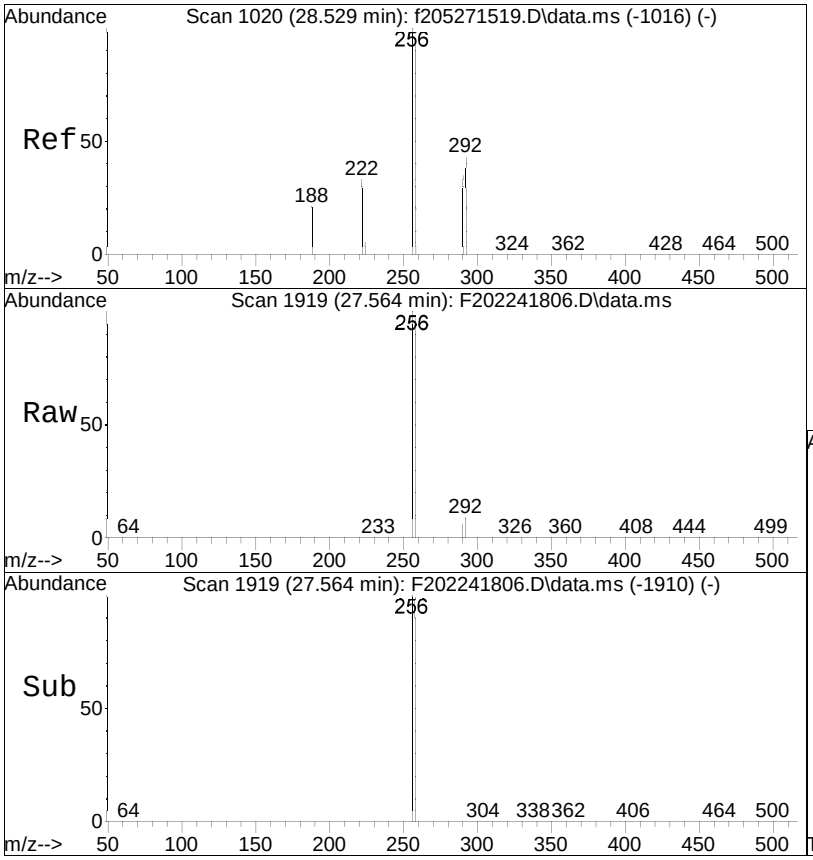


#50
Cl4-BZ#43
Concen: 34.59 ng/mL
RT: 27.531 min Scan# 1917
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 64748

Ion	Ratio	Lower	Upper
292	100		
290	78.3	60.5	90.7

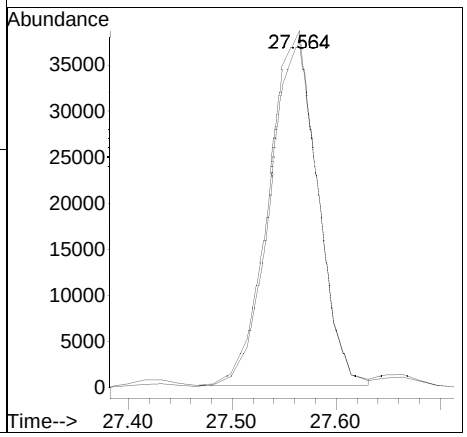


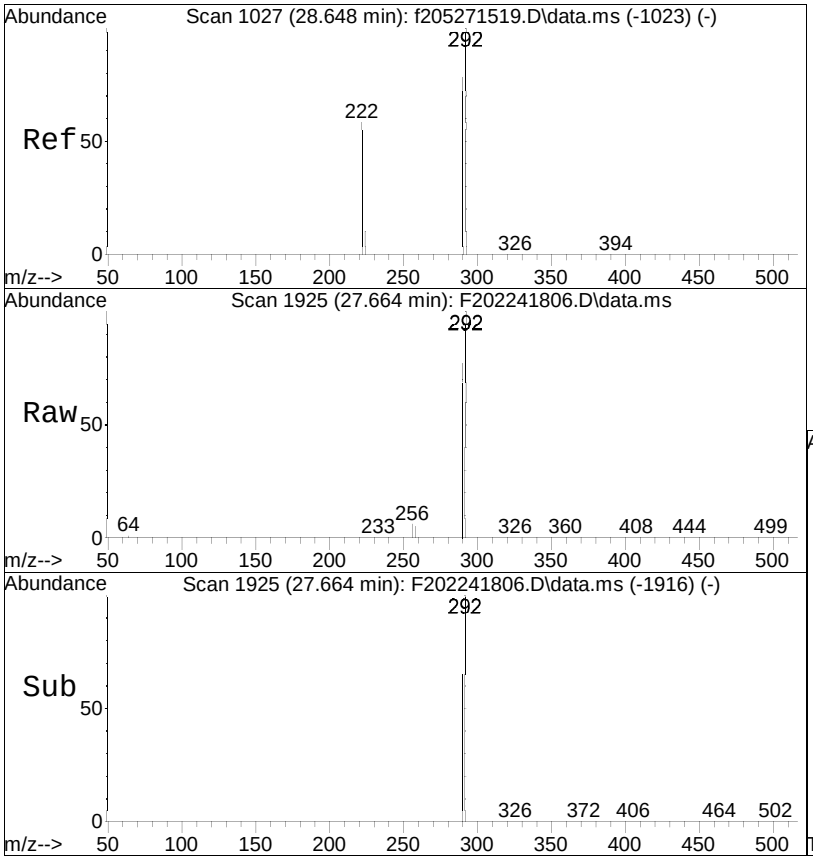


#51
Cl3-BZ#36
Concen: 37.81 ng/mL
RT: 27.564 min Scan# 1919
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 125586

Ion	Ratio	Lower	Upper
256	100		
258	96.4	77.4	116.0

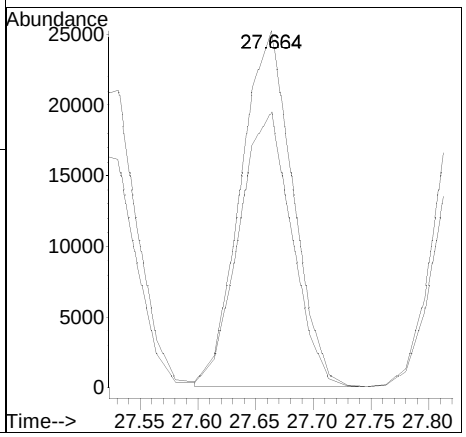


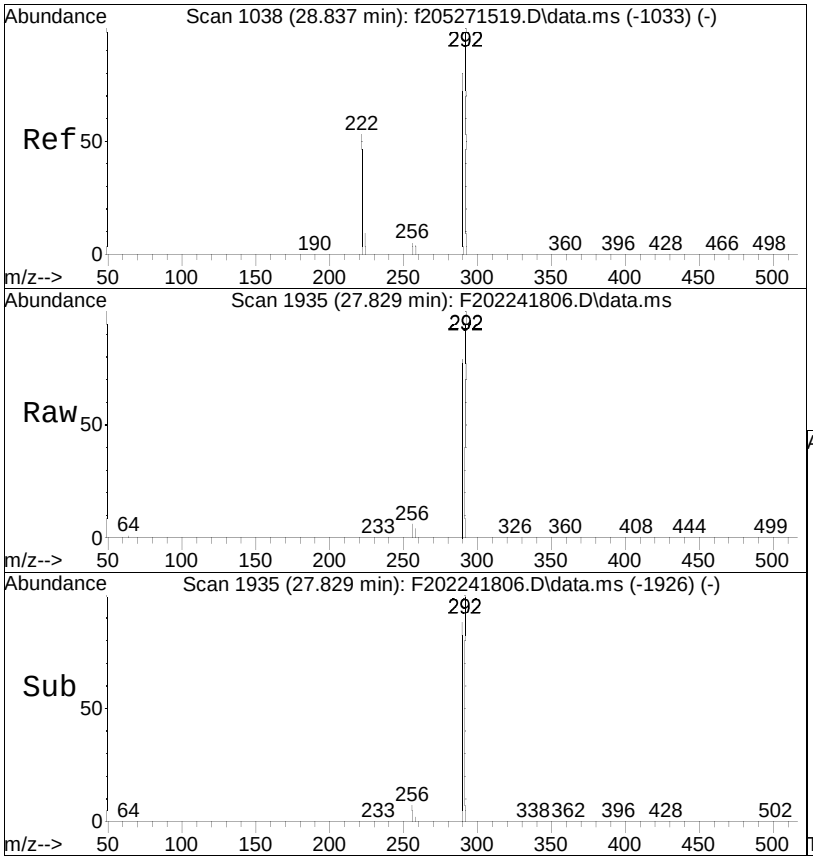


#52
Cl4-BZ#52
Concen: 35.36 ng/mL
RT: 27.664 min Scan# 1925
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 79097

Ion	Ratio	Lower	Upper
292	100		
290	77.3	60.8	91.2

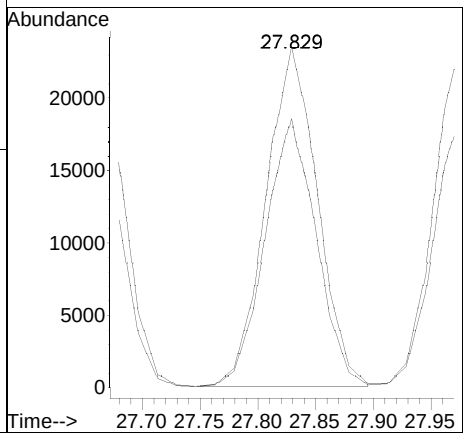


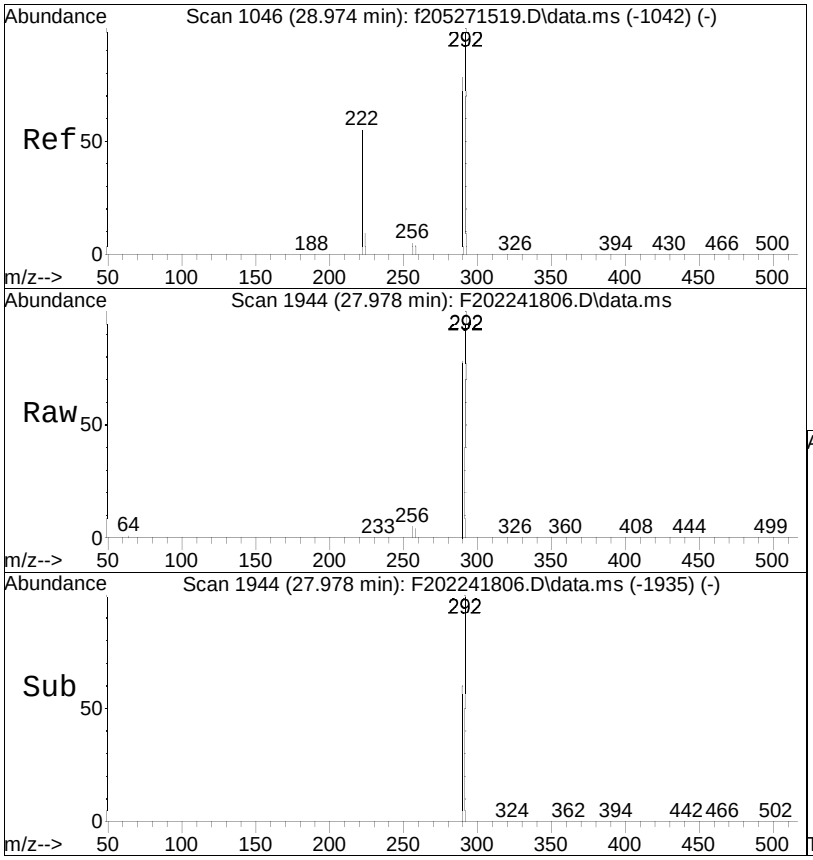


#53
Cl4-BZ#48
Concen: 38.70 ng/mL
RT: 27.829 min Scan# 1935
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 72590

Ion	Ratio	Lower	Upper
292	100		
290	78.9	61.0	91.6

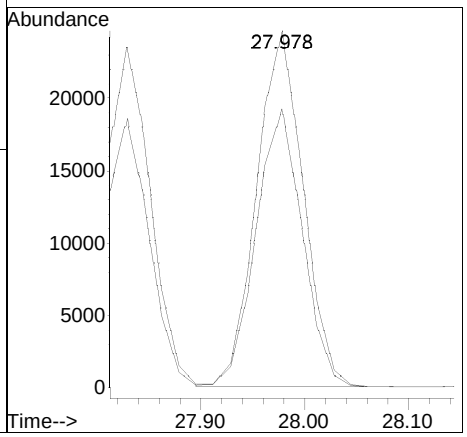


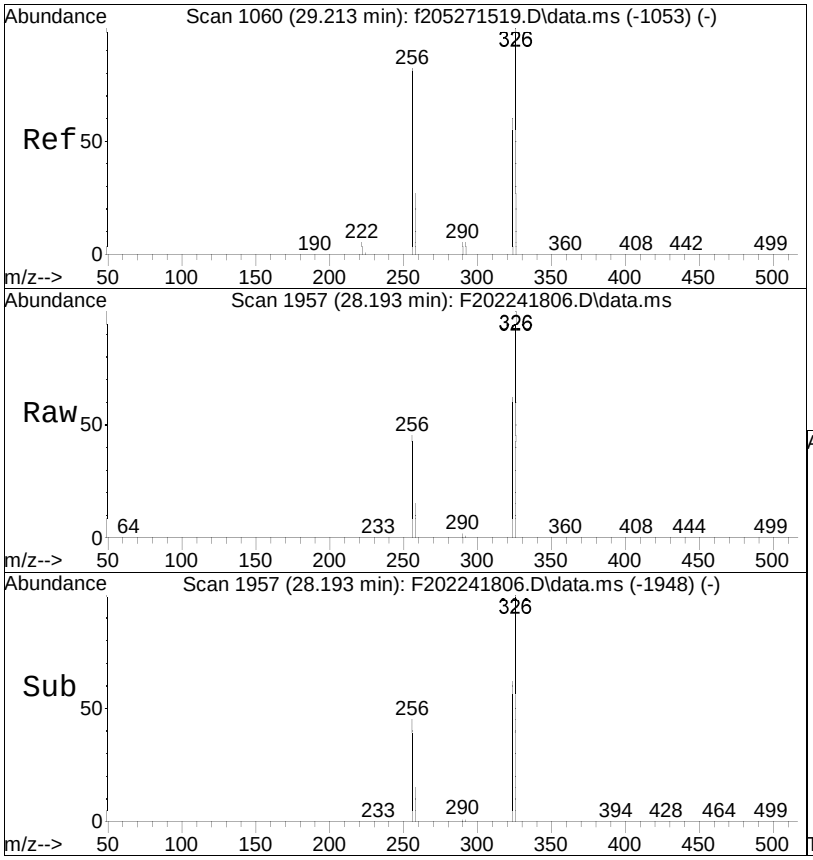


#54
Cl4-BZ#49
Concen: 37.26 ng/mL
RT: 27.978 min Scan# 1944
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 76192

Ion	Ratio	Lower	Upper
292	100		
290	78.1	62.1	93.1

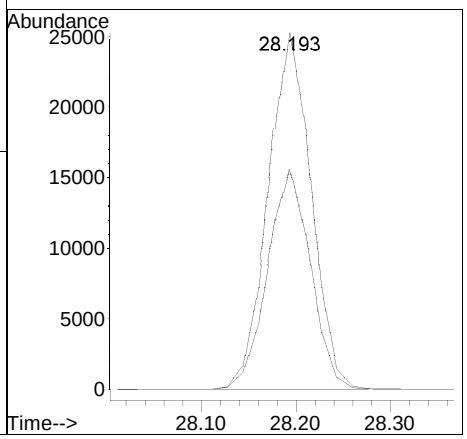


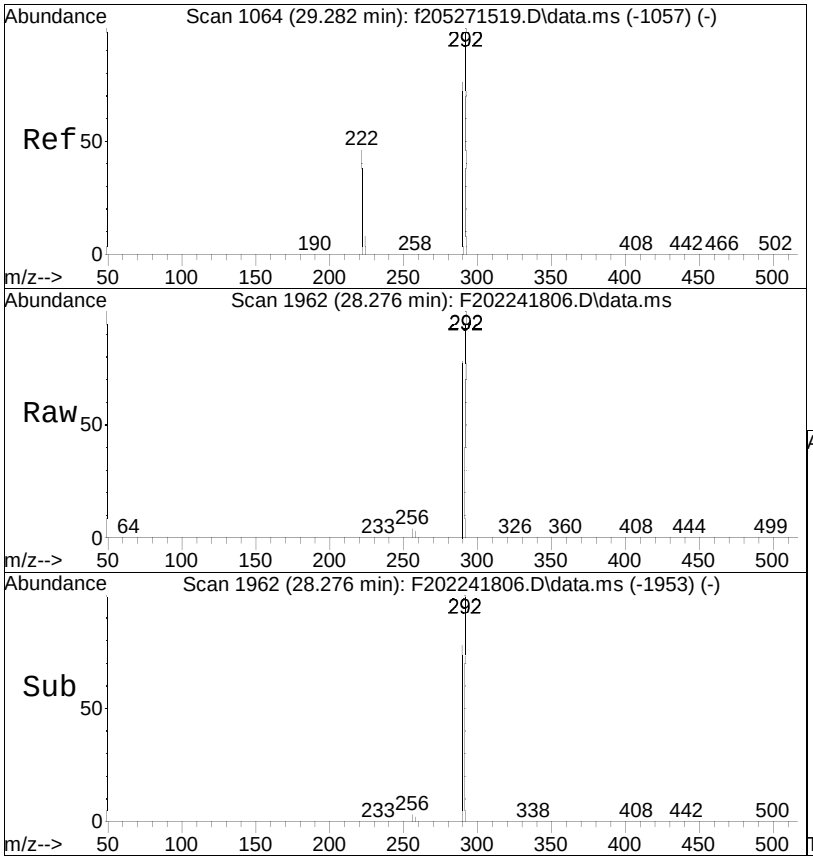


#55
Cl5-BZ#104-RTW
Concen: 35.78 ng/mL
RT: 28.193 min Scan# 1957
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 79355

Ion	Ratio	Lower	Upper
326	100		
324	61.8	48.4	72.6

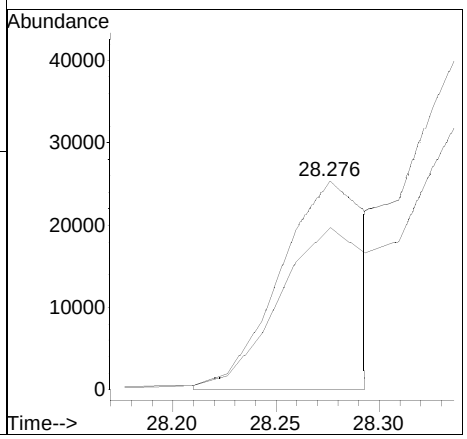


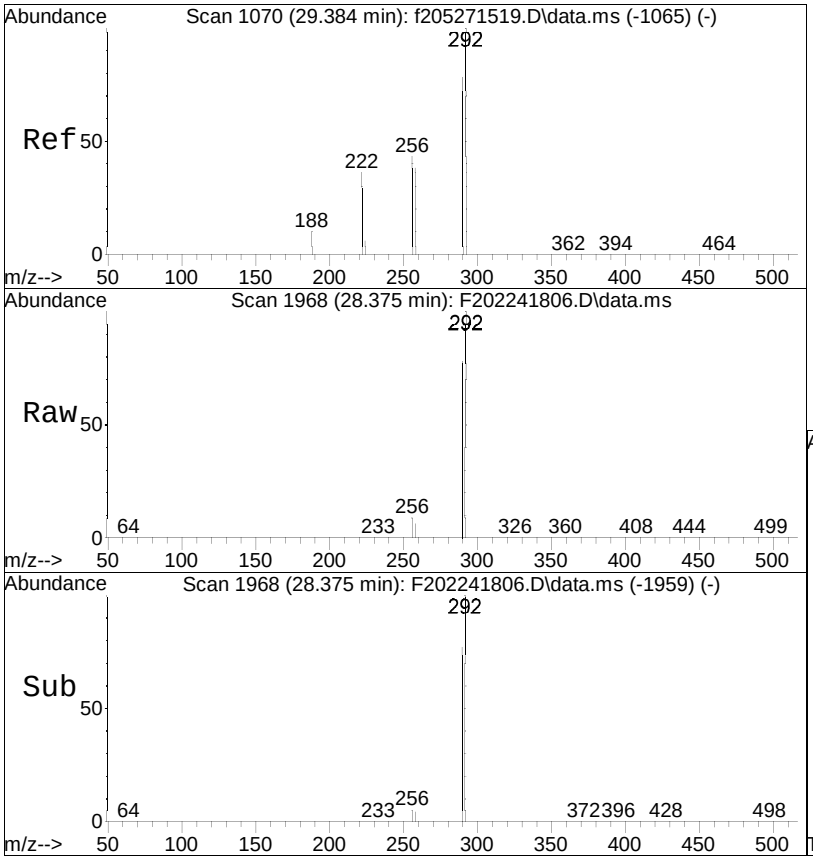


#56
Cl4-BZ#47
Concen: 34.75 ng/mL M3
RT: 28.276 min Scan# 1962
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 76048

Ion	Ratio	Lower	Upper
292	100		
290	0.0	63.0	94.4#

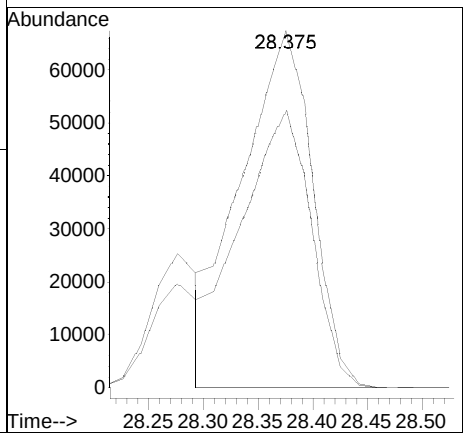


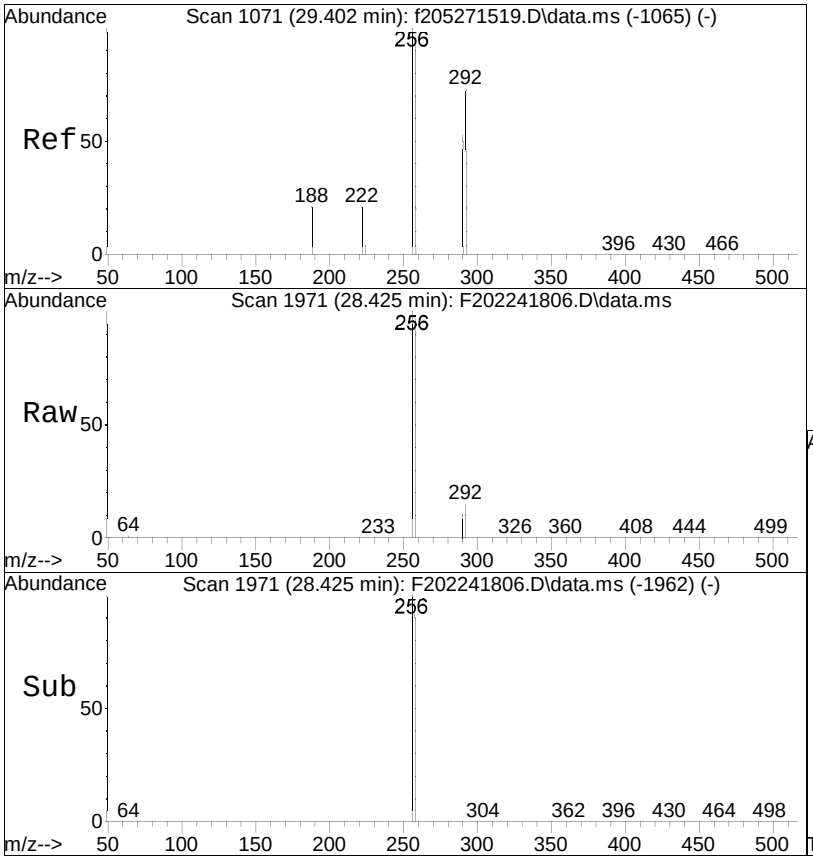


#57
Cl4-BZ#65/#75/#62
Concen: 114.32 ng/mL M3
RT: 28.375 min Scan# 1968
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 305405

Ion	Ratio	Lower	Upper
292	100		
290	88.9	63.0	94.6

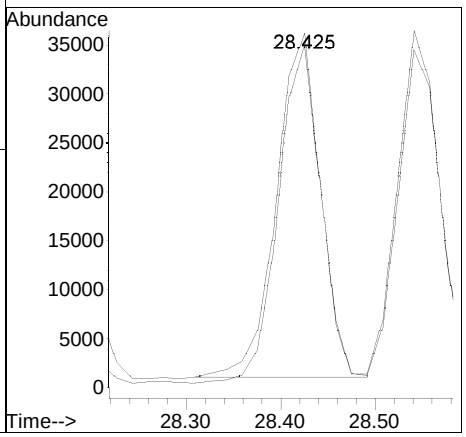


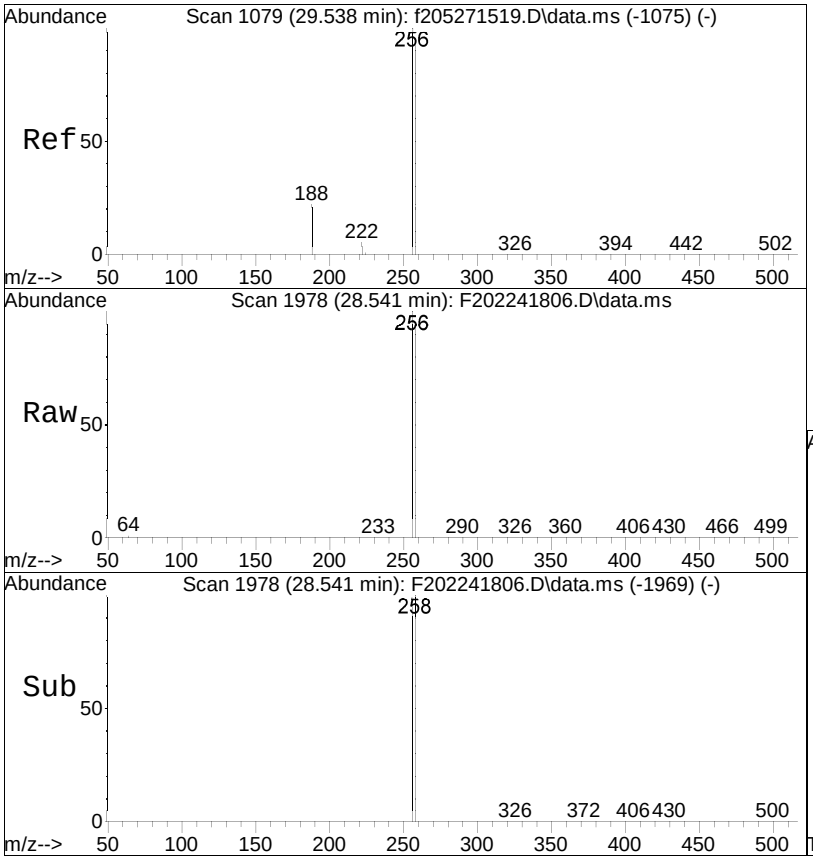


#58
Cl3-BZ#39
Concen: 37.99 ng/mL
RT: 28.425 min Scan# 1971
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 113139

Ion	Ratio	Lower	Upper
256	100		
258	96.4	76.2	114.2

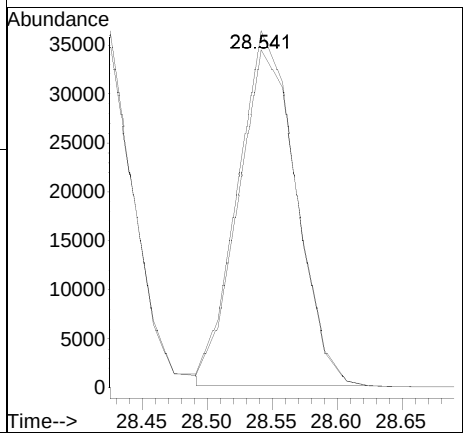


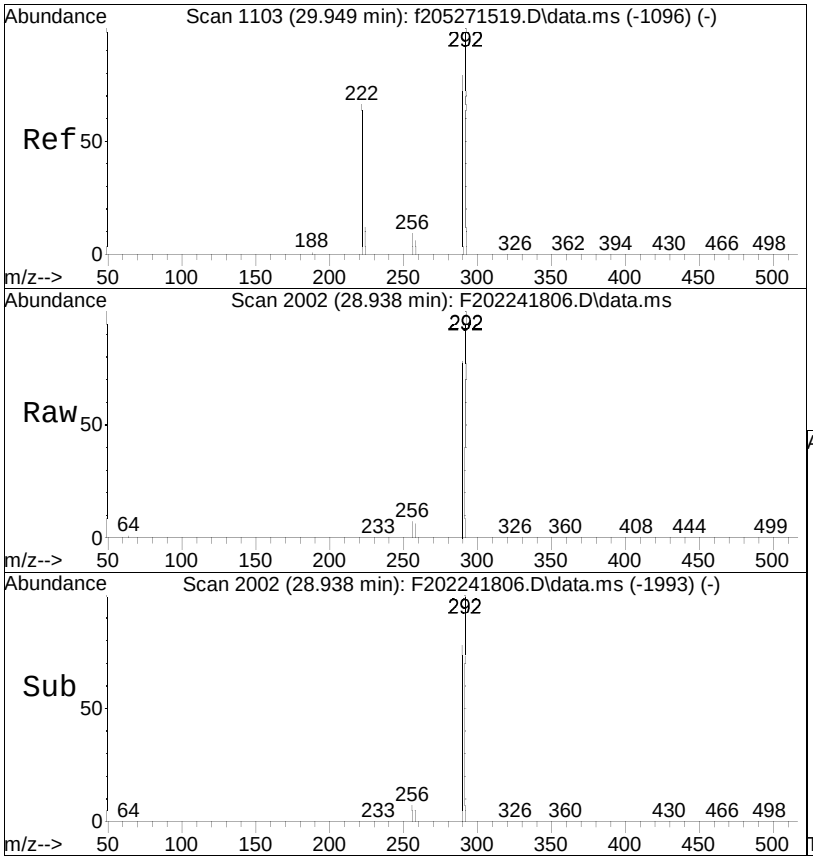


#59
Cl3-BZ#38
Concen: 38.32 ng/mL
RT: 28.541 min Scan# 1978
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 112330

Ion	Ratio	Lower	Upper
256	100		
258	96.0	74.9	112.3

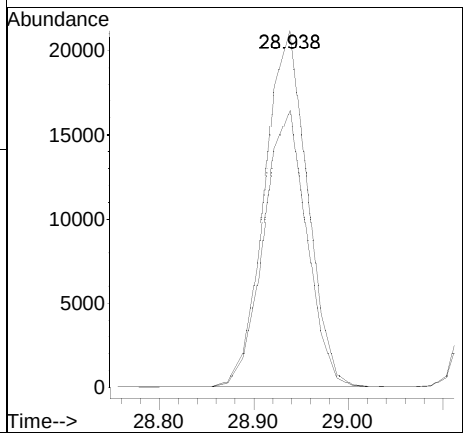


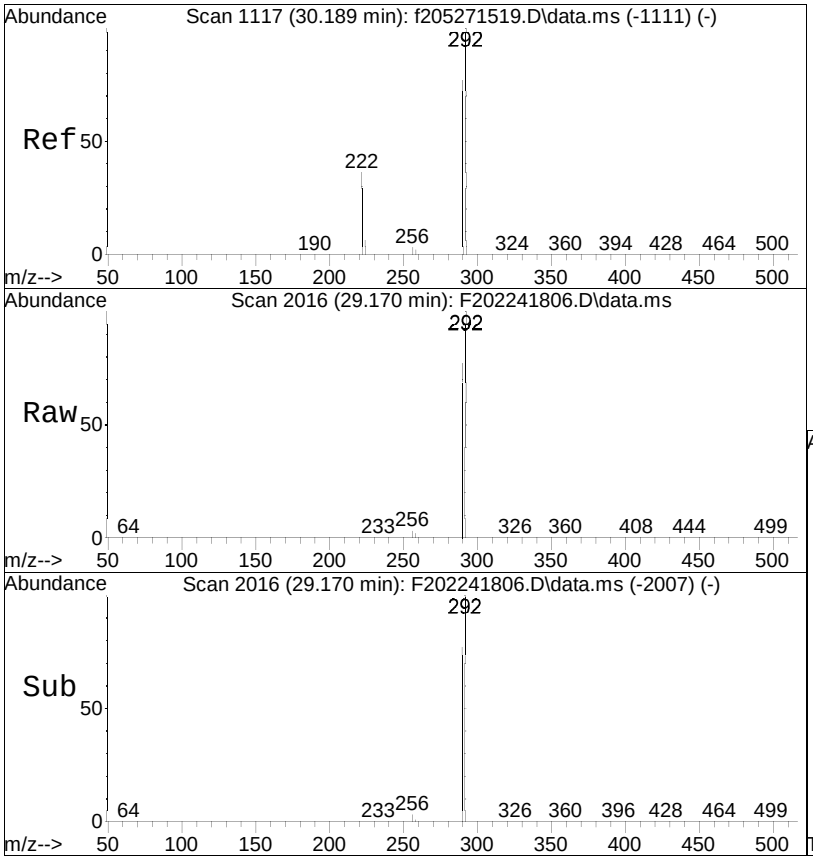


#60
Cl4-BZ#44
Concen: 36.90 ng/mL
RT: 28.938 min Scan# 2002
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 66316

Ion	Ratio	Lower	Upper
292	100		
290	77.7	63.1	94.7

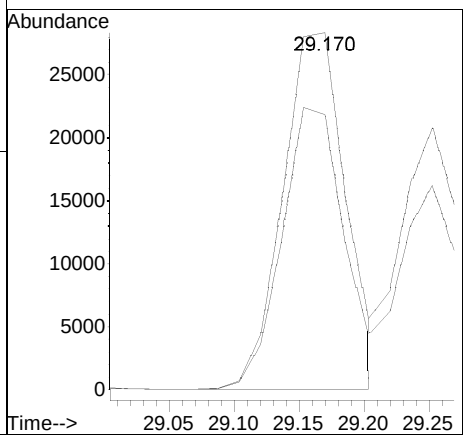


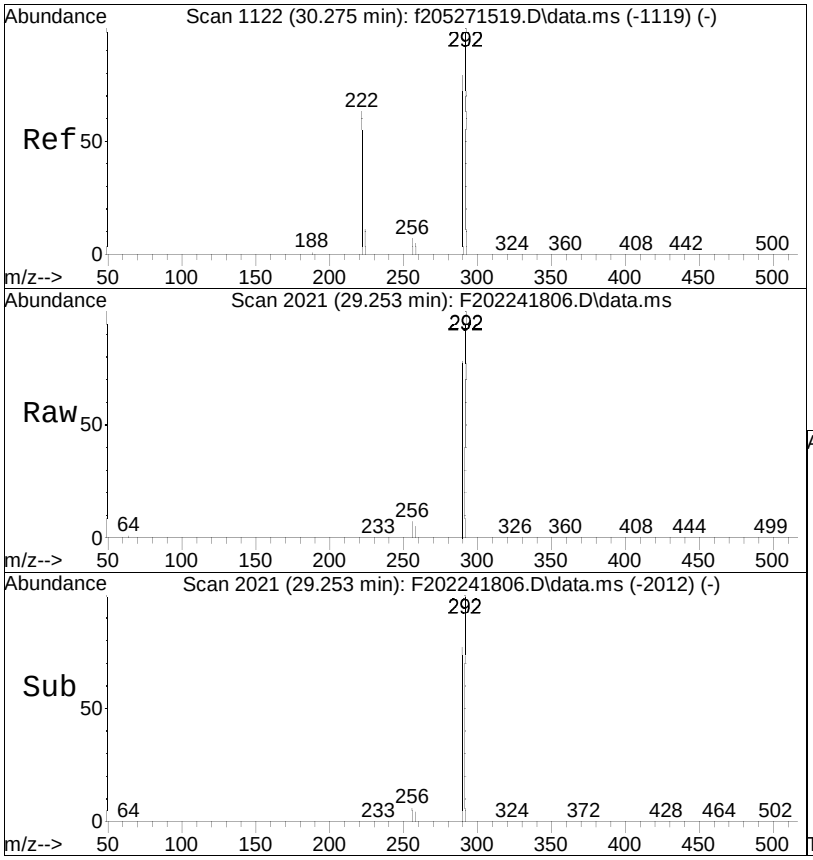


#61
Cl4-BZ#59
Concen: 36.73 ng/mL
RT: 29.170 min Scan# 2016
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 95600

Ion	Ratio	Lower	Upper
292	100		
290	78.5	64.0	96.0

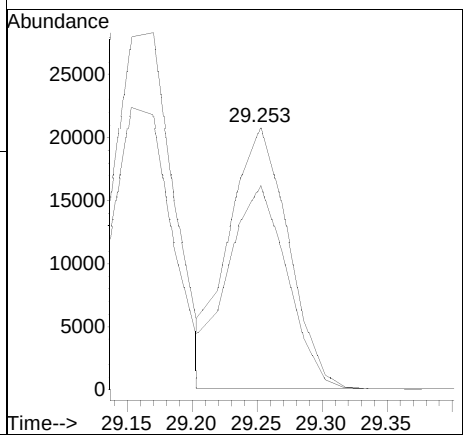


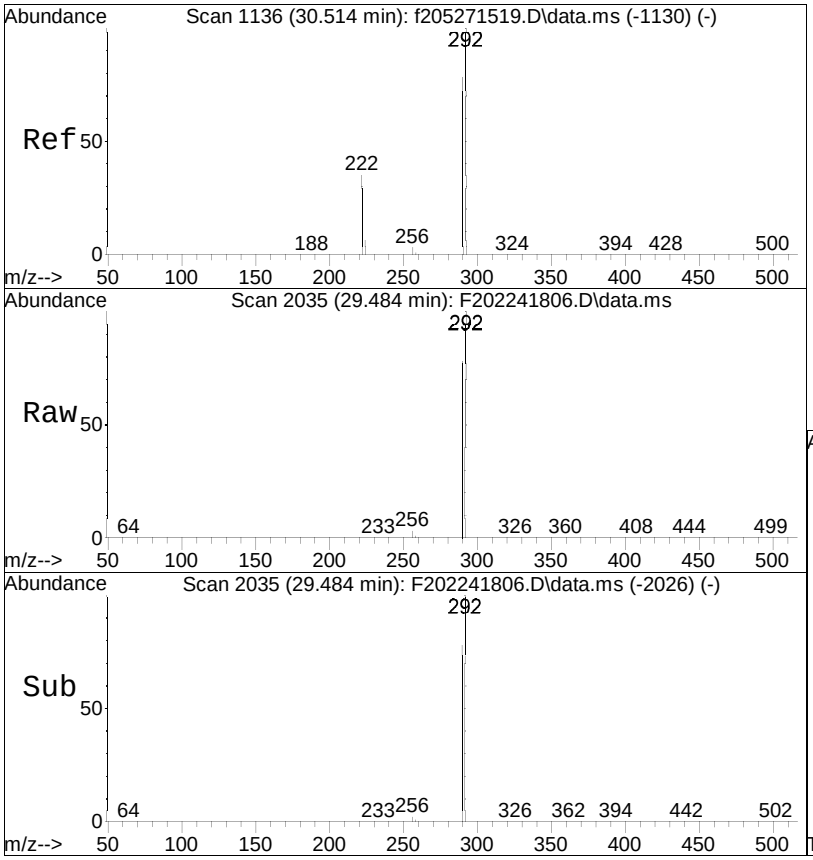


#62
Cl4-BZ#42
Concen: 38.38 ng/mL
RT: 29.253 min Scan# 2021
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 65609

Ion	Ratio	Lower	Upper
292	100		
290	77.8	64.3	96.5

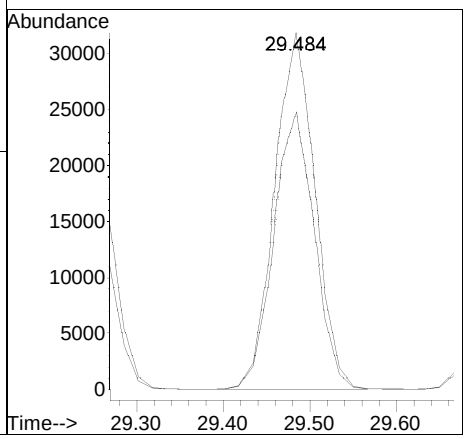


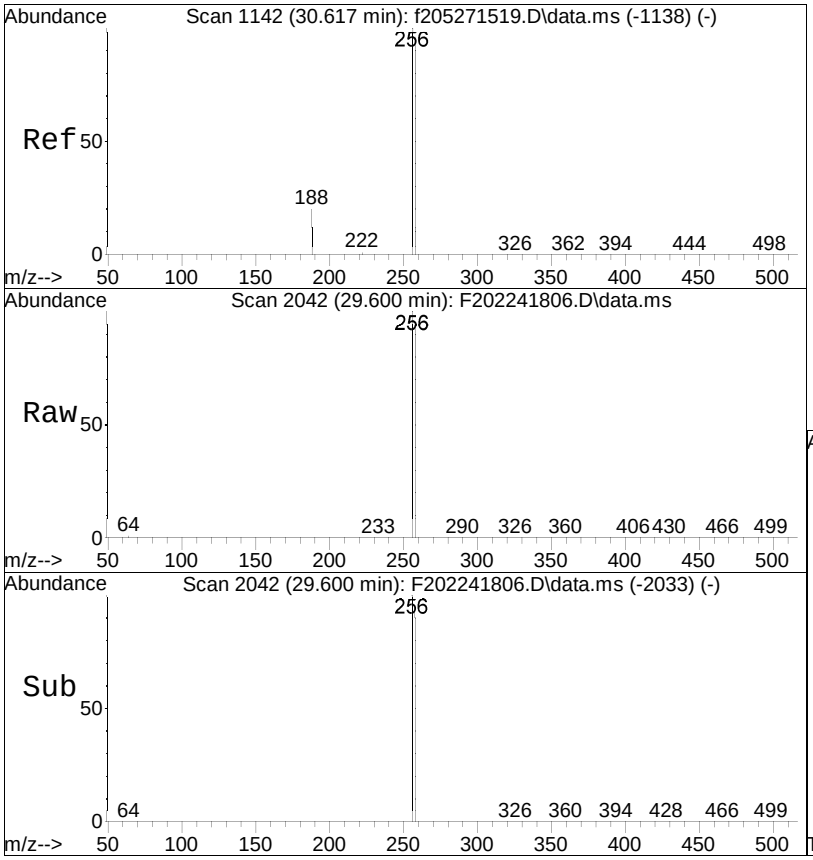


#63
Cl4-BZ#71
Concen: 36.65 ng/mL
RT: 29.484 min Scan# 2035
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 102165

Ion	Ratio	Lower	Upper
292	100		
290	78.4	62.8	94.2

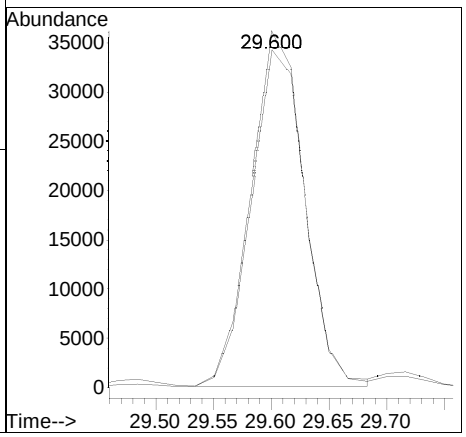


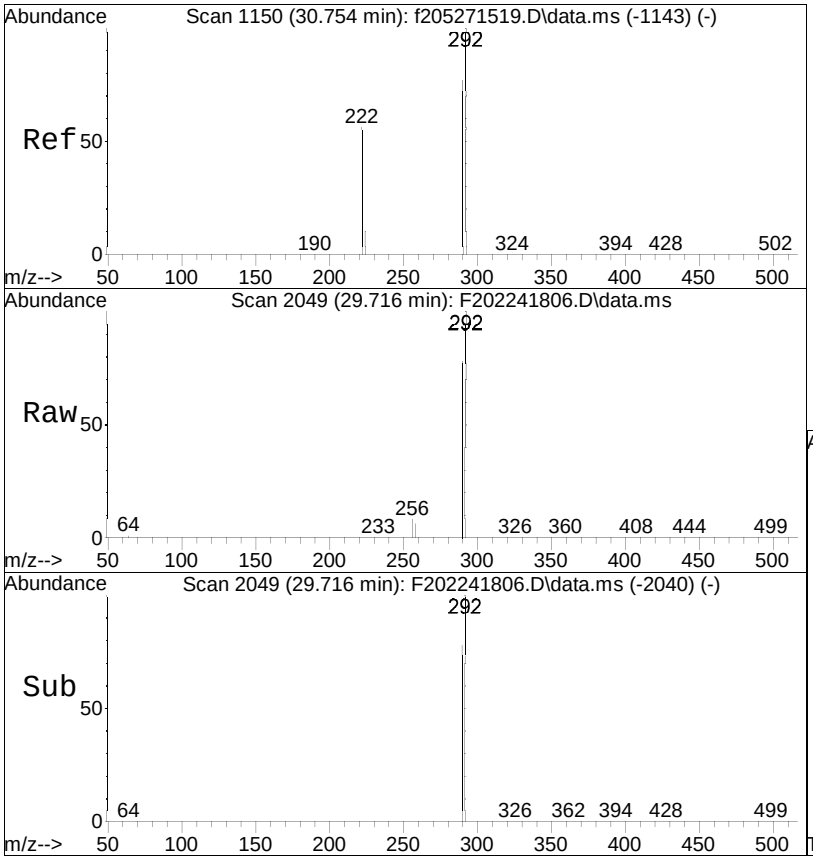


#64
Cl3-BZ#35
Concen: 40.00 ng/mL
RT: 29.600 min Scan# 2042
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 115327

Ion	Ratio	Lower	Upper
256	100		
258	96.2	77.2	115.8

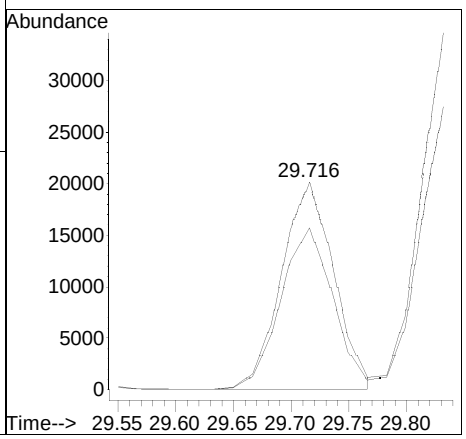


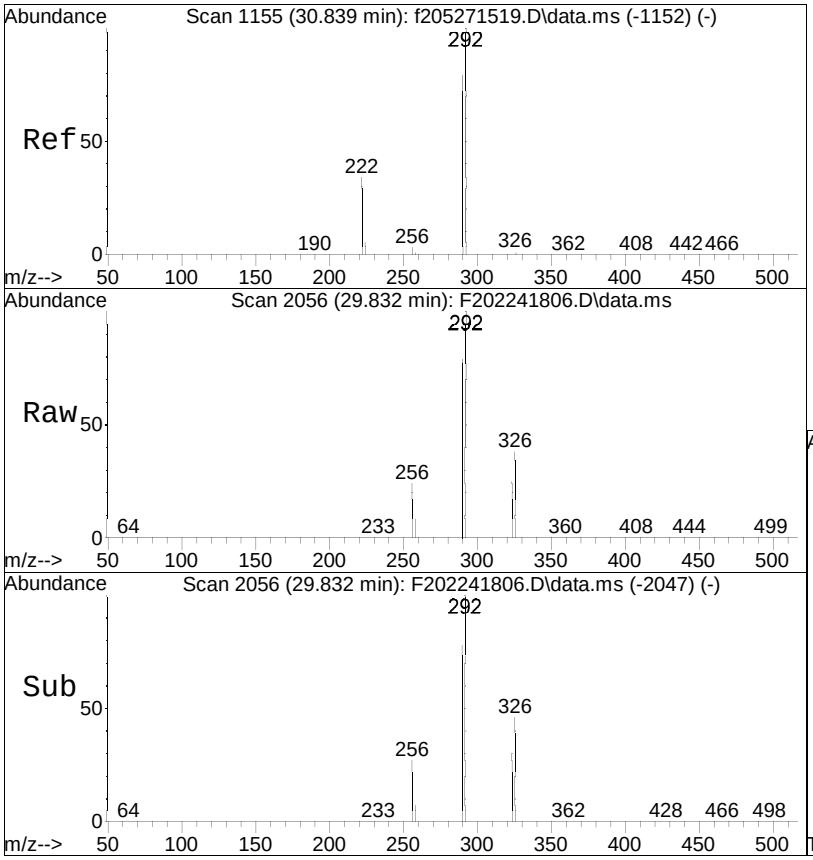


#65
Cl4-BZ#41
Concen: 38.73 ng/mL
RT: 29.716 min Scan# 2049
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 63027

Ion	Ratio	Lower	Upper
292	100		
290	78.2	63.0	94.4

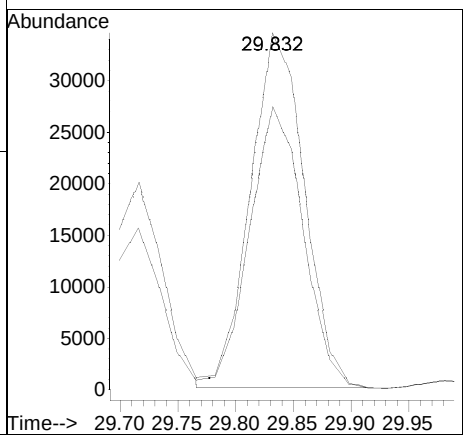


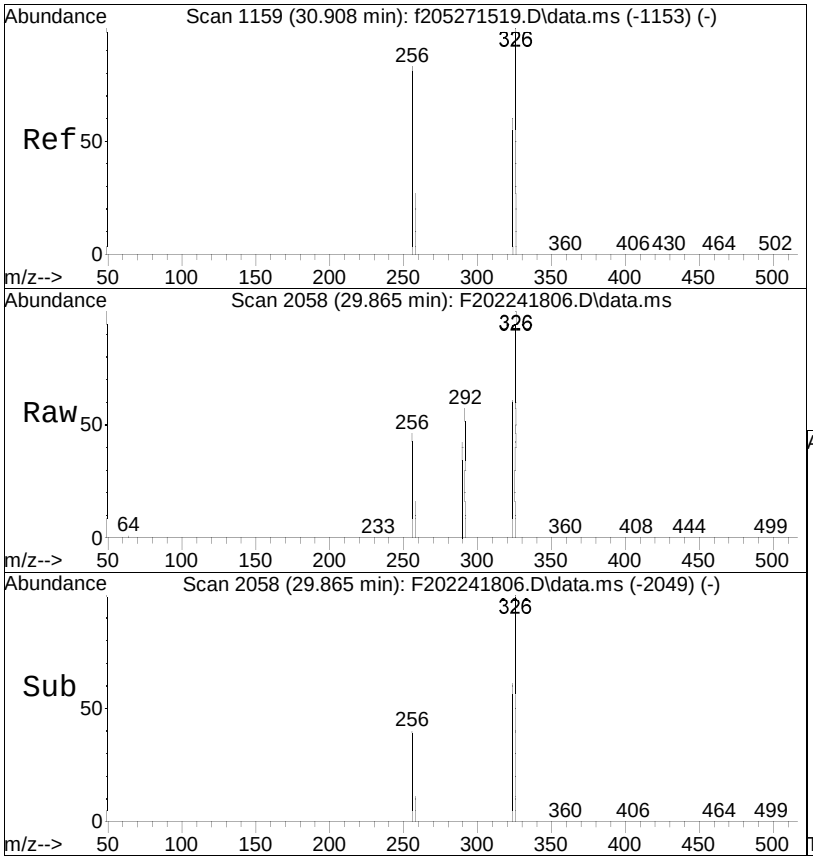


#66
Cl4-BZ#72
Concen: 38.74 ng/mL
RT: 29.832 min Scan# 2056
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 111735

Ion	Ratio	Lower	Upper
292	100		
290	78.9	62.6	93.8

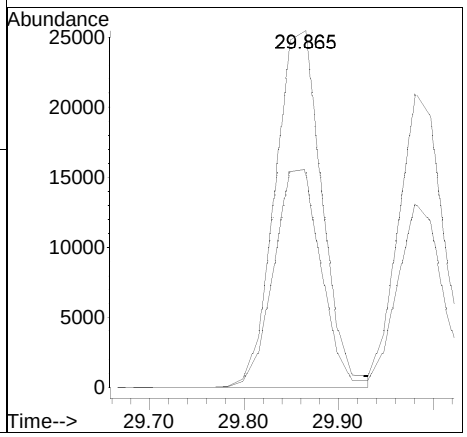


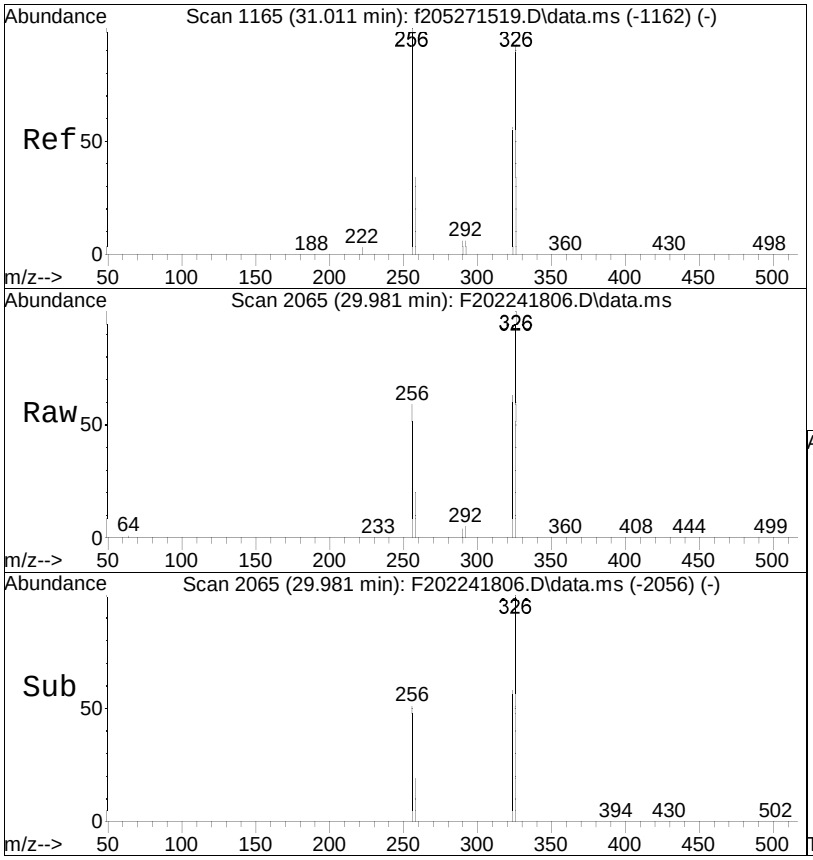


#67
Cl5-BZ#96
Concen: 36.62 ng/mL
RT: 29.865 min Scan# 2058
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 87513

Ion	Ratio	Lower	Upper
326	100		
324	61.3	47.2	70.8

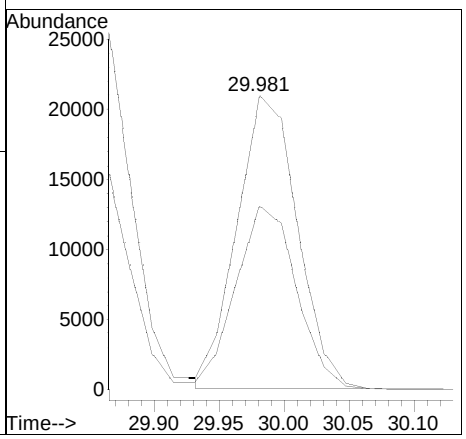


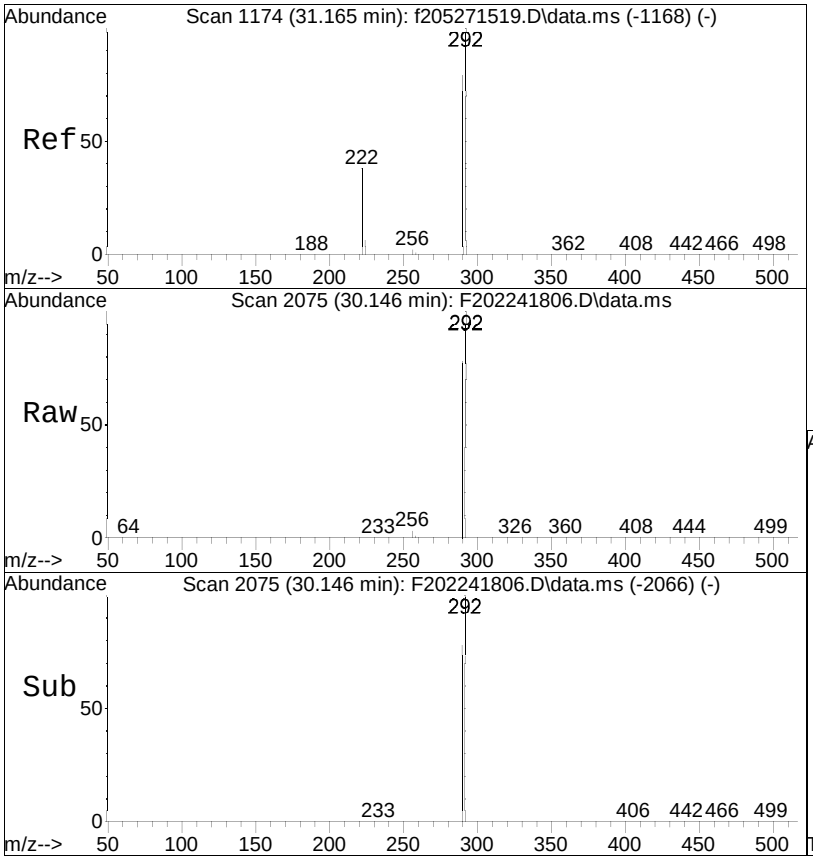


#68
Cl5-BZ#103
Concen: 39.58 ng/mL
RT: 29.981 min Scan# 2065
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 67383

Ion	Ratio	Lower	Upper
326	100		
324	62.9	51.6	77.4

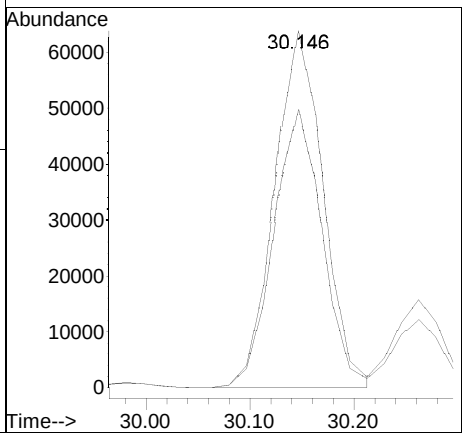


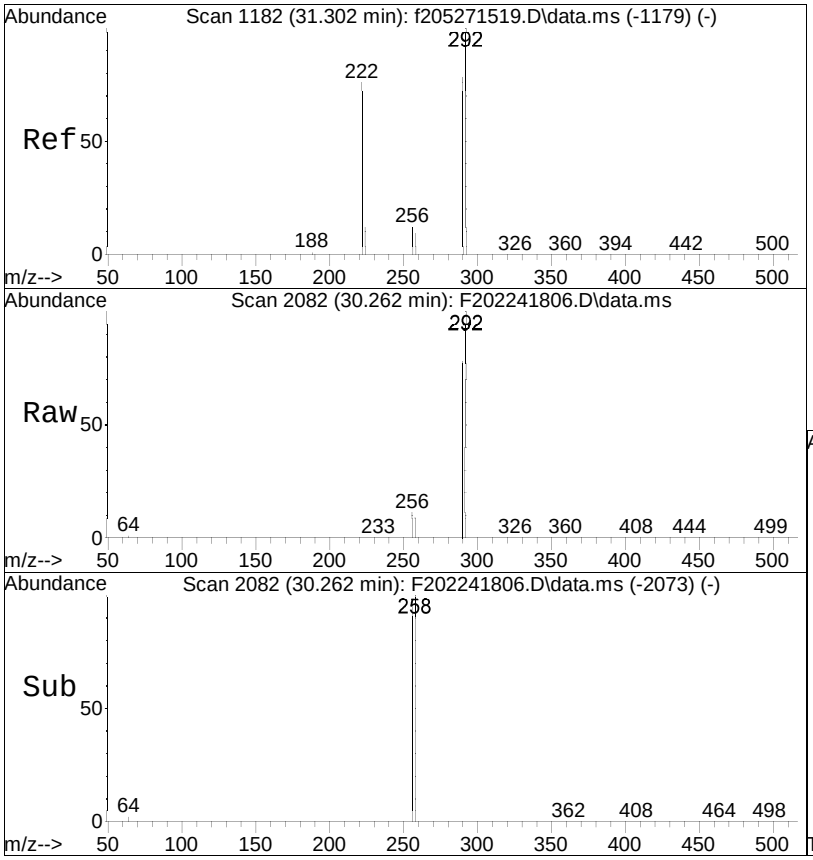


#69
Cl4-BZ#68/#64
Concen: 77.26 ng/mL
RT: 30.146 min Scan# 2075
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 206439

Ion	Ratio	Lower	Upper
292	100		
290	77.9	61.7	92.5

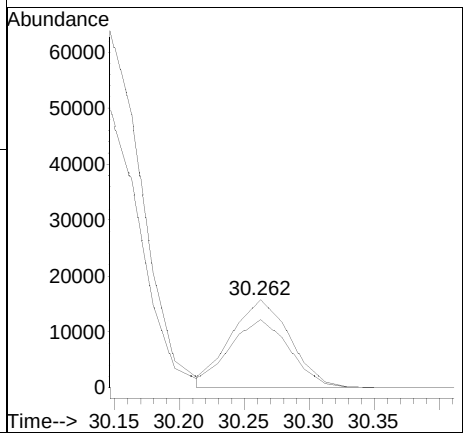


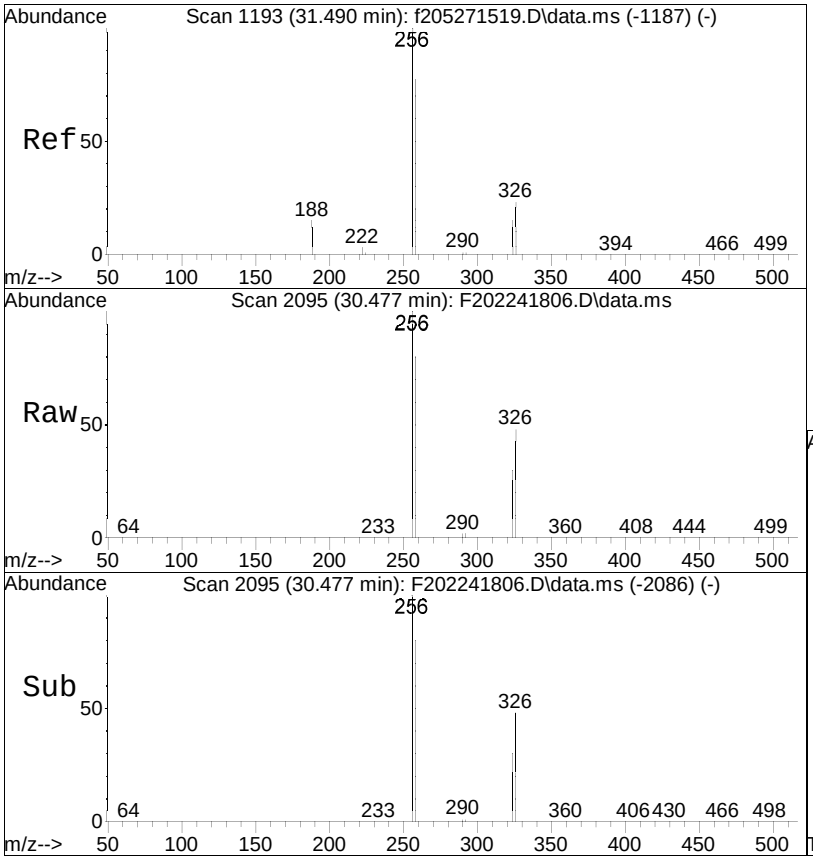


#70
Cl4-BZ#40
Concen: 37.87 ng/mL
RT: 30.262 min Scan# 2082
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 49049

Ion	Ratio	Lower	Upper
292	100		
290	78.2	63.8	95.6

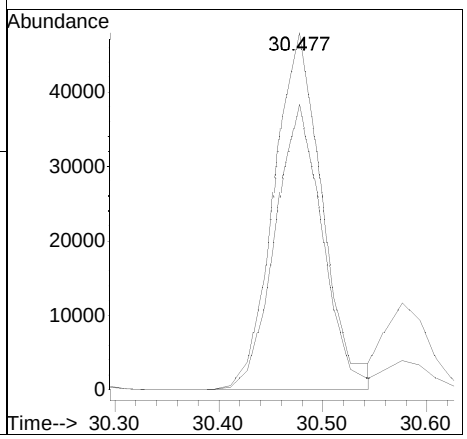


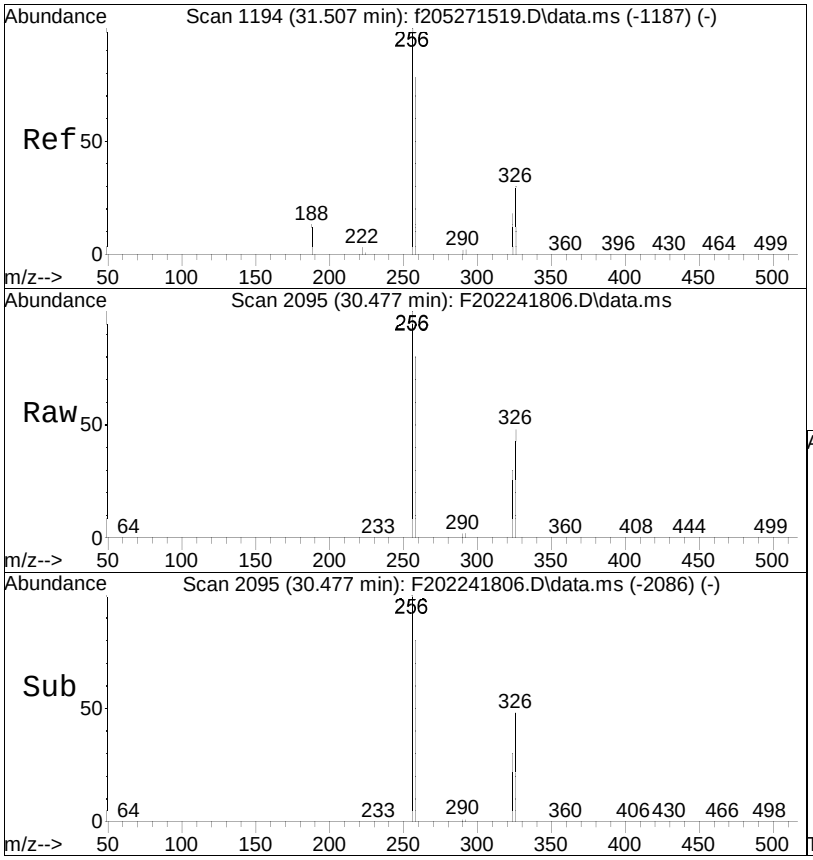


#71
Cl3-BZ#37-RTW
Concen: 40.58 ng/mL
RT: 30.477 min Scan# 2095
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:256 Resp: 153869

Ion	Ratio	Lower	Upper
256	100		
258	79.9	63.5	95.3

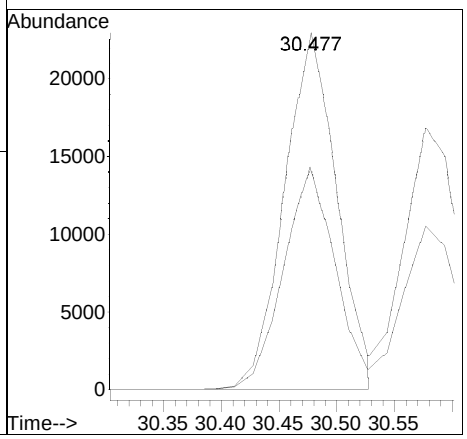


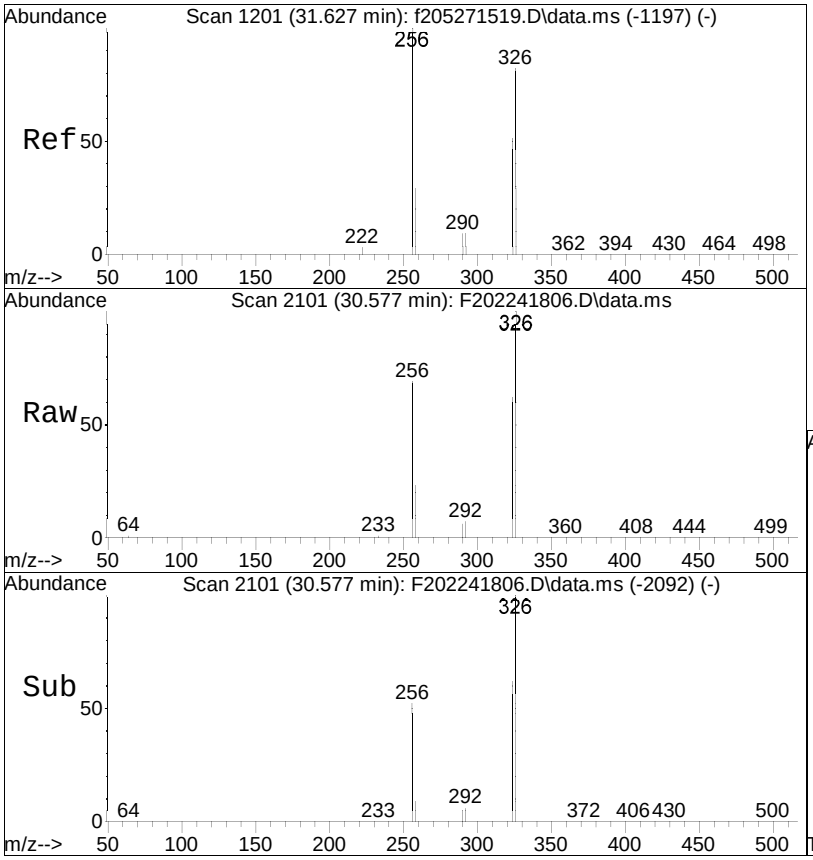


#72
Cl5-BZ#100
Concen: 37.61 ng/mL
RT: 30.477 min Scan# 2095
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 72522

Ion	Ratio	Lower	Upper
326	100		
324	61.6	48.6	73.0

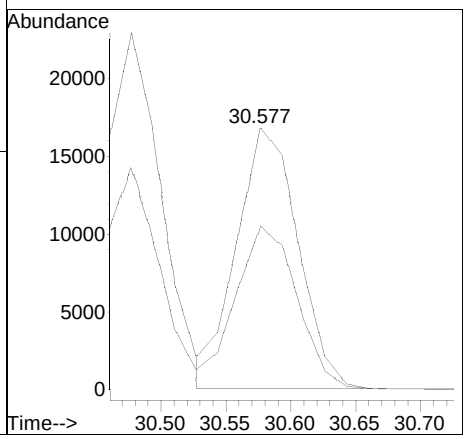


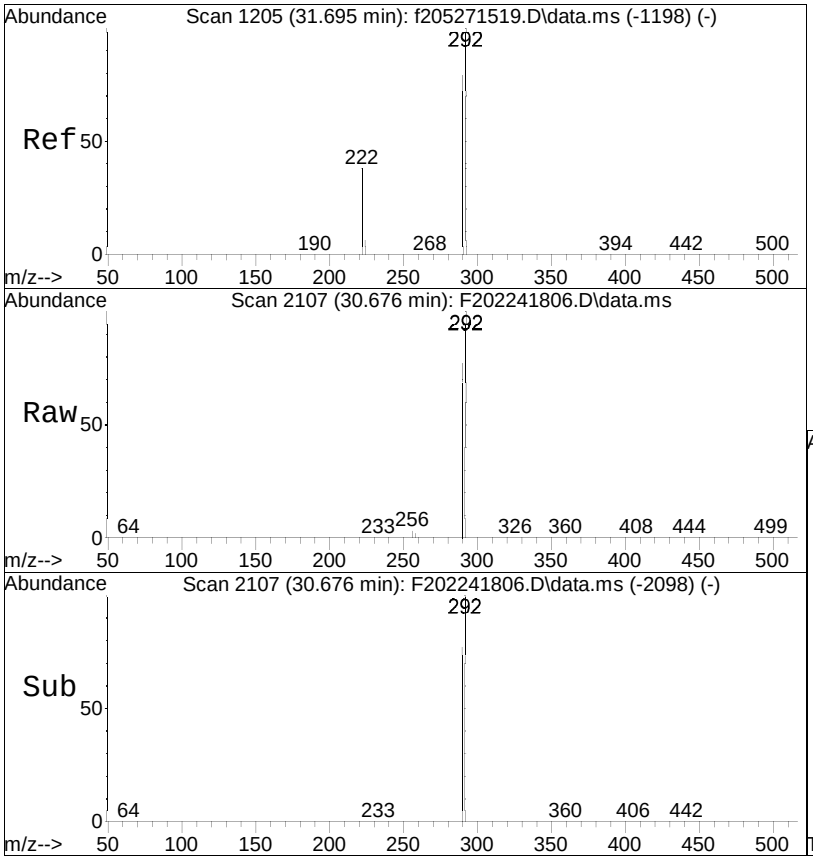


#73
Cl5-BZ#94
Concen: 37.05 ng/mL
RT: 30.577 min Scan# 2101
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 54635

Ion	Ratio	Lower	Upper
326	100		
324	62.3	49.7	74.5

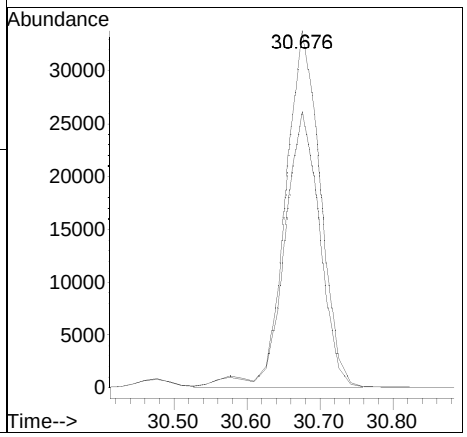


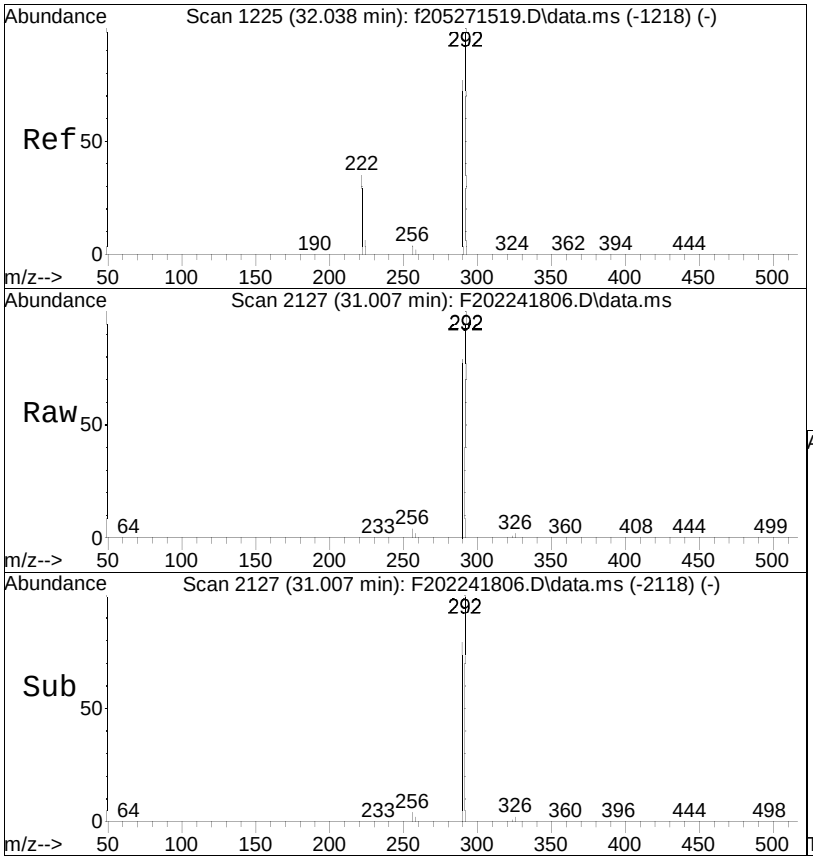


#74
Cl4-BZ#57
Concen: 38.87 ng/mL M4
RT: 30.676 min Scan# 2107
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 111752

Ion	Ratio	Lower	Upper
292	100		
290	76.6	63.9	95.9

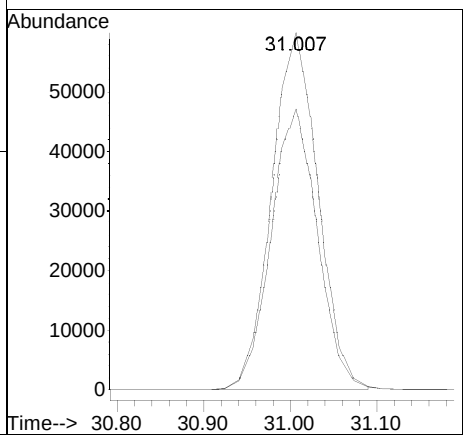


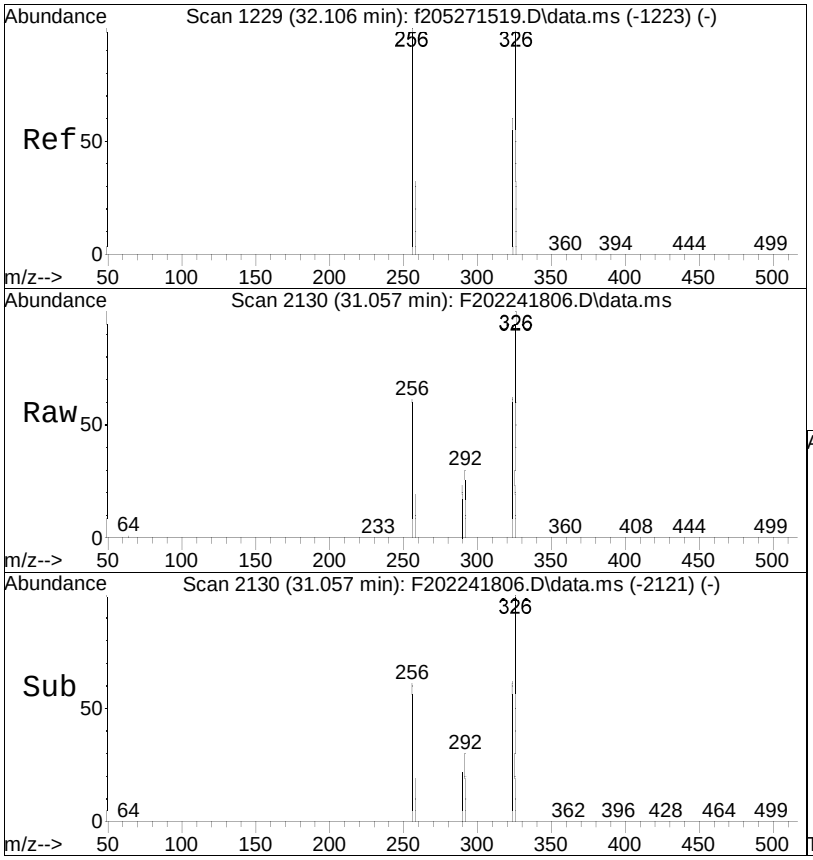


#75
Cl4-BZ#67/#58
Concen: 77.07 ng/mL
RT: 31.007 min Scan# 2127
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 221792

Ion	Ratio	Lower	Upper
292	100		
290	78.7	62.3	93.5

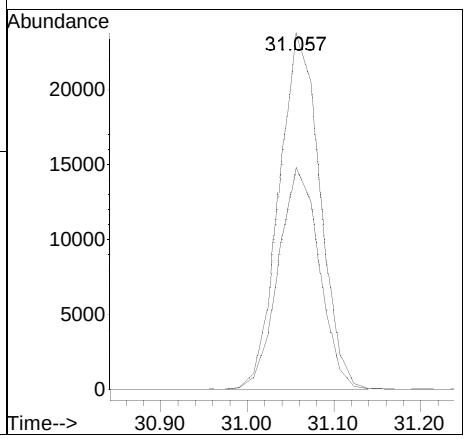


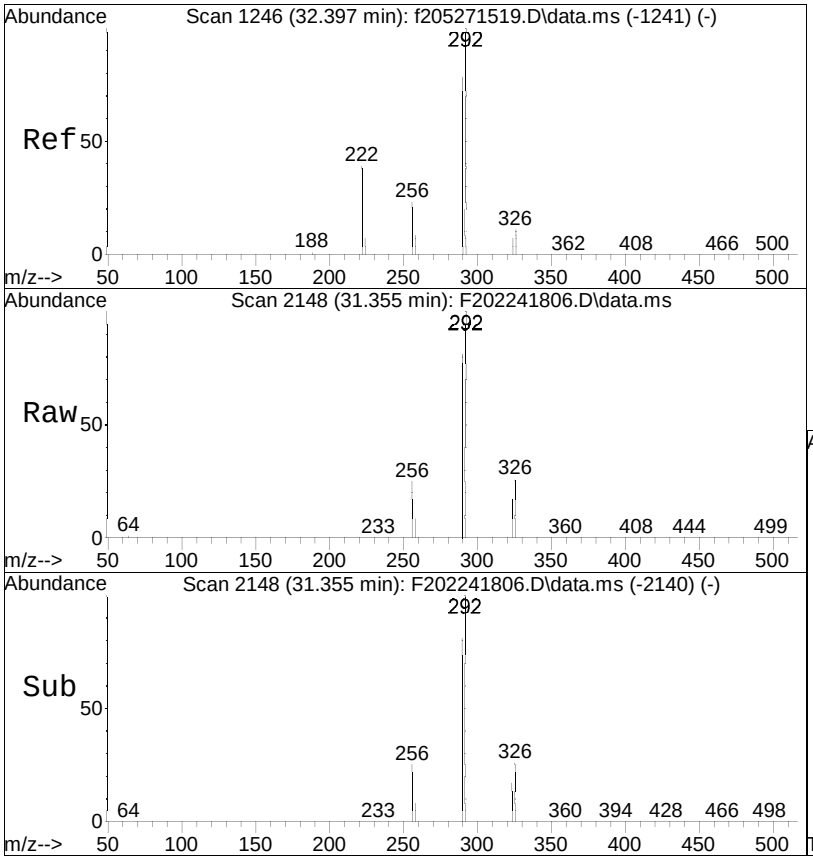


#76
Cl5-BZ#102
Concen: 36.36 ng/mL
RT: 31.057 min Scan# 2130
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 77305

Ion	Ratio	Lower	Upper
326	100		
324	62.4	49.8	74.8

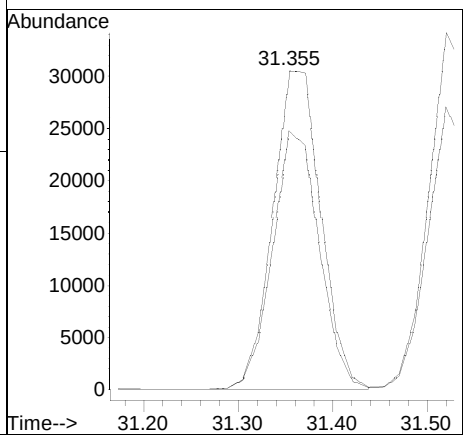


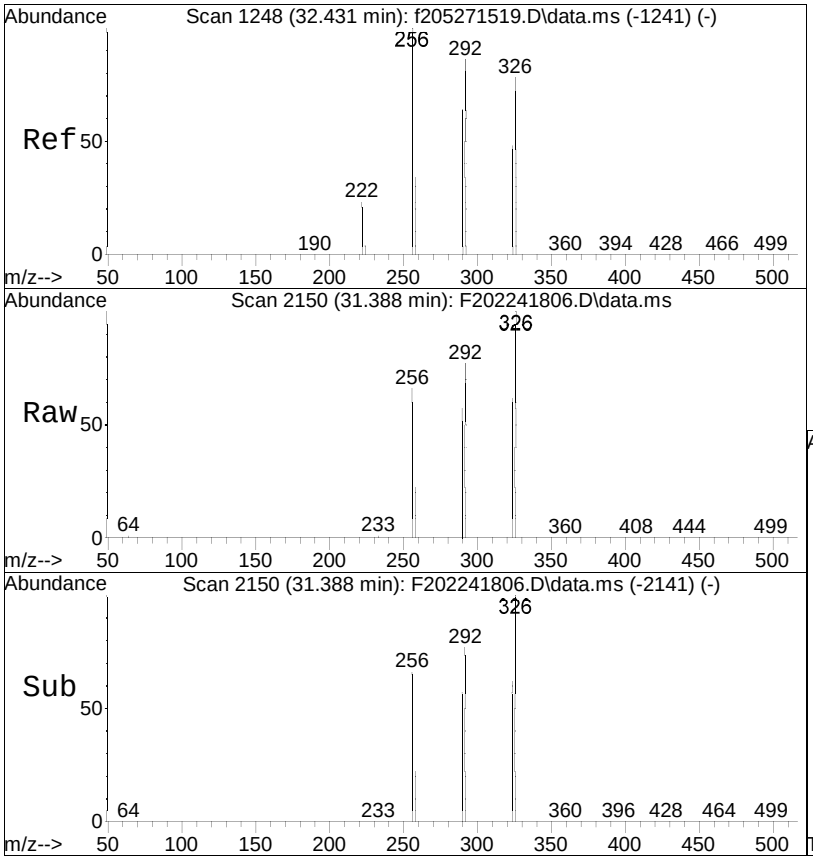


#77
Cl4-BZ#61
Concen: 38.10 ng/mL
RT: 31.355 min Scan# 2148
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 107463

Ion	Ratio	Lower	Upper
292	100		
290	78.9	61.5	92.3

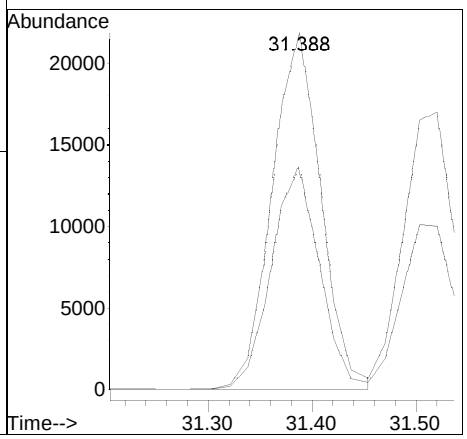


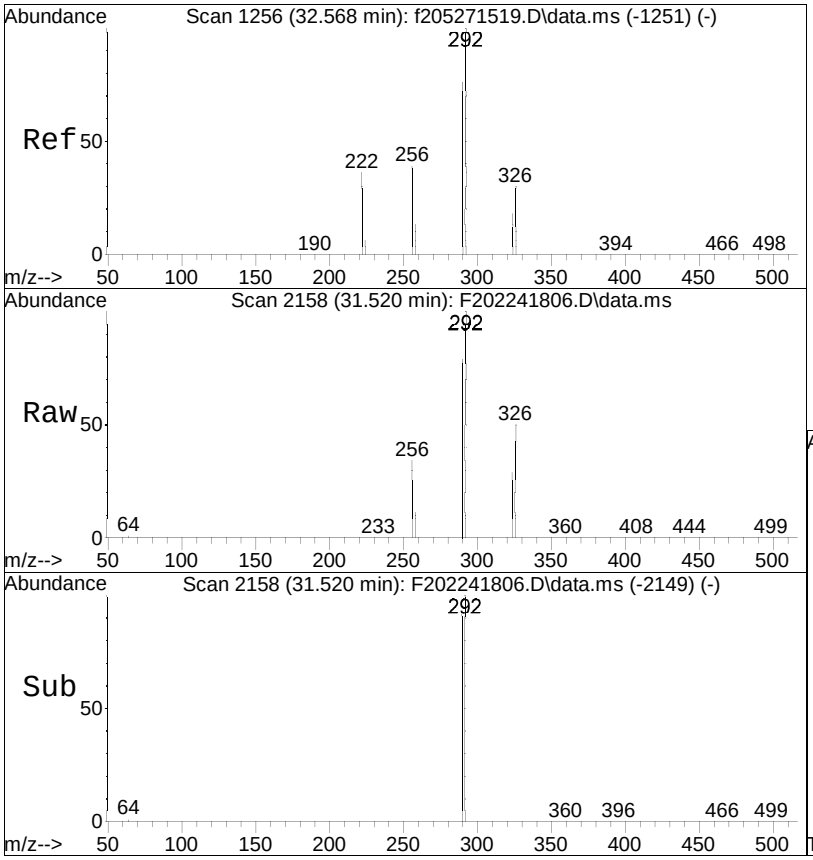


#78
Cl5-BZ#98
Concen: 37.31 ng/mL
RT: 31.388 min Scan# 2150
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 71006

Ion	Ratio	Lower	Upper
326	100		
324	61.9	50.2	75.2

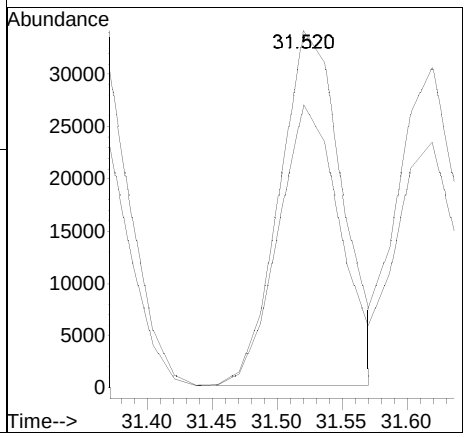


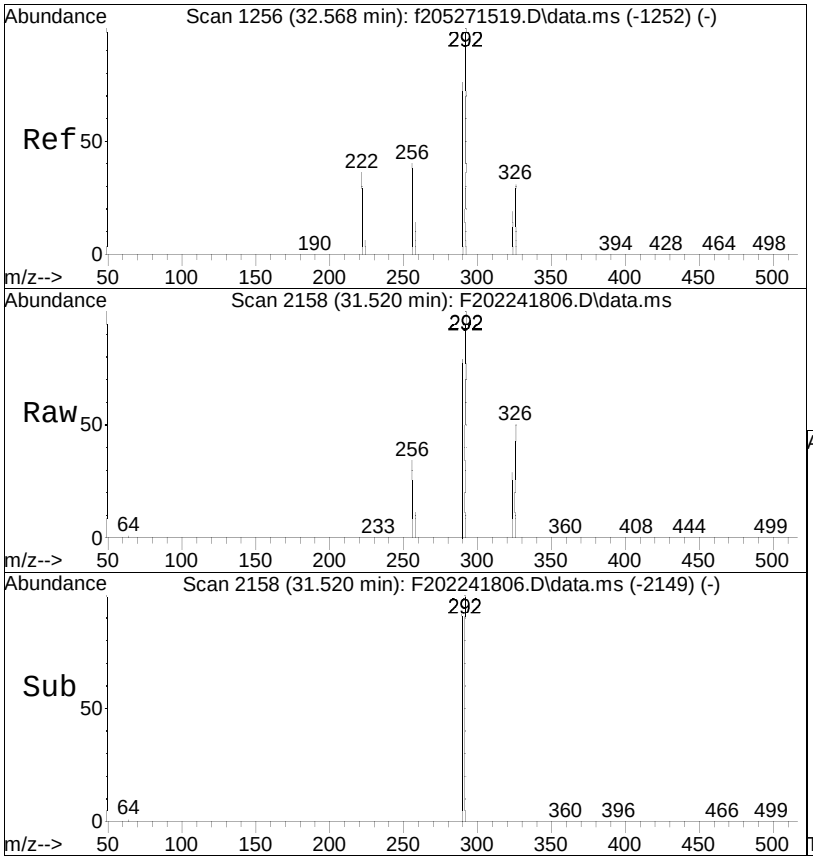


#79
Cl4-BZ#76
Concen: 37.27 ng/mL
RT: 31.520 min Scan# 2158
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 115360

Ion	Ratio	Lower	Upper
292	100		
290	78.7	62.2	93.2

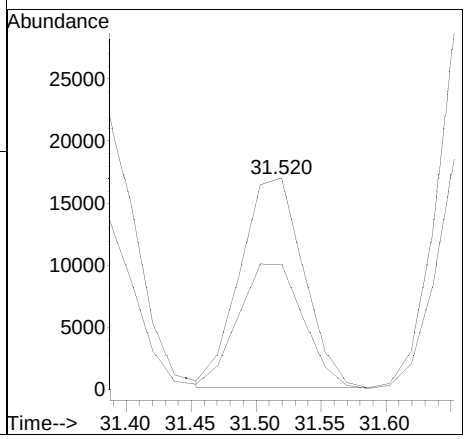


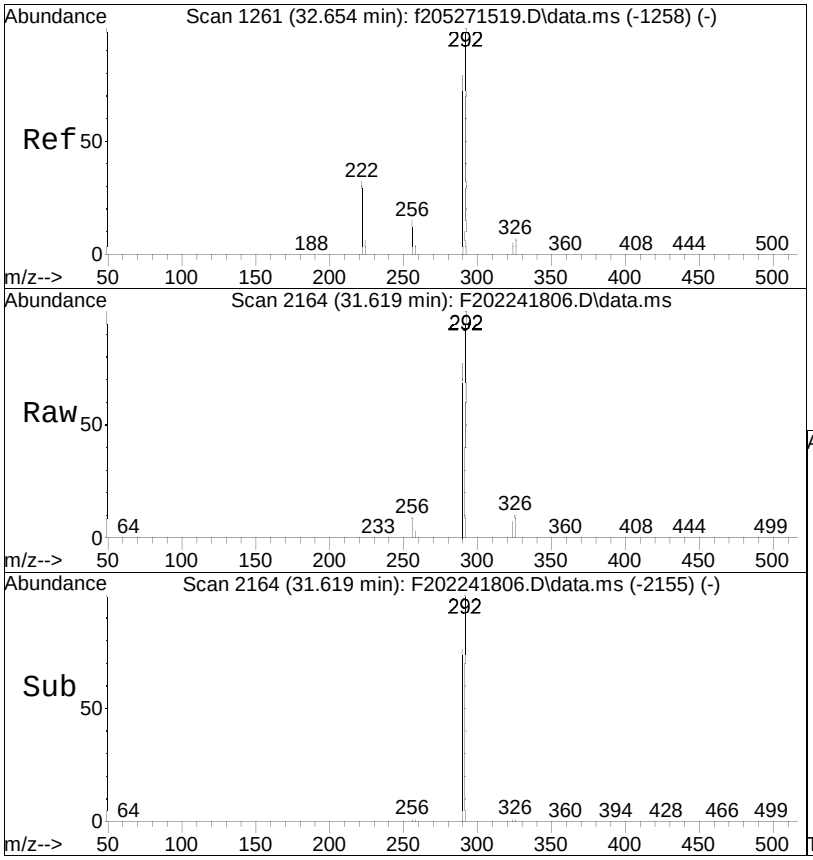


#80
Cl5-BZ#93
Concen: 36.67 ng/mL
RT: 31.520 min Scan# 2158
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 57208

Ion	Ratio	Lower	Upper
326	100		
324	61.1	49.8	74.6

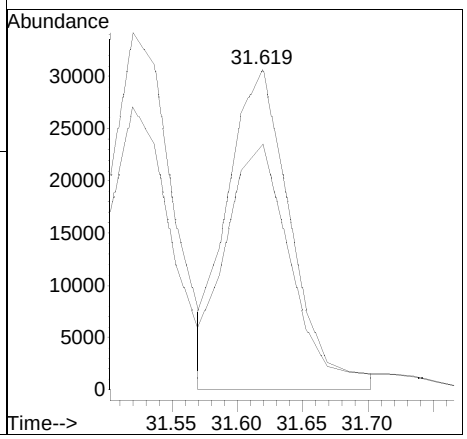


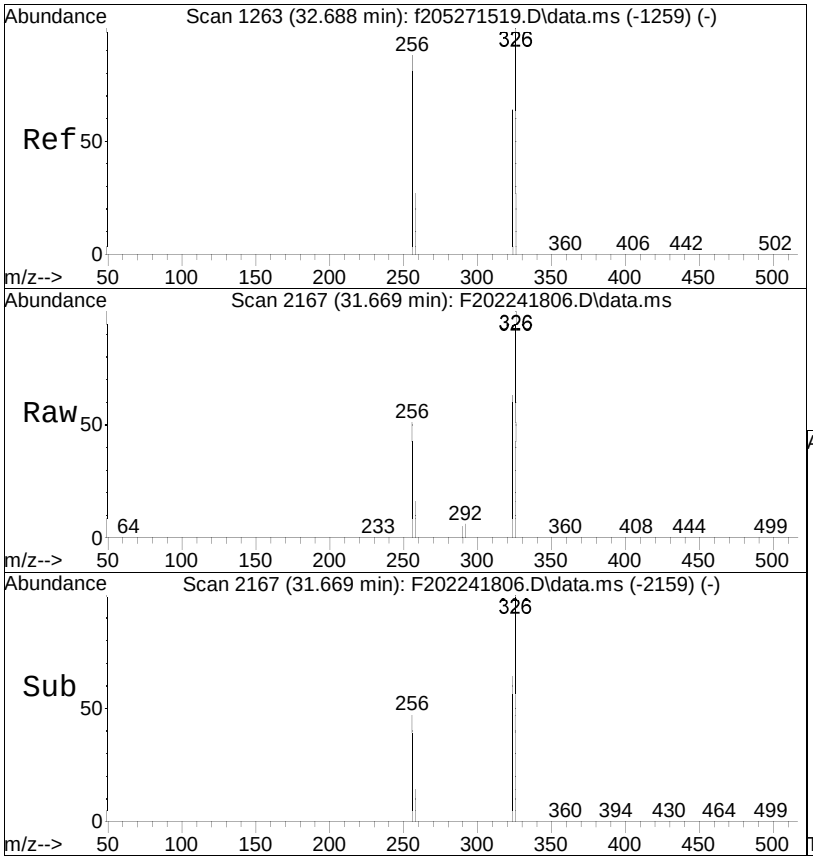


#81
Cl4-BZ#63
Concen: 37.86 ng/mL M4
RT: 31.619 min Scan# 2164
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 102595

Ion	Ratio	Lower	Upper
292	100		
290	76.6	61.7	92.5

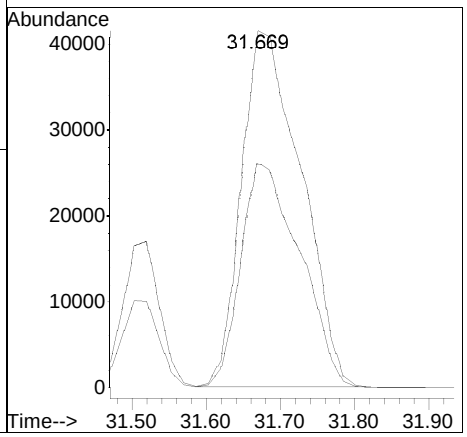


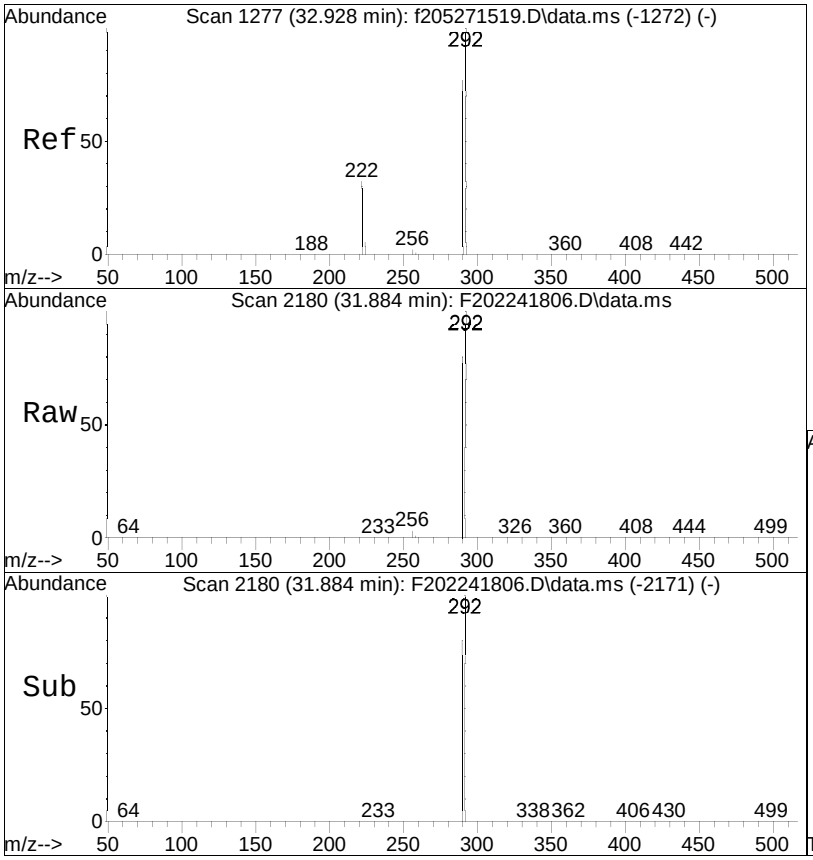


#82
Cl5-BZ#121/#95/#88
Concen: 112.67 ng/mL
RT: 31.669 min Scan# 2167
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 230250

Ion	Ratio	Lower	Upper
326	100		
324	62.3	49.4	74.2

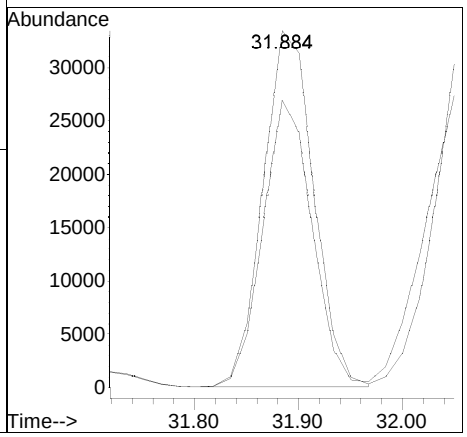


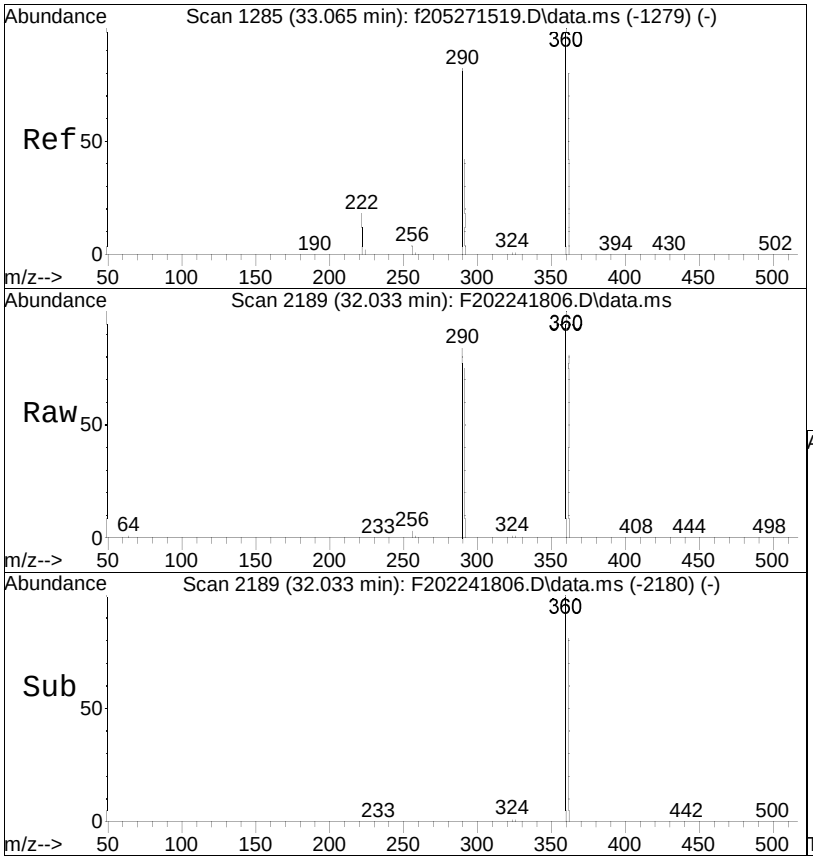


#83
Cl4-BZ#74
Concen: 38.54 ng/mL
RT: 31.884 min Scan# 2180
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 113049

Ion	Ratio	Lower	Upper
292	100		
290	80.4	63.6	95.4

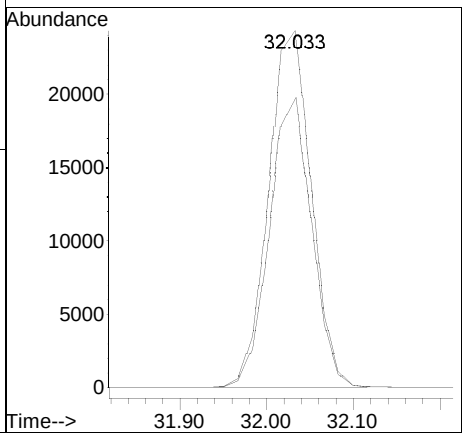


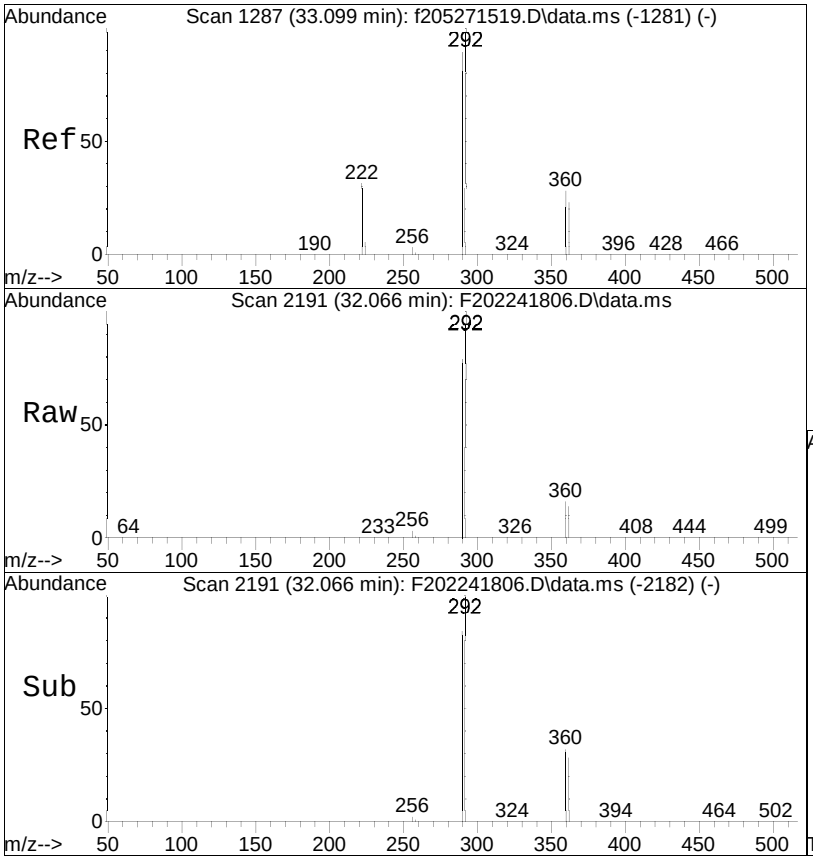


#84
Cl6-BZ#155-RTW
Concen: 36.69 ng/mL
RT: 32.033 min Scan# 2189
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 83238

Ion	Ratio	Lower	Upper
360	100		
362	80.2	63.7	95.5

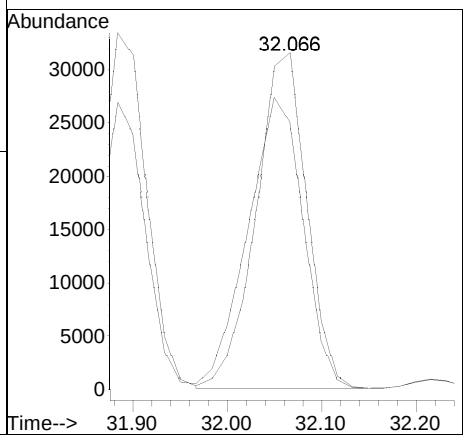


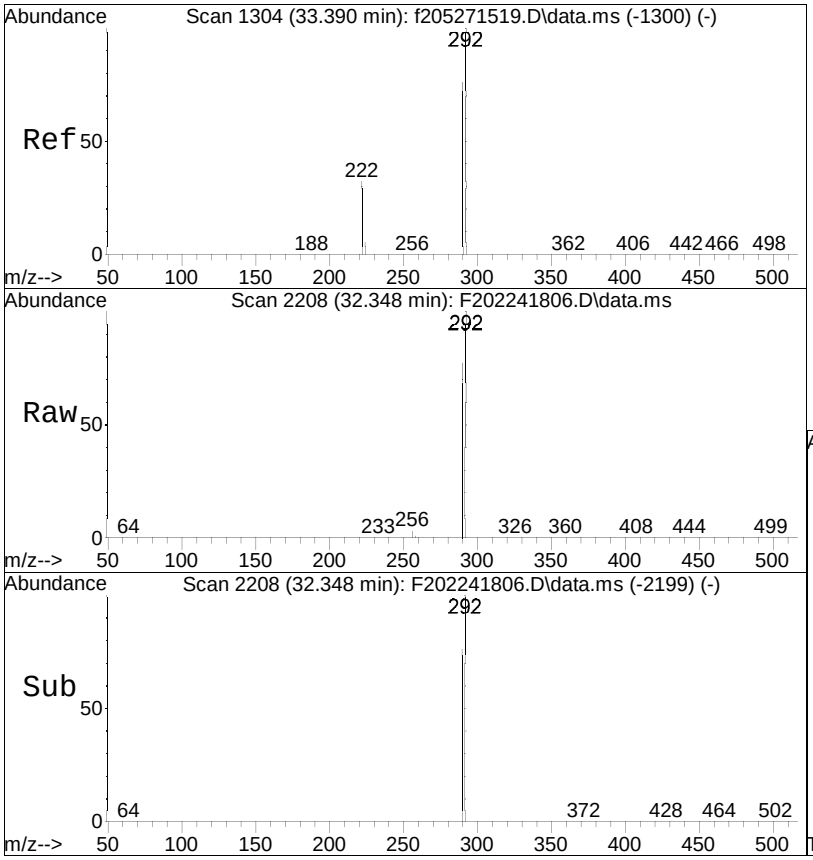


#85
Cl4-BZ#70
Concen: 34.05 ng/mL
RT: 32.066 min Scan# 2191
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 116718

Ion	Ratio	Lower	Upper
292	100		
290	79.4	66.7	100.1

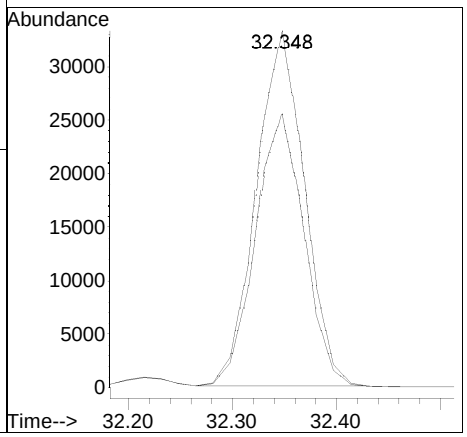


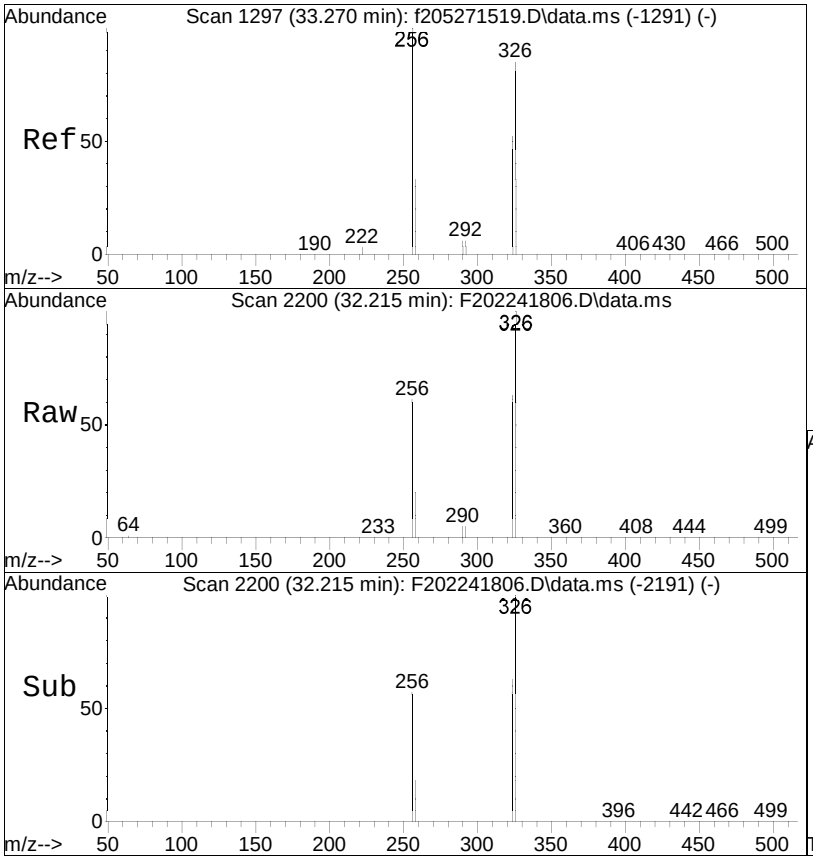


#86
Cl4-BZ#66
Concen: 38.66 ng/mL
RT: 32.348 min Scan# 2208
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 106489

Ion	Ratio	Lower	Upper
292	100		
290	76.8	62.3	93.5

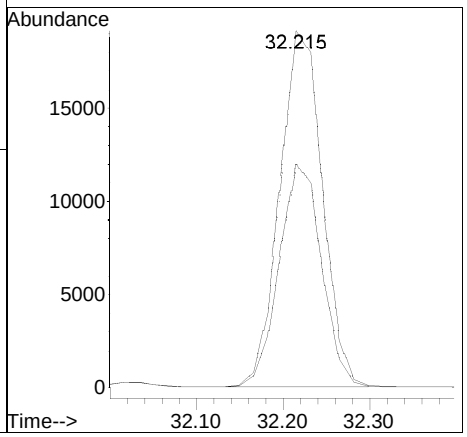


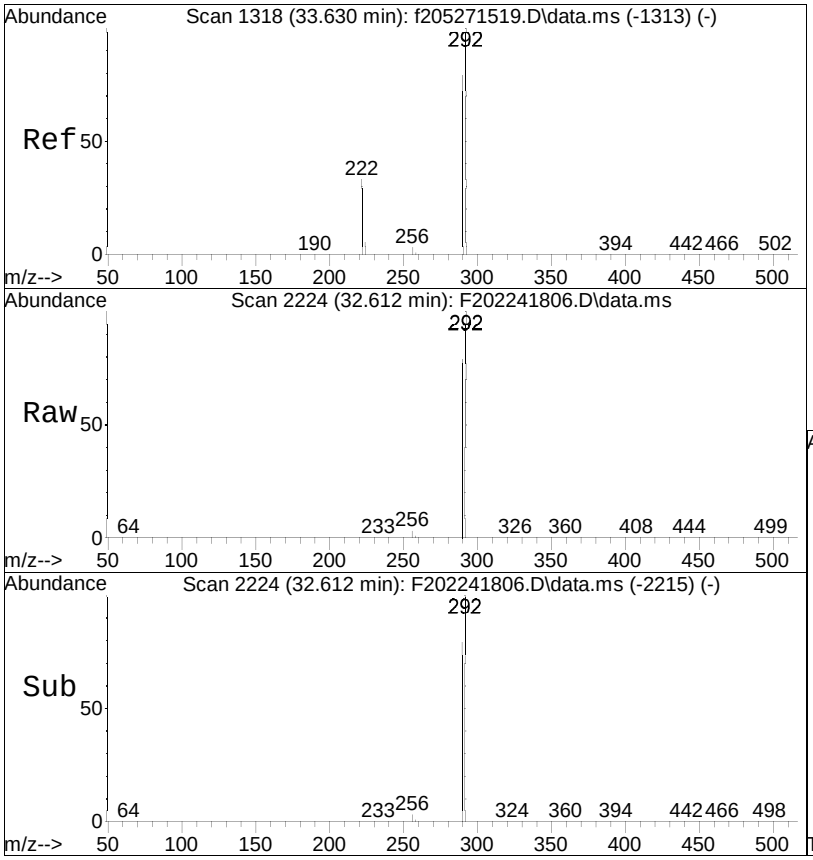


#87
Cl5-BZ#91
Concen: 36.21 ng/mL
RT: 32.215 min Scan# 2200
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 65004

Ion	Ratio	Lower	Upper
326	100		
324	62.9	50.0	75.0

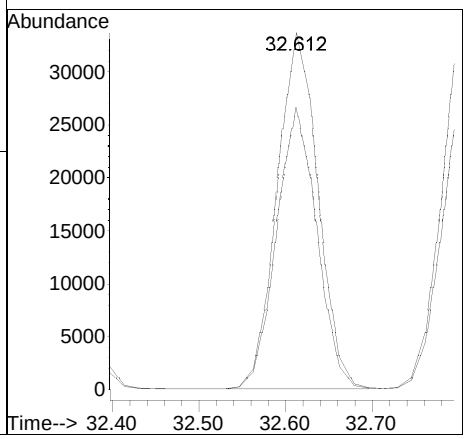


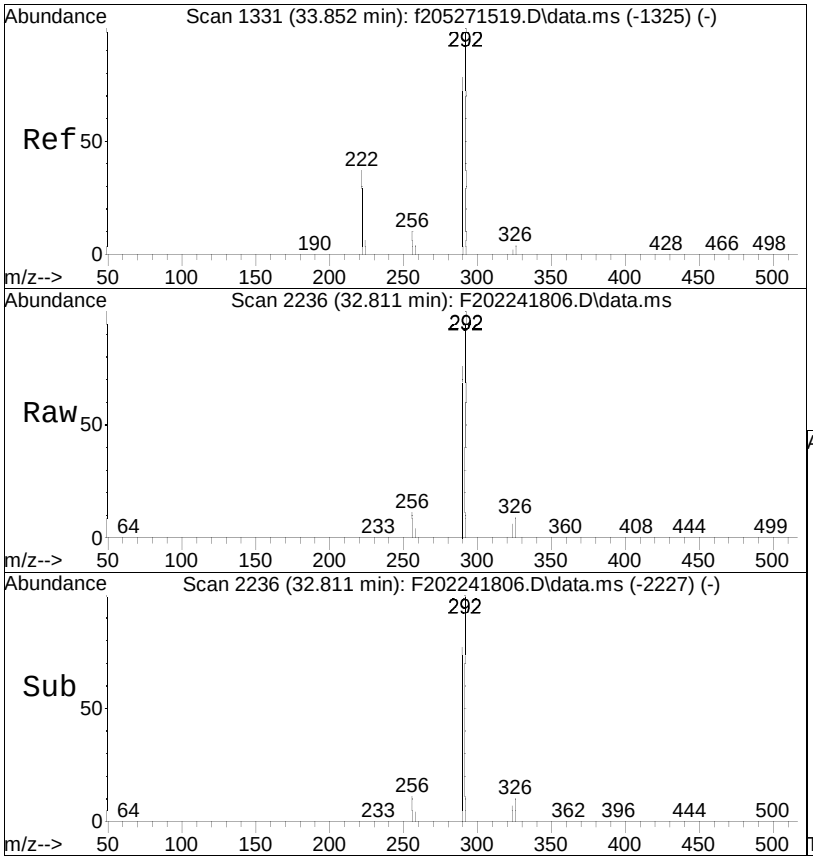


#88
Cl4-BZ#80
Concen: 39.89 ng/mL
RT: 32.612 min Scan# 2224
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 110197

Ion	Ratio	Lower	Upper
292	100		
290	78.0	63.5	95.3

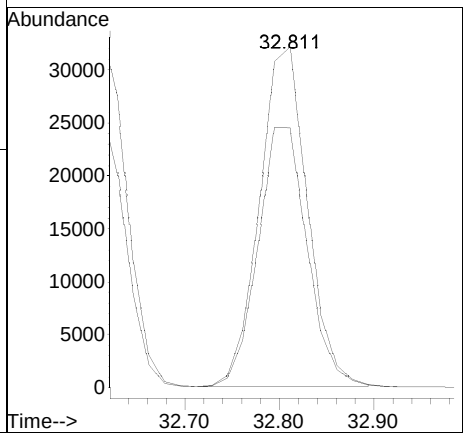


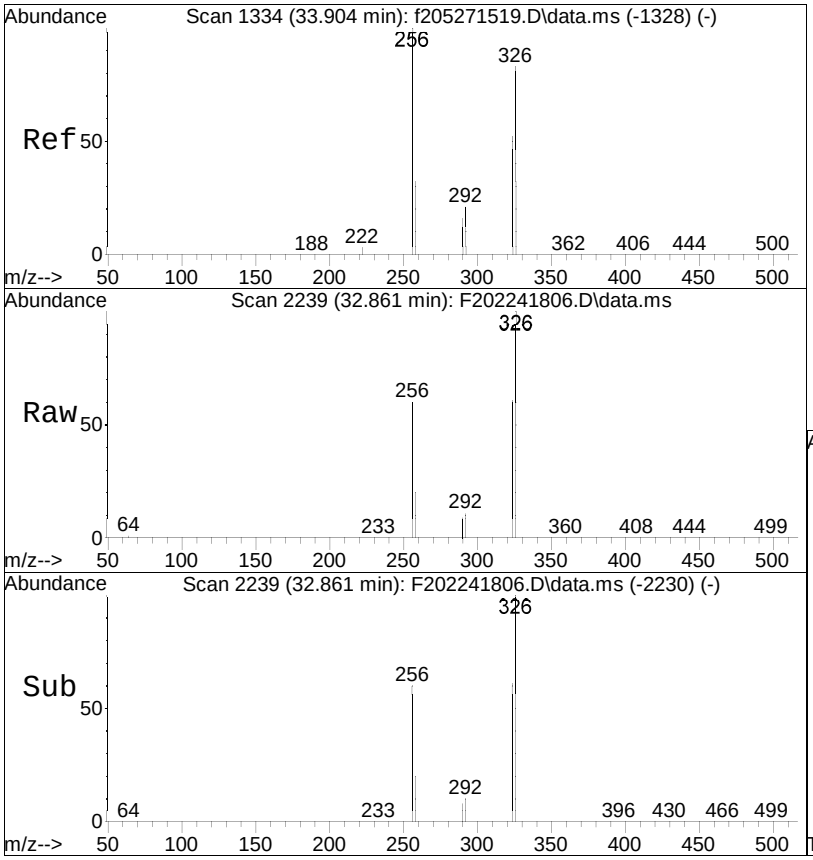


#89
Cl4-BZ#55
Concen: 39.56 ng/mL
RT: 32.811 min Scan# 2236
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 112907

Ion	Ratio	Lower	Upper
292	100		
290	78.4	61.8	92.6

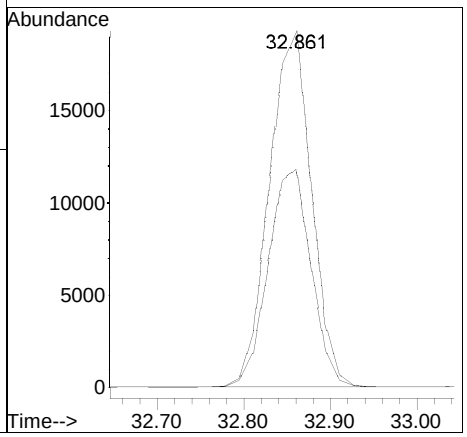


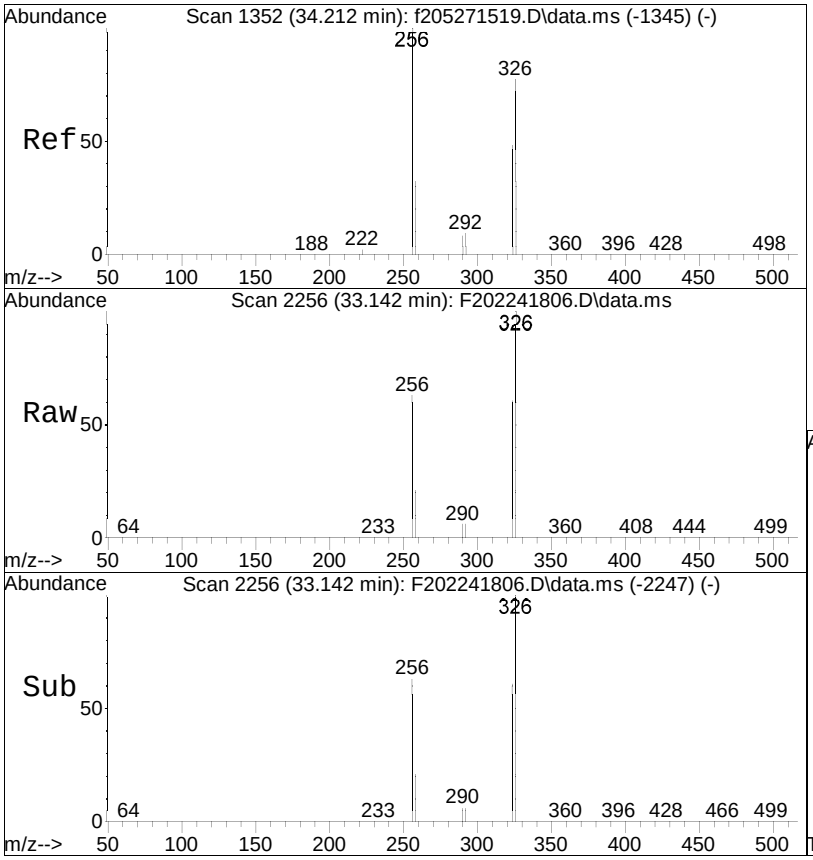


#90
Cl5-BZ#92
Concen: 37.63 ng/mL
RT: 32.861 min Scan# 2239
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 64943

Ion	Ratio	Lower	Upper
326	100		
324	61.3	49.1	73.7

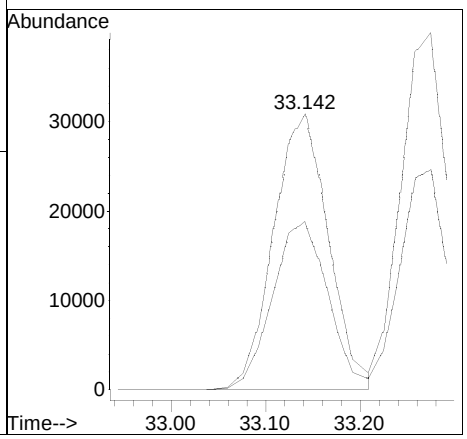


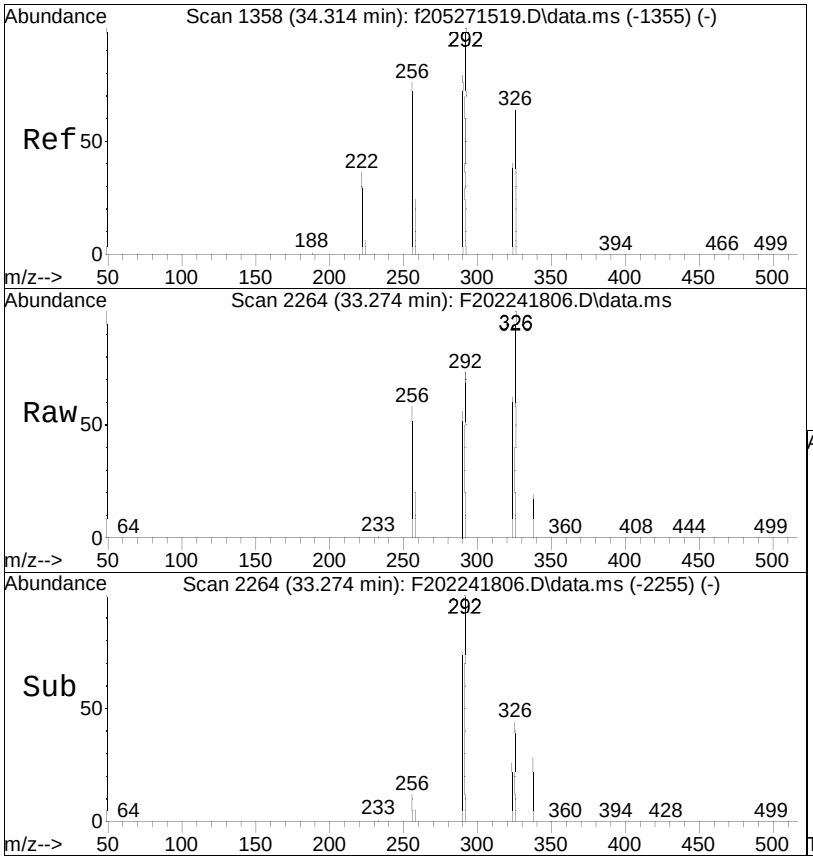


#91
Cl5-BZ#89/#84
Concen: 68.36 ng/mL
RT: 33.142 min Scan# 2256
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 124256

Ion	Ratio	Lower	Upper
326	100		
324	60.8	47.8	71.8

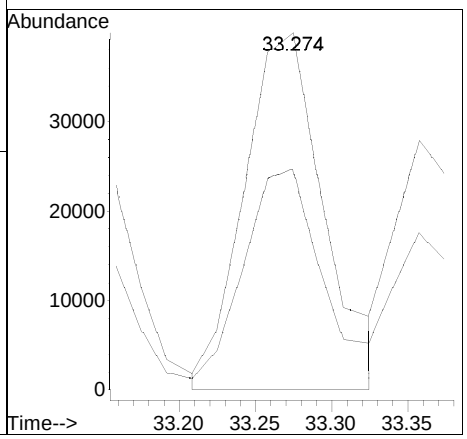


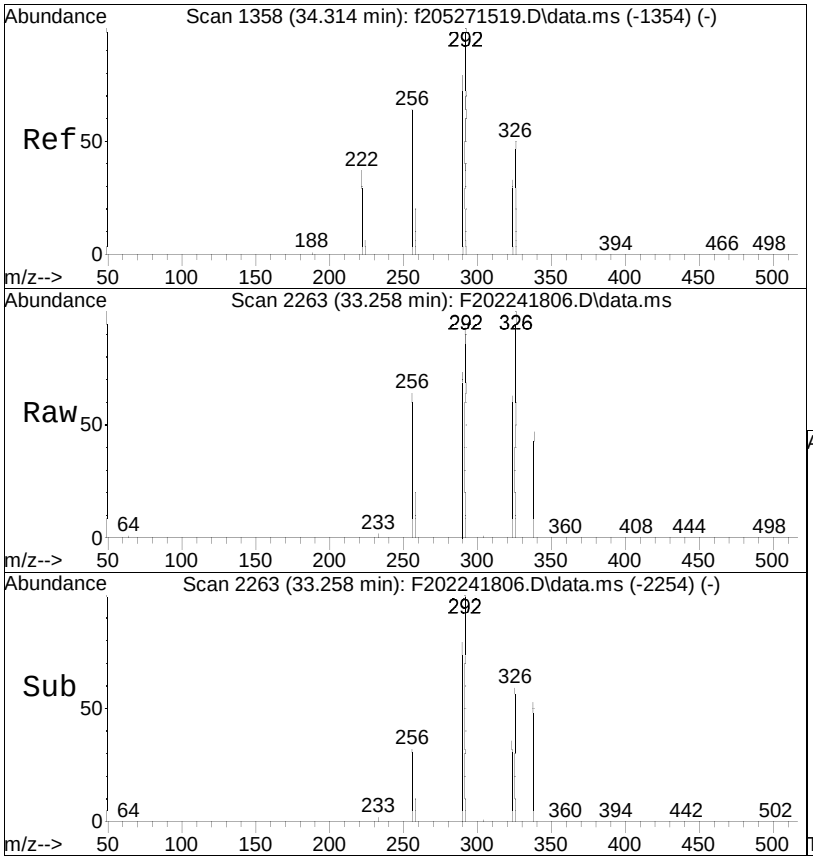


#92
Cl5-BZ#101/#90
Concen: 77.80 ng/mL M4
RT: 33.274 min Scan# 2264
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 145000

Ion	Ratio	Lower	Upper
326	100		
324	56.3	48.9	73.3

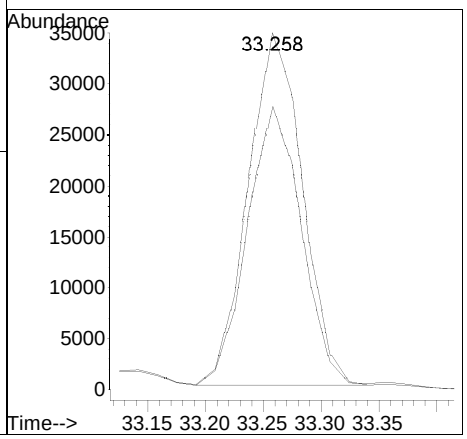


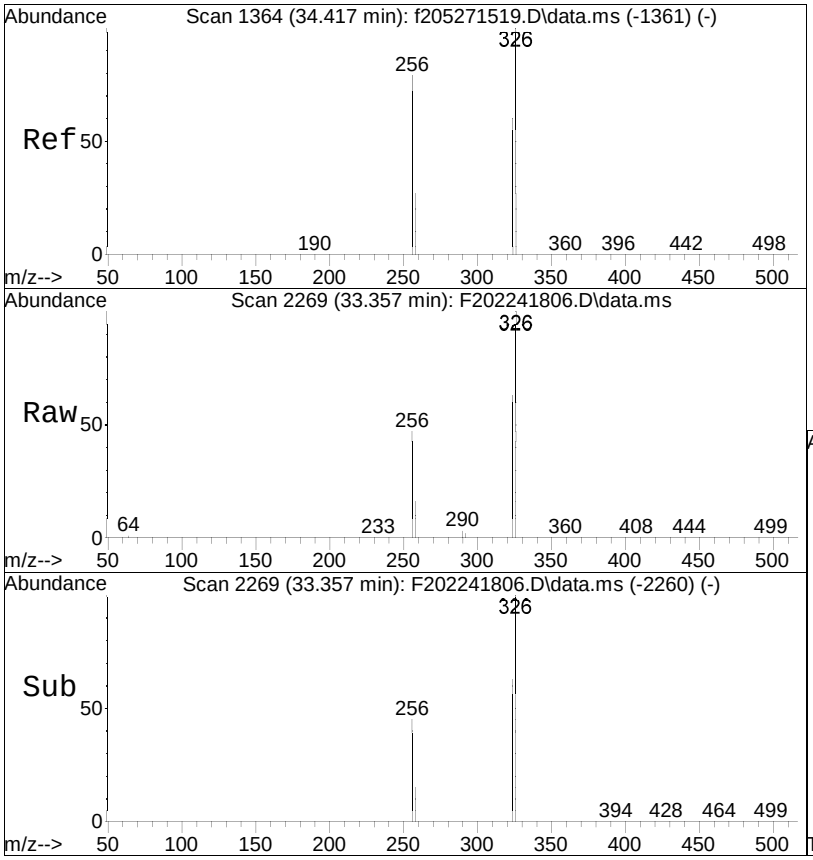


#94
Cl4-BZ#56
Concen: 38.42 ng/mL
RT: 33.258 min Scan# 2263
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 112631

Ion	Ratio	Lower	Upper
292	100		
290	78.8	63.5	95.3

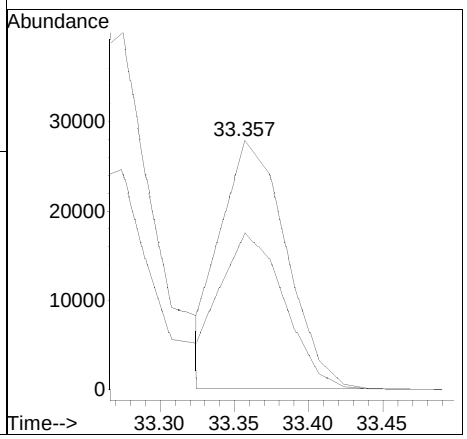


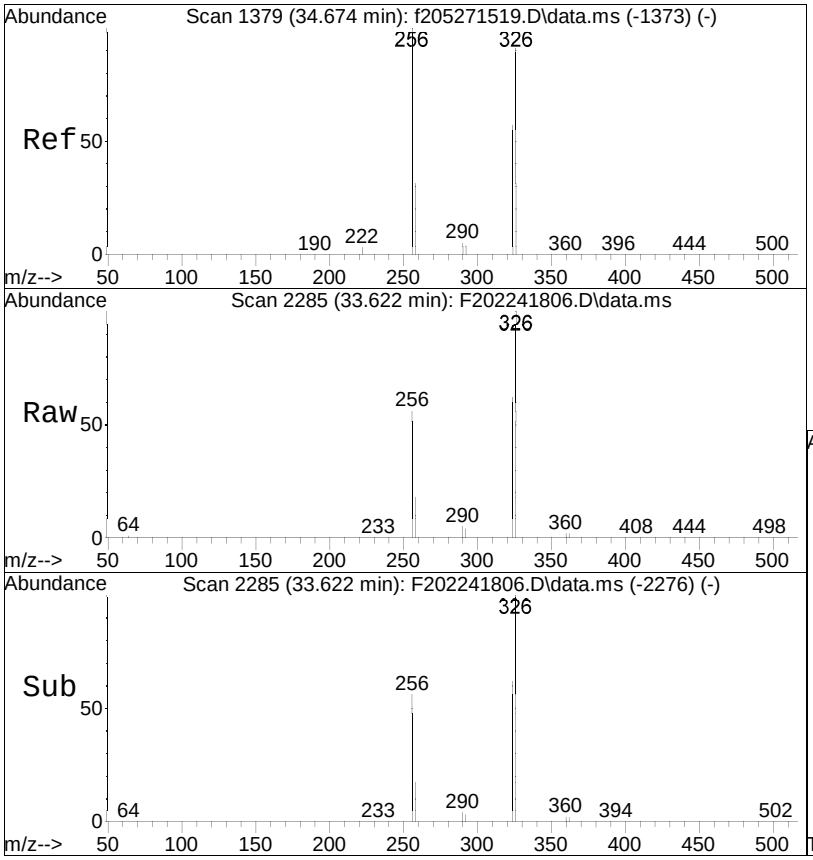


#95
Cl5-BZ#113
Concen: 37.06 ng/mL
RT: 33.357 min Scan# 2269
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 83886

Ion	Ratio	Lower	Upper
326	100		
324	61.6	50.5	75.7

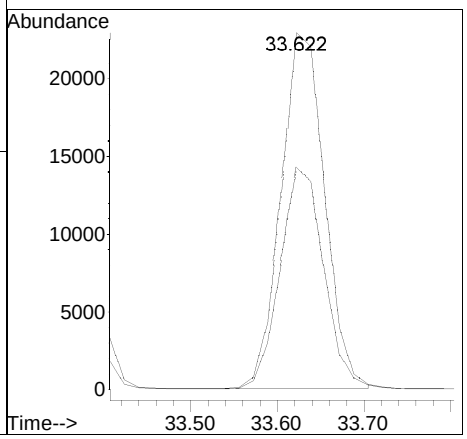


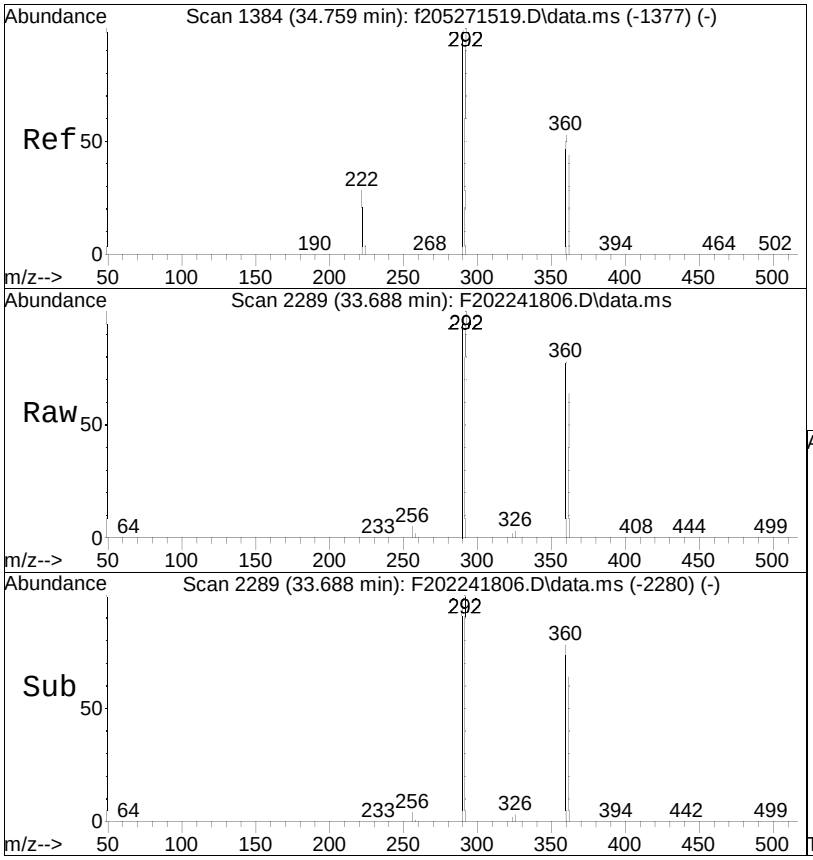


#96
Cl5-BZ#99
Concen: 38.09 ng/mL
RT: 33.622 min Scan# 2285
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 79680

Ion	Ratio	Lower	Upper
326	100		
324	62.2	50.5	75.7

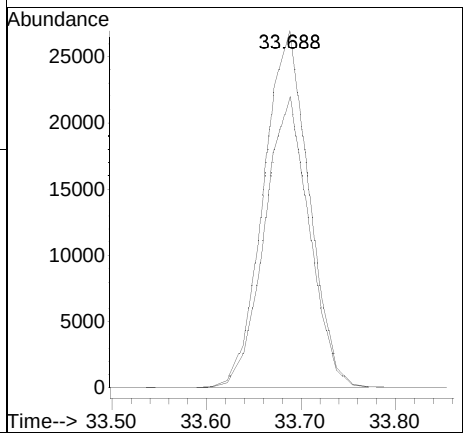


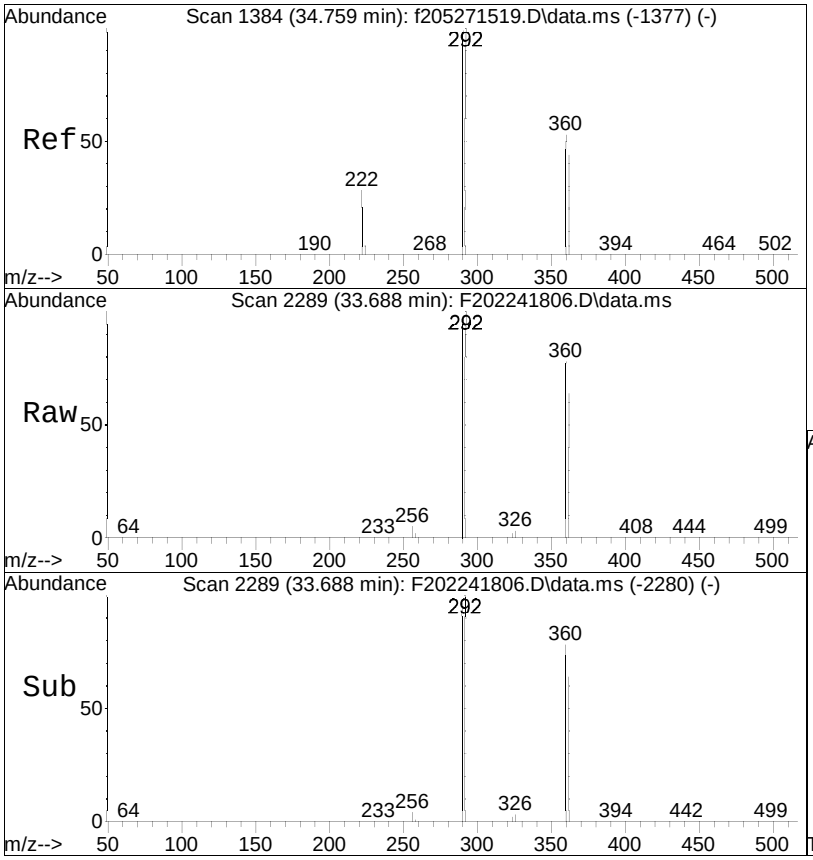


#97
Cl6-BZ#150
Concen: 37.32 ng/mL
RT: 33.688 min Scan# 2289
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 89573

Ion	Ratio	Lower	Upper
360	100		
362	80.2	65.2	97.8

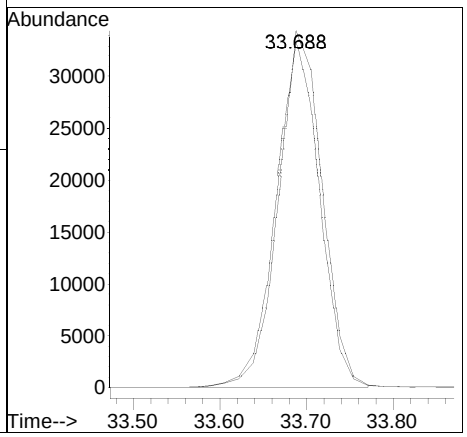


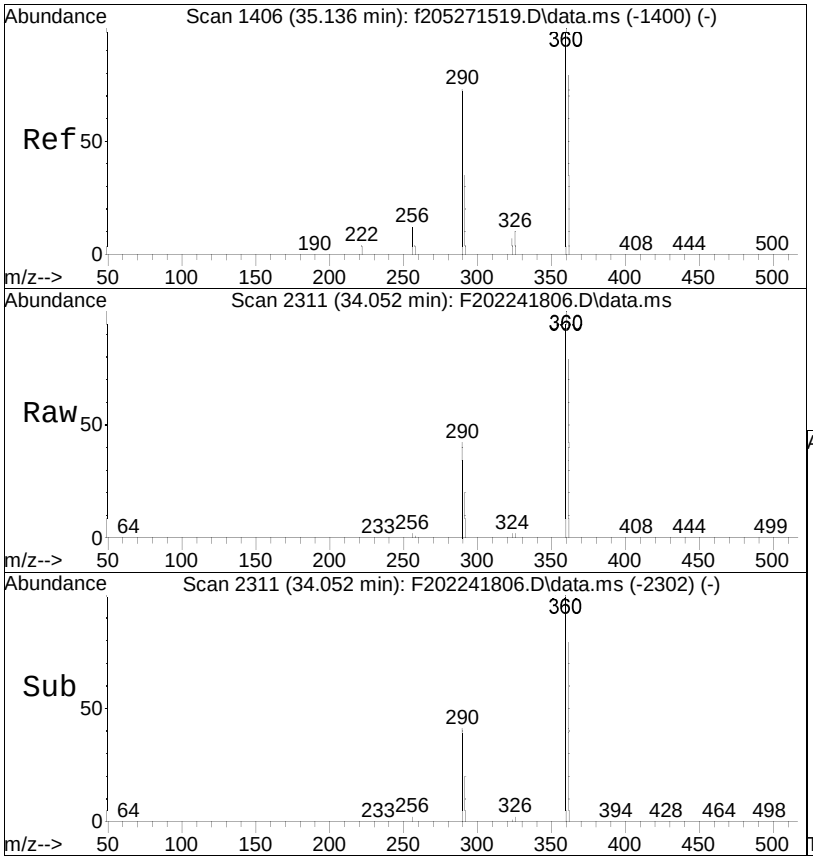


#98
Cl4-BZ#60
Concen: 36.48 ng/mL
RT: 33.688 min Scan# 2289
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 119681

Ion	Ratio	Lower	Upper
292	100		
290	97.0	79.1	118.7

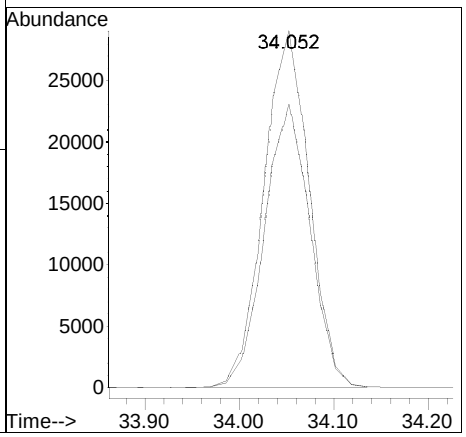


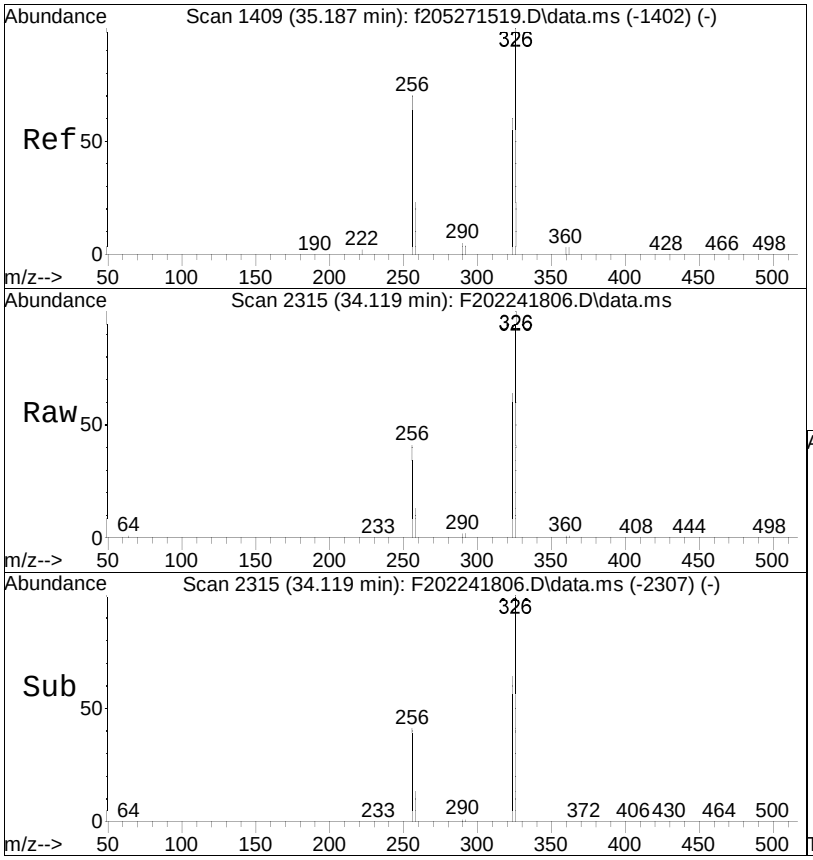


#99
Cl6-BZ#152
Concen: 36.54 ng/mL
RT: 34.052 min Scan# 2311
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 96567

Ion	Ratio	Lower	Upper
360	100		
362	79.8	64.2	96.4

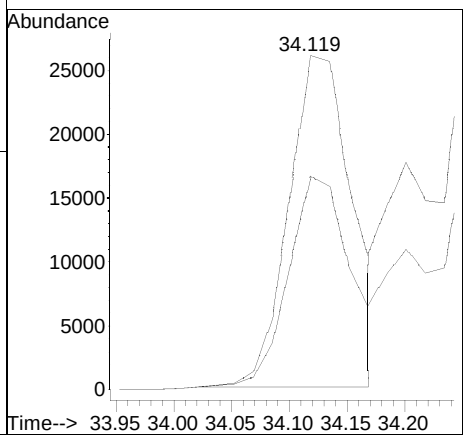


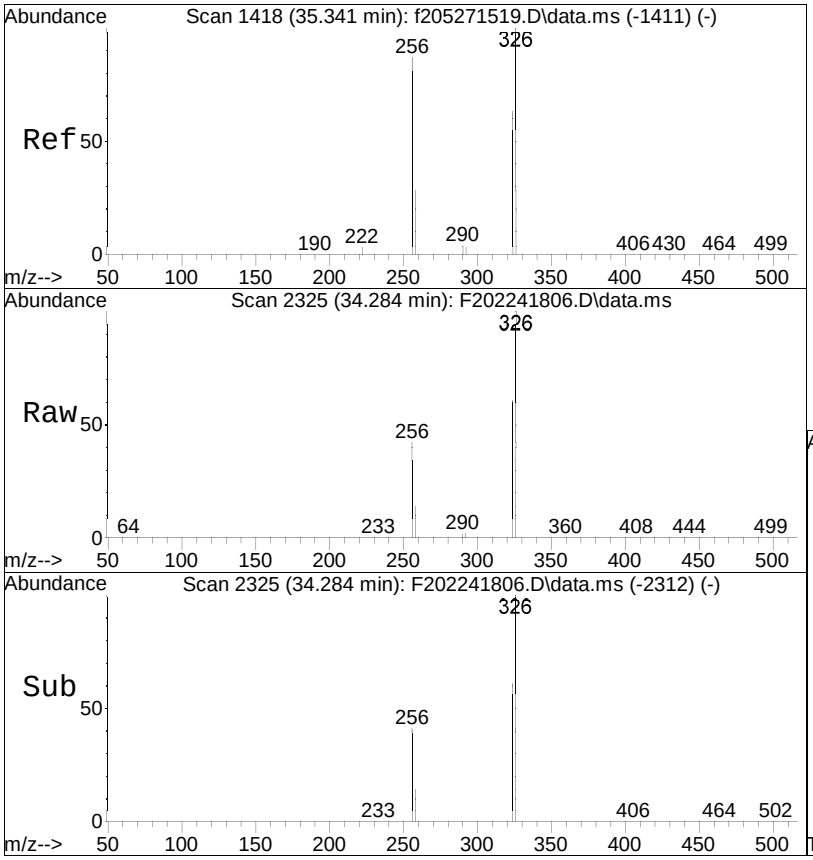


#100
Cl5-BZ#119
Concen: 37.76 ng/mL
RT: 34.119 min Scan# 2315
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 99243

Ion	Ratio	Lower	Upper
326	100		
324	63.8	47.9	71.9

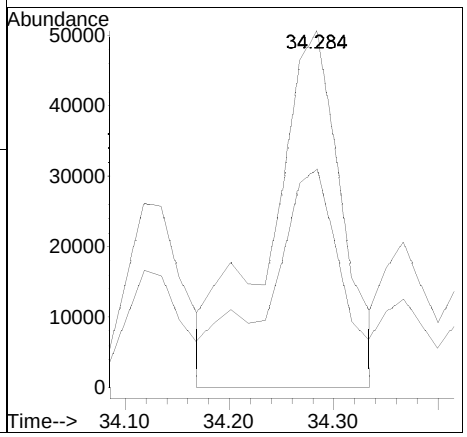


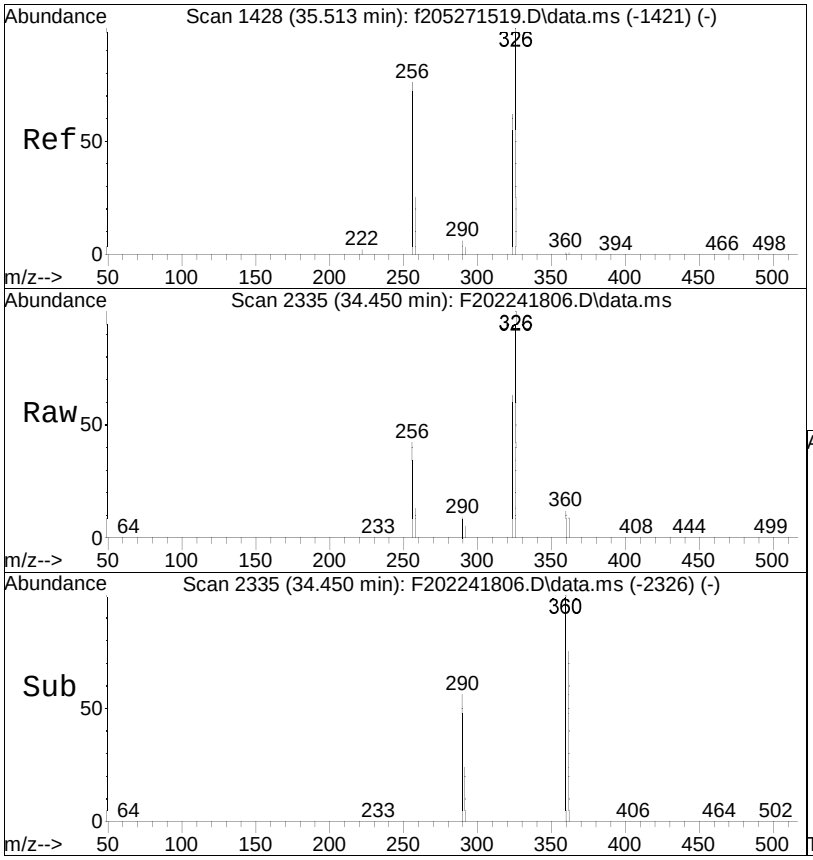


#101
Cl5-BZ#83/#125/#112
Concen: 114.44 ng/mL M1
RT: 34.284 min Scan# 2325
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 245792

Ion	Ratio	Lower	Upper
326	100		
324	35.9	49.5	74.3#

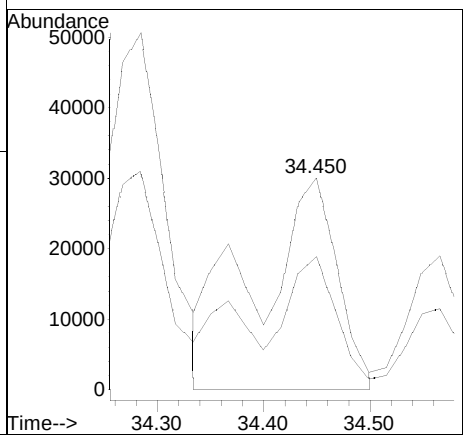


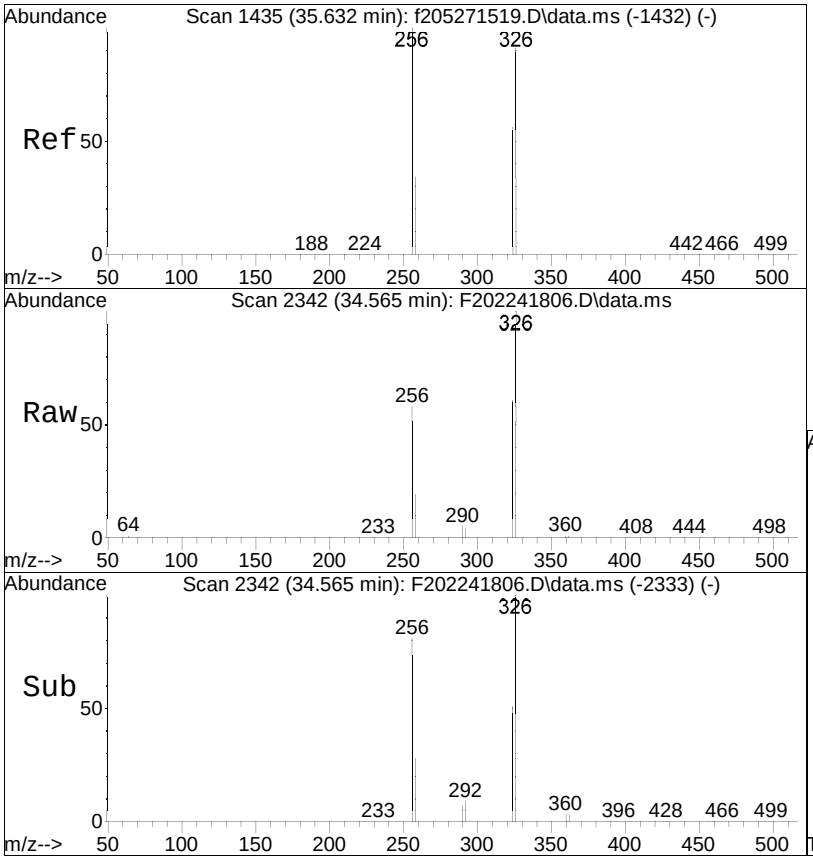


#102
Cl5-BZ#86/#109
Concen: 75.88 ng/mL M1
RT: 34.450 min Scan# 2335
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 160157

Ion	Ratio	Lower	Upper
326	100		
324	33.1	49.7	74.5#

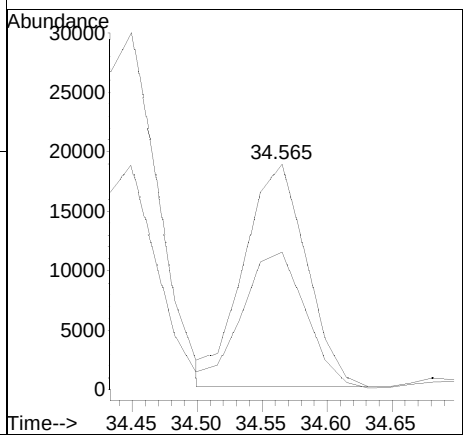


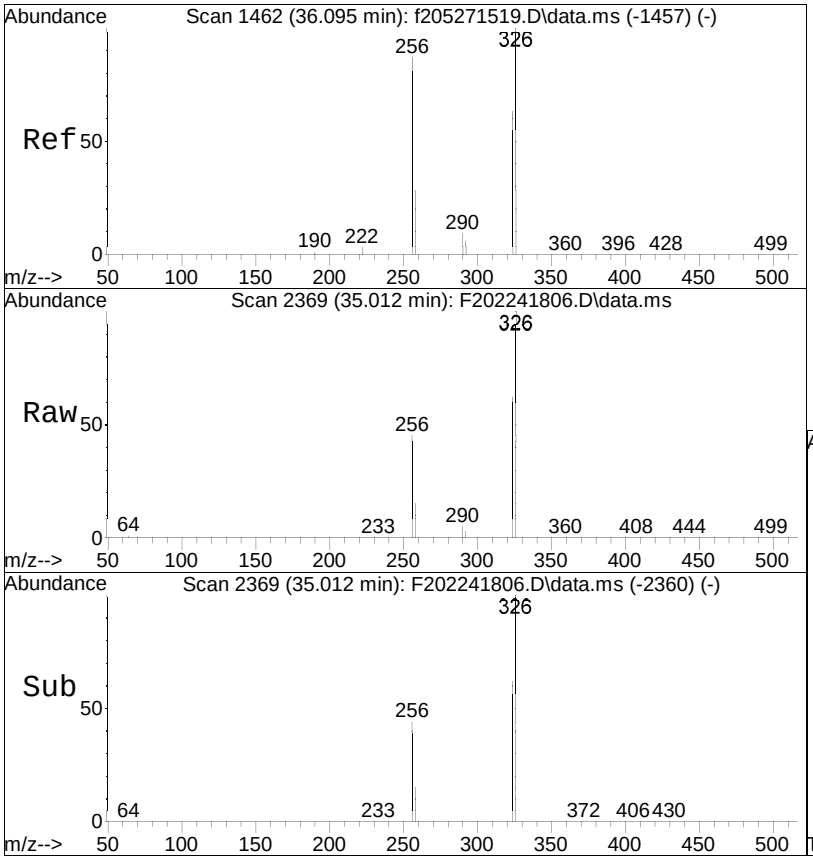


#103
Cl5-BZ#97
Concen: 38.26 ng/mL
RT: 34.565 min Scan# 2342
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 62570

Ion	Ratio	Lower	Upper
326	100		
324	62.3	51.2	76.8

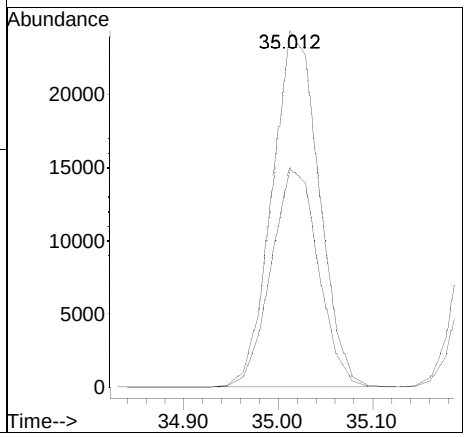


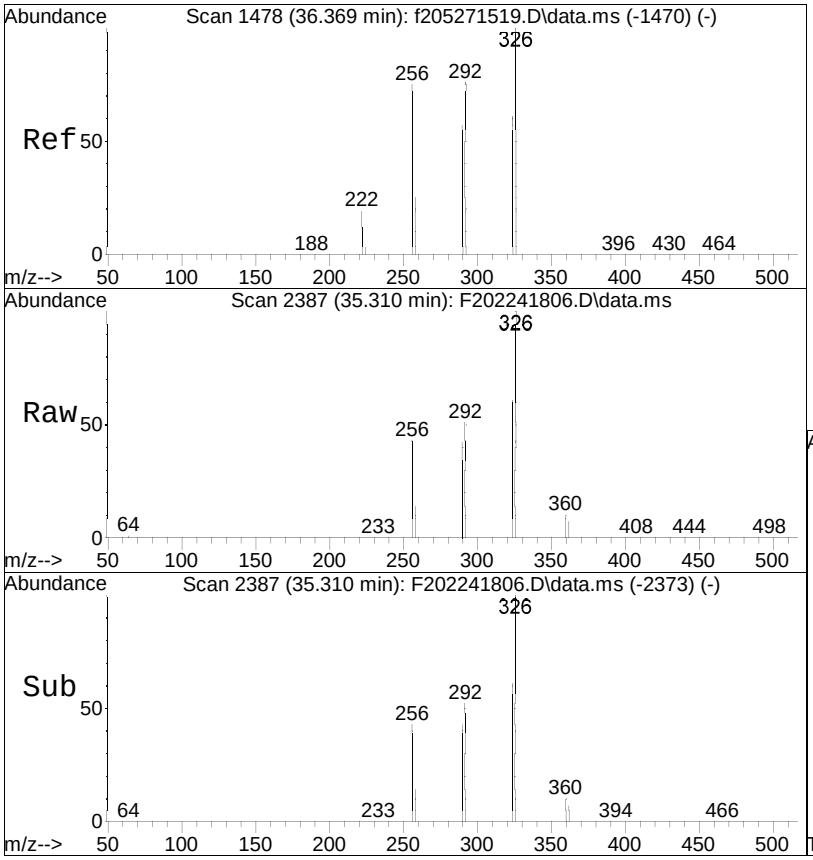


#104
Cl5-BZ#116
Concen: 38.23 ng/mL
RT: 35.012 min Scan# 2369
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 83443

Ion	Ratio	Lower	Upper
326	100		
324	61.9	49.0	73.6

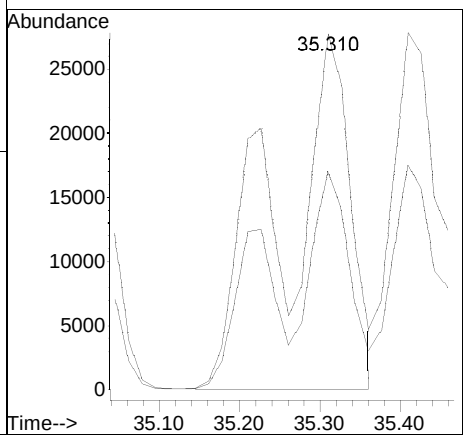


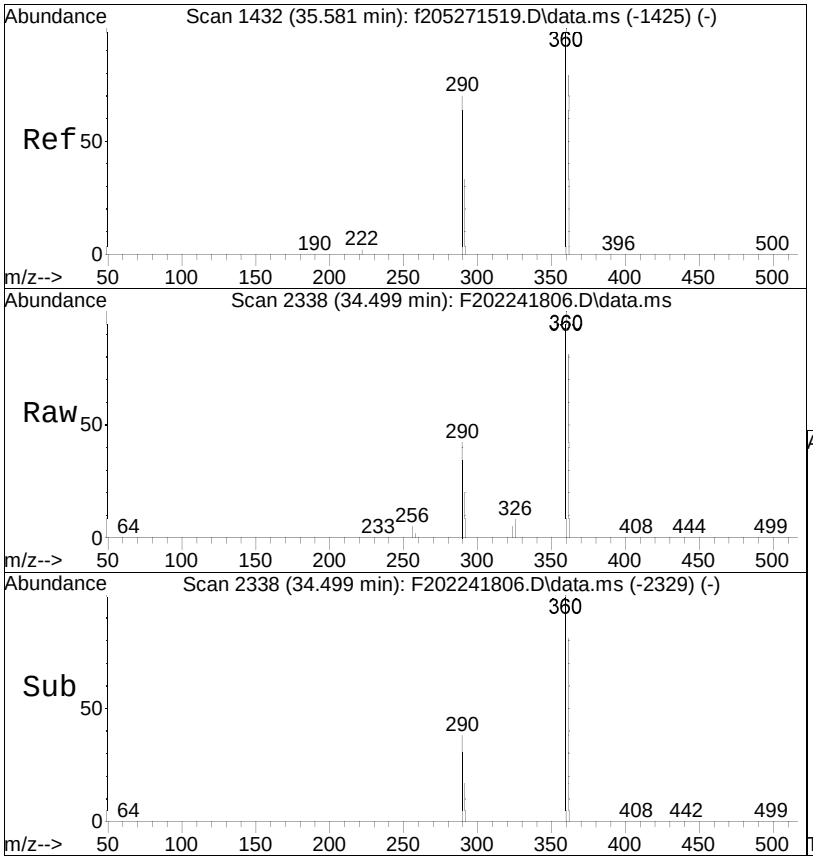


#105
Cl5-BZ#87/#111
Concen: 76.18 ng/mL M1
RT: 35.310 min Scan# 2387
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 165165

Ion	Ratio	Lower	Upper
326	100		
324	22.8	50.6	75.8#

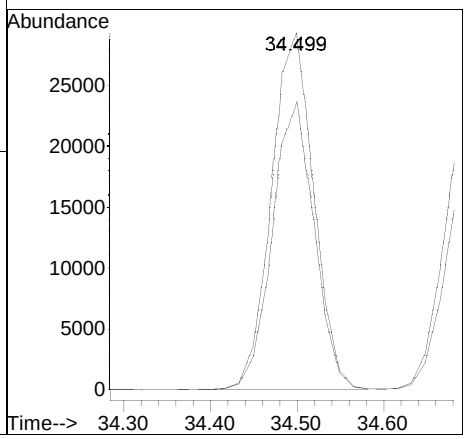


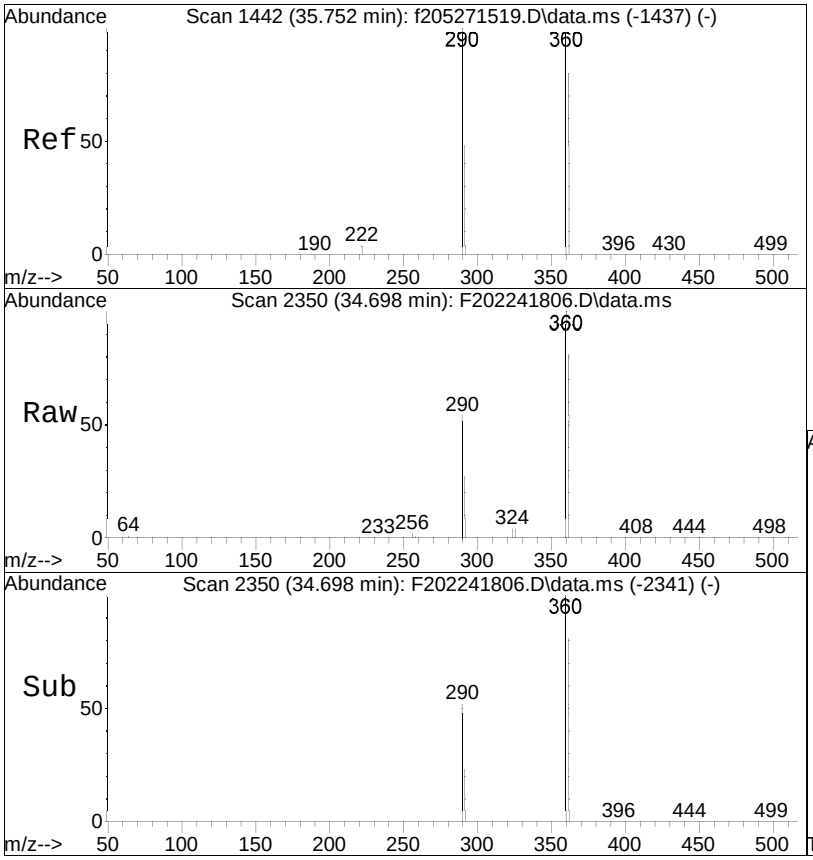


#108
Cl6-BZ#145
Concen: 37.02 ng/mL
RT: 34.499 min Scan# 2338
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 99118

Ion	Ratio	Lower	Upper
360	100		
362	79.8	64.9	97.3

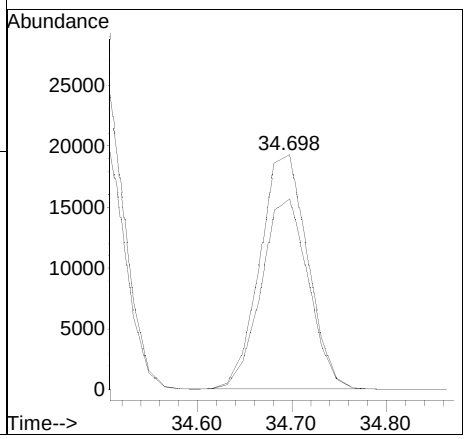


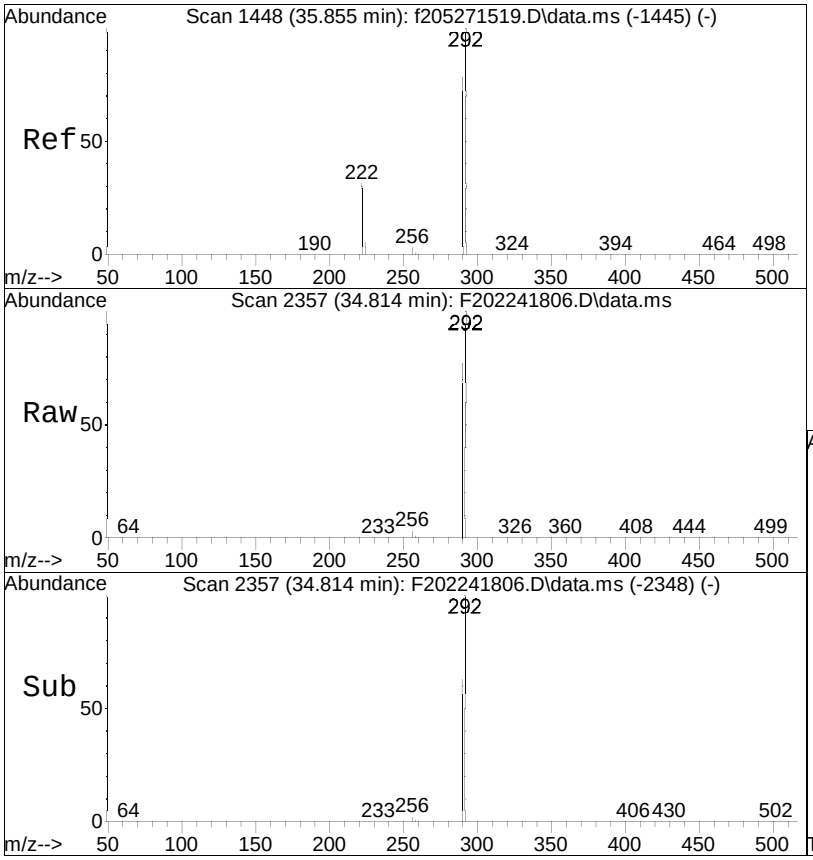


#109
Cl6-BZ#148
Concen: 38.04 ng/mL
RT: 34.698 min Scan# 2350
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 67566

Ion	Ratio	Lower	Upper
360	100		
362	80.6	63.3	94.9

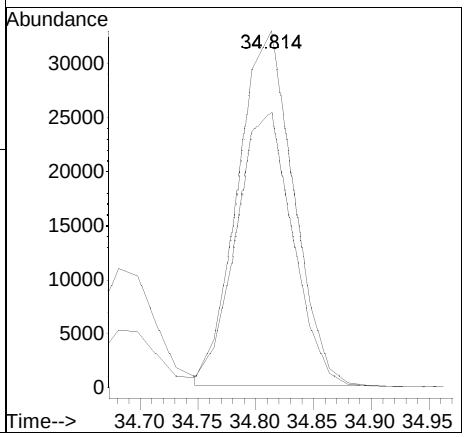


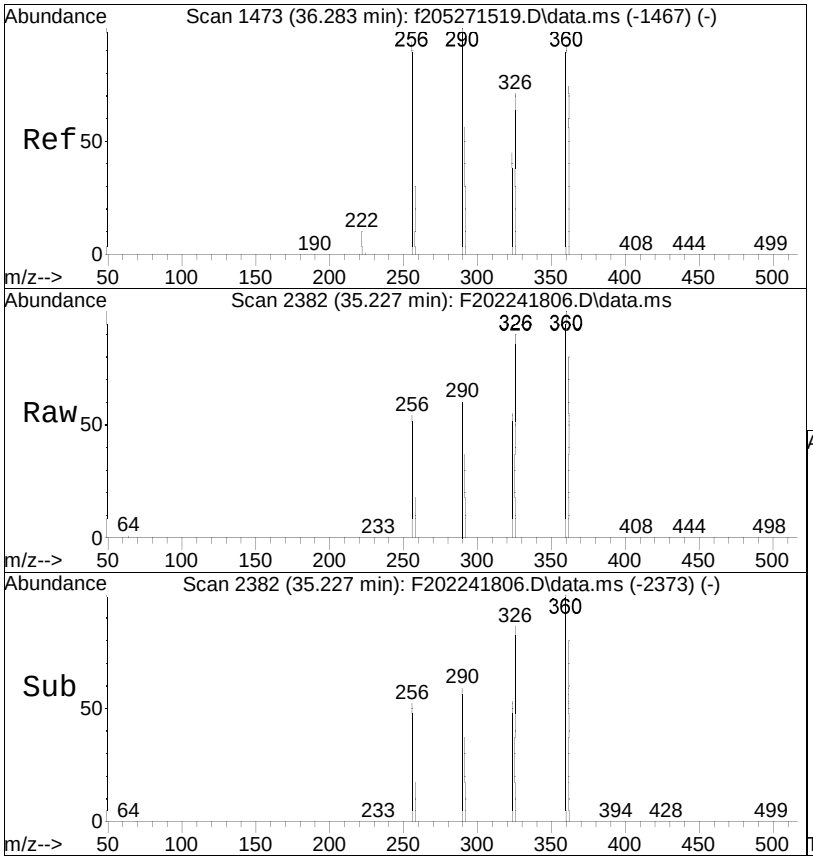


#110
Cl4-BZ#79
Concen: 40.55 ng/mL
RT: 34.814 min Scan# 2357
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 109630

Ion	Ratio	Lower	Upper
292	100		
290	78.1	62.6	93.8

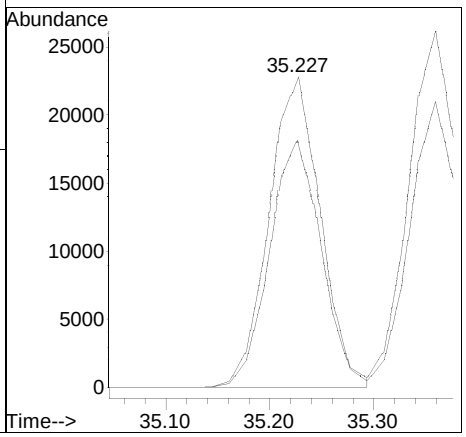


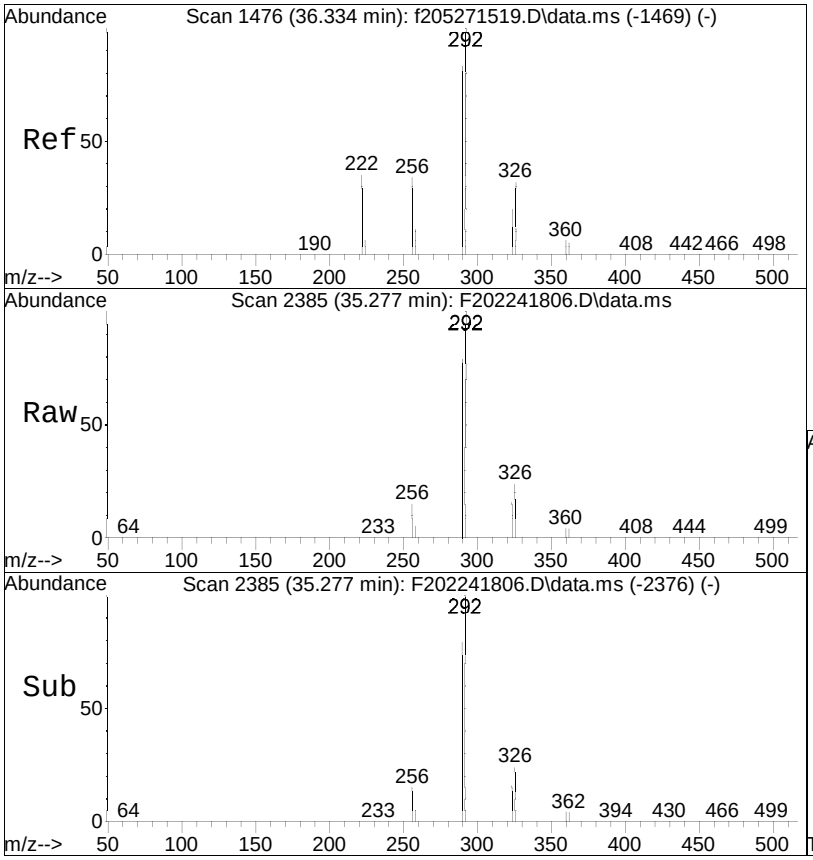


#111
Cl6-BZ#154-Cal
Concen: 38.75 ng/mL
RT: 35.227 min Scan# 2382
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 78169

Ion	Ratio	Lower	Upper
360	100		
362	79.9	64.2	96.4

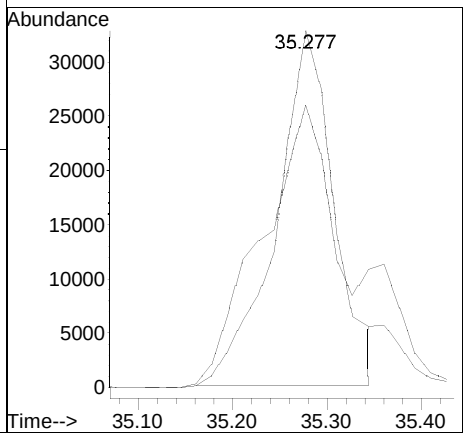


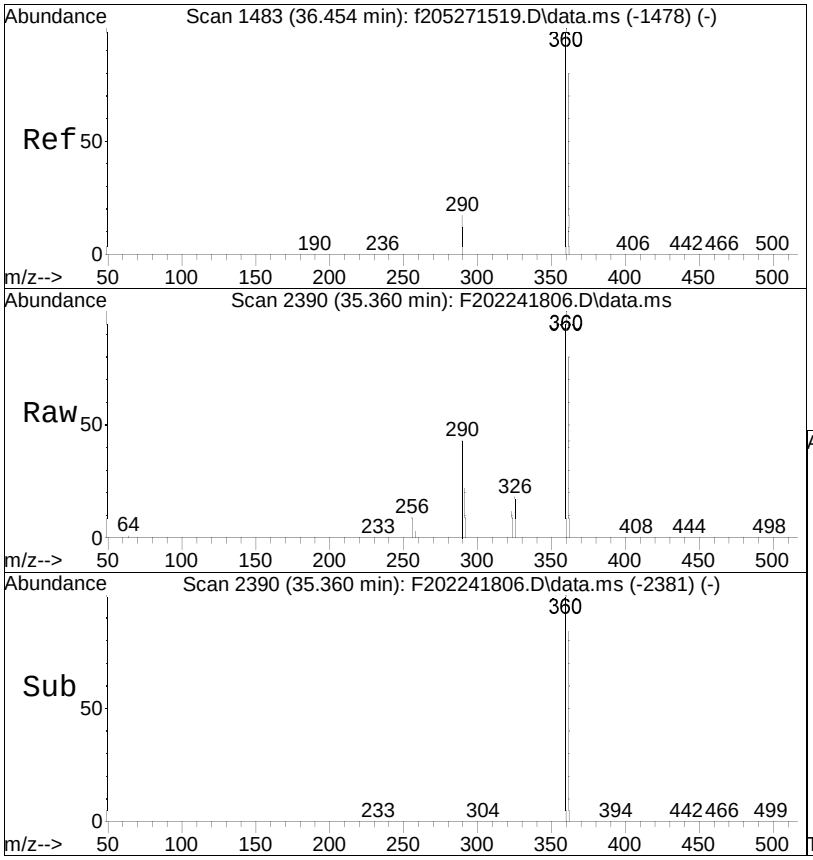


#114
Cl4-BZ#78
Concen: 39.49 ng/mL
RT: 35.277 min Scan# 2385
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 138382

Ion	Ratio	Lower	Upper
292	100		
290	95.3	65.0	97.6

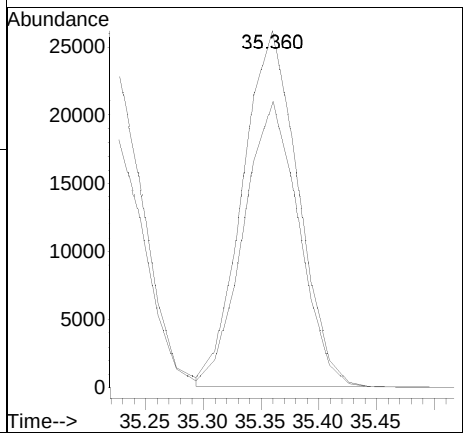


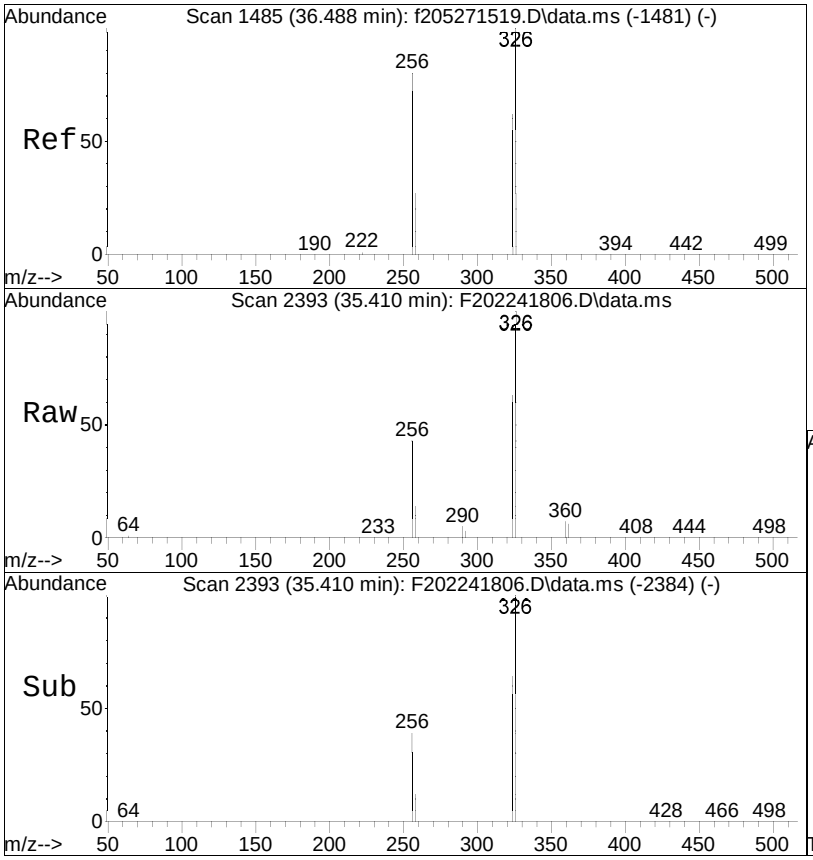


#115
Cl6-BZ#136
Concen: 36.55 ng/mL
RT: 35.360 min Scan# 2390
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 87291

Ion	Ratio	Lower	Upper
360	100		
362	79.6	64.9	97.3

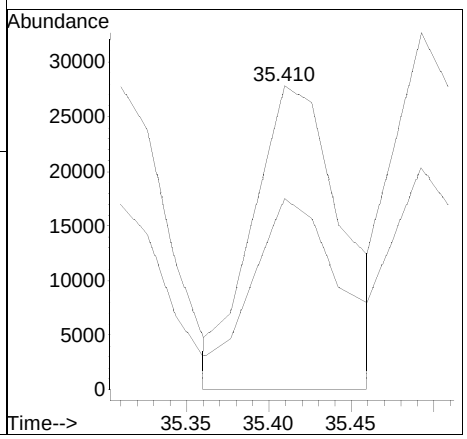


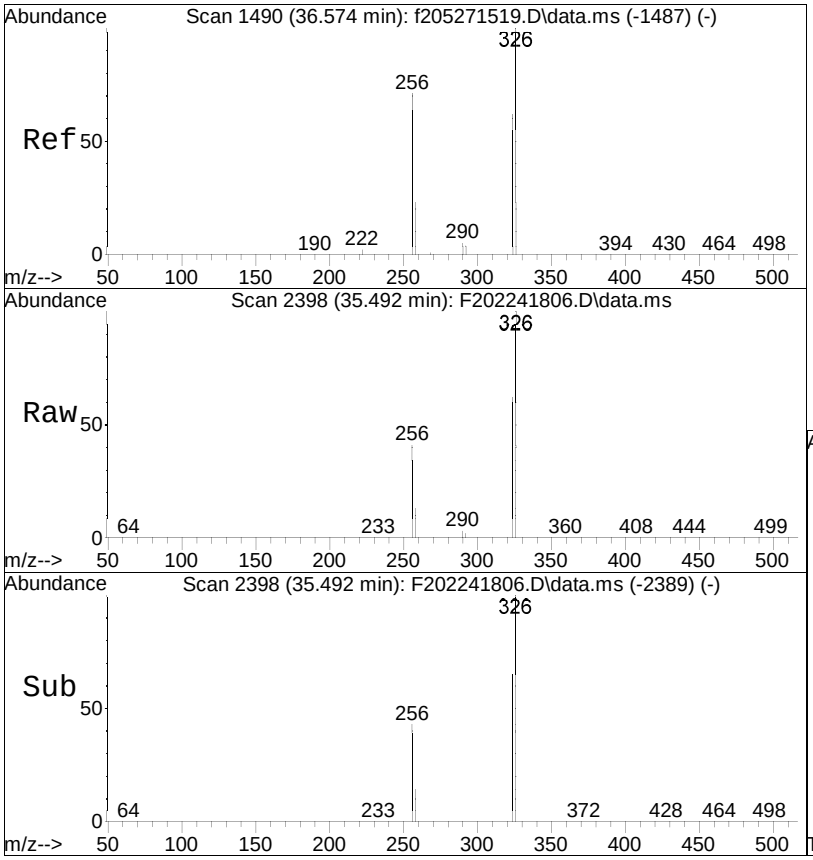


#116
Cl5-BZ#117
Concen: 38.15 ng/mL M4
RT: 35.410 min Scan# 2393
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 104528

Ion	Ratio	Lower	Upper
326	100		
324	45.5	49.1	73.7#

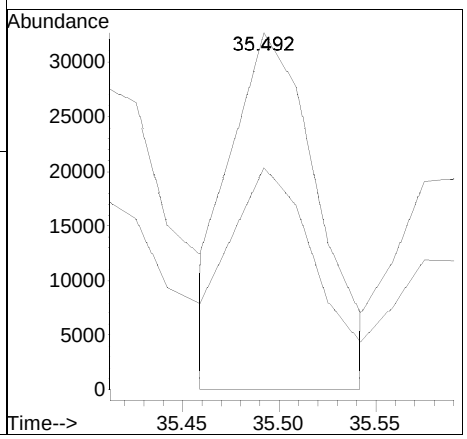


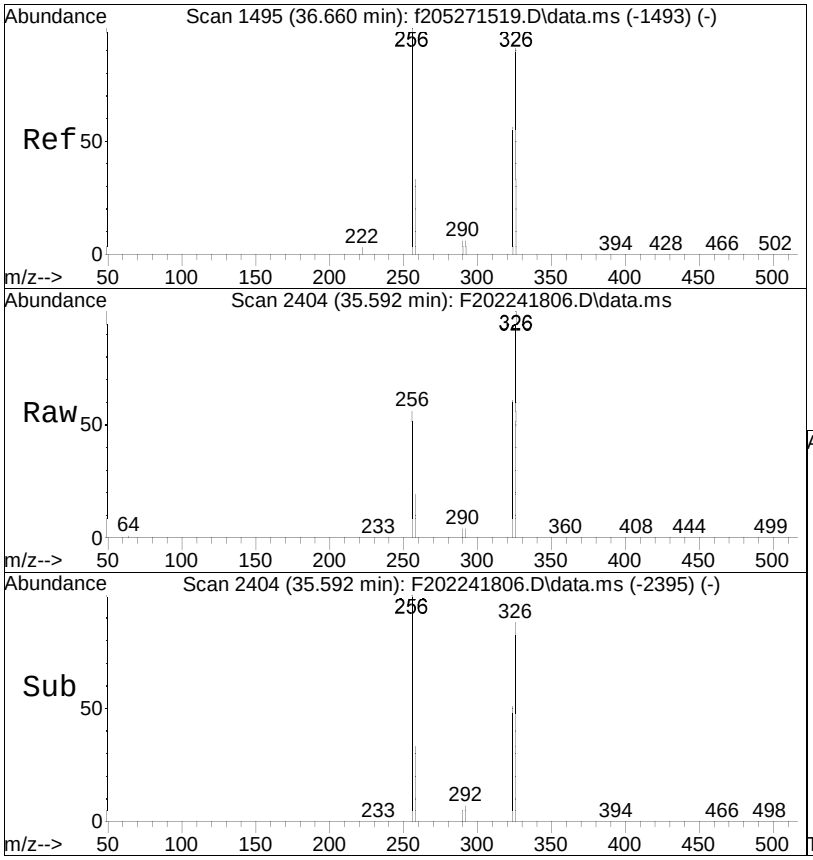


#117
Cl5-BZ#115
Concen: 39.83 ng/mL M4
RT: 35.492 min Scan# 2398
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 101732

Ion	Ratio	Lower	Upper
326	100		
324	40.9	48.7	73.1#

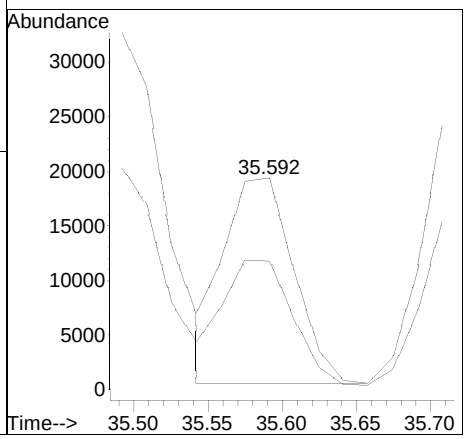


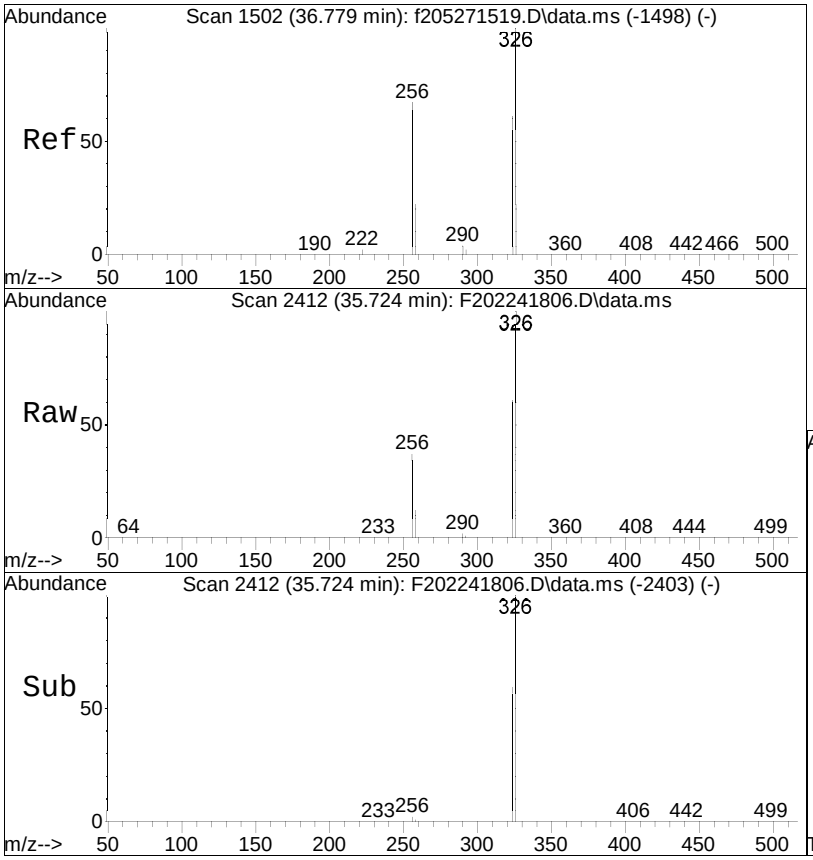


#118
Cl5-BZ#85
Concen: 36.92 ng/mL
RT: 35.592 min Scan# 2404
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 61311

Ion	Ratio	Lower	Upper
326	100		
324	60.8	49.6	74.4

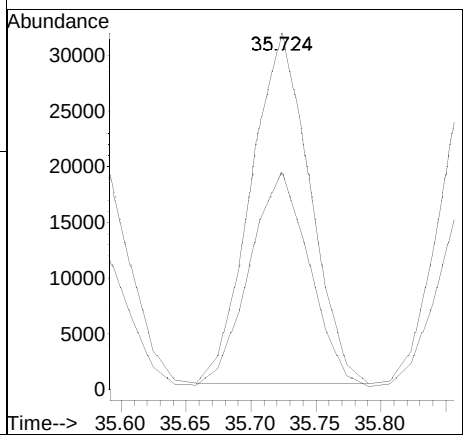


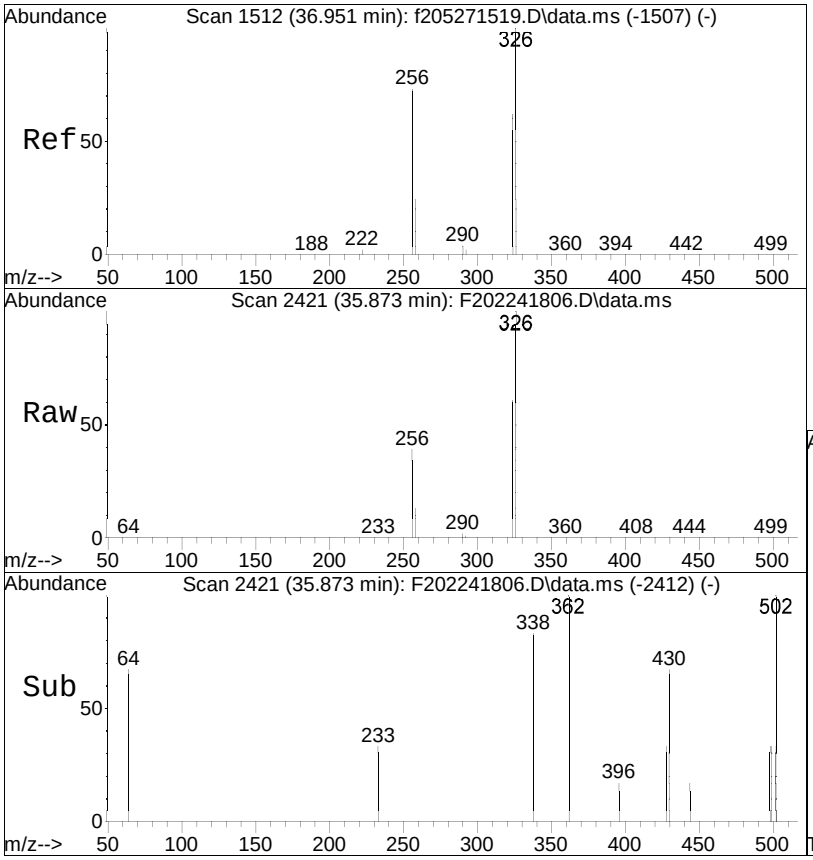


#119
Cl5-BZ#120
Concen: 39.46 ng/mL
RT: 35.724 min Scan# 2412
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 99612

Ion	Ratio	Lower	Upper
326	100		
324	61.8	49.7	74.5

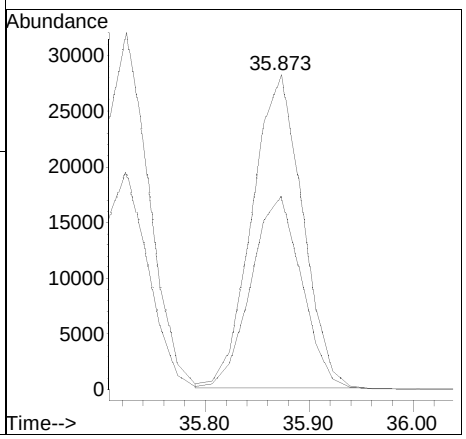


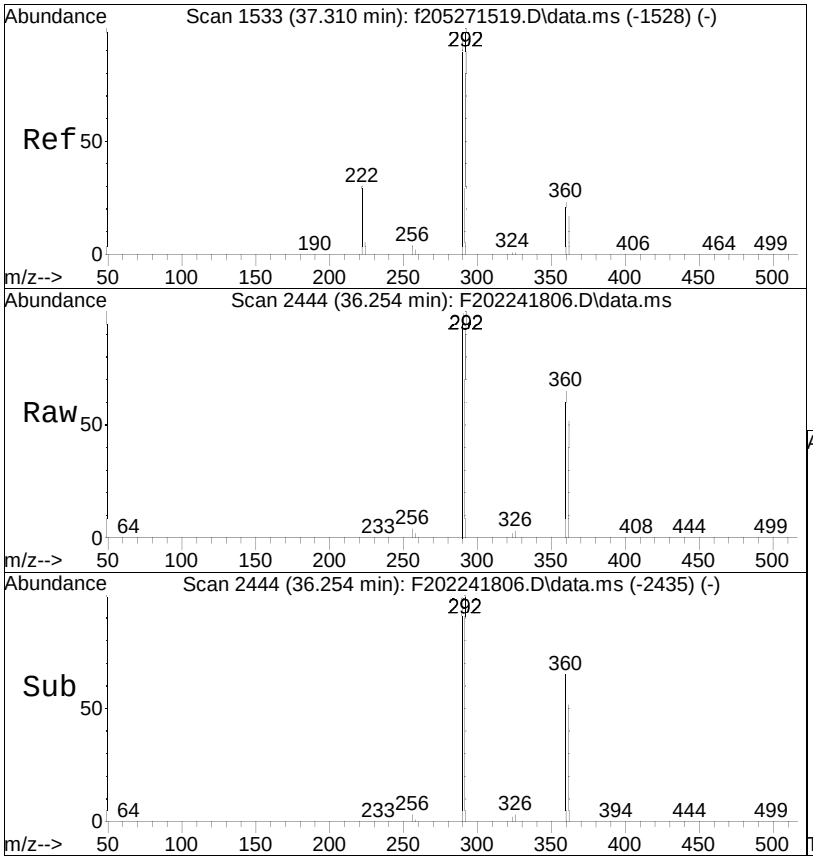


#120
Cl5-BZ#110
Concen: 38.46 ng/mL
RT: 35.873 min Scan# 2421
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 94676

Ion	Ratio	Lower	Upper
326	100		
324	61.5	49.4	74.2

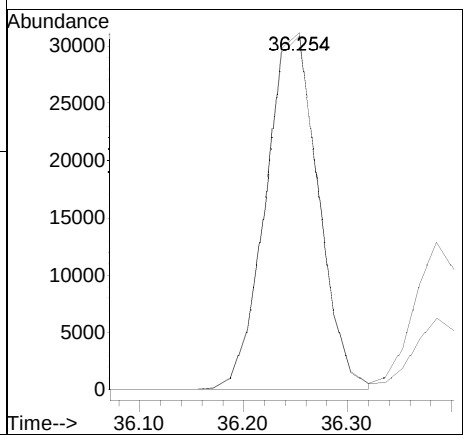


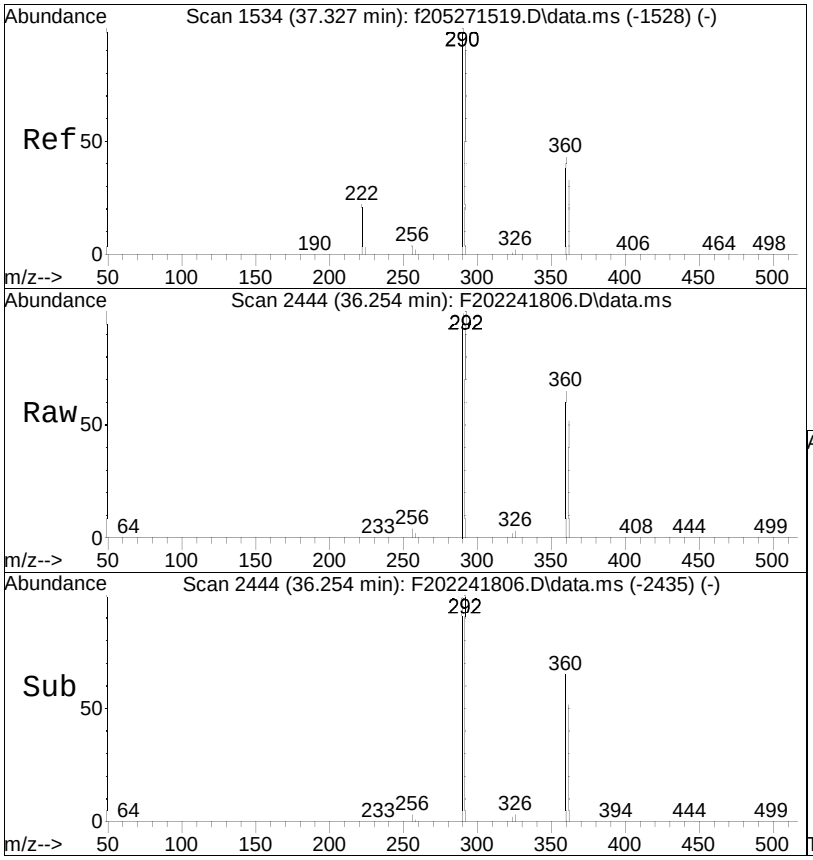


#121
Cl4-BZ#81
Concen: 41.11 ng/mL
RT: 36.254 min Scan# 2444
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 109159

Ion	Ratio	Lower	Upper
292	100		
290	99.2	78.3	117.5

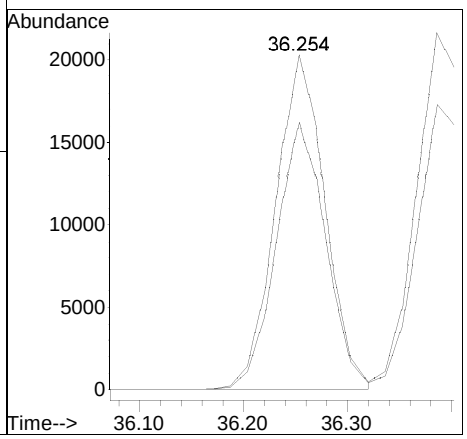


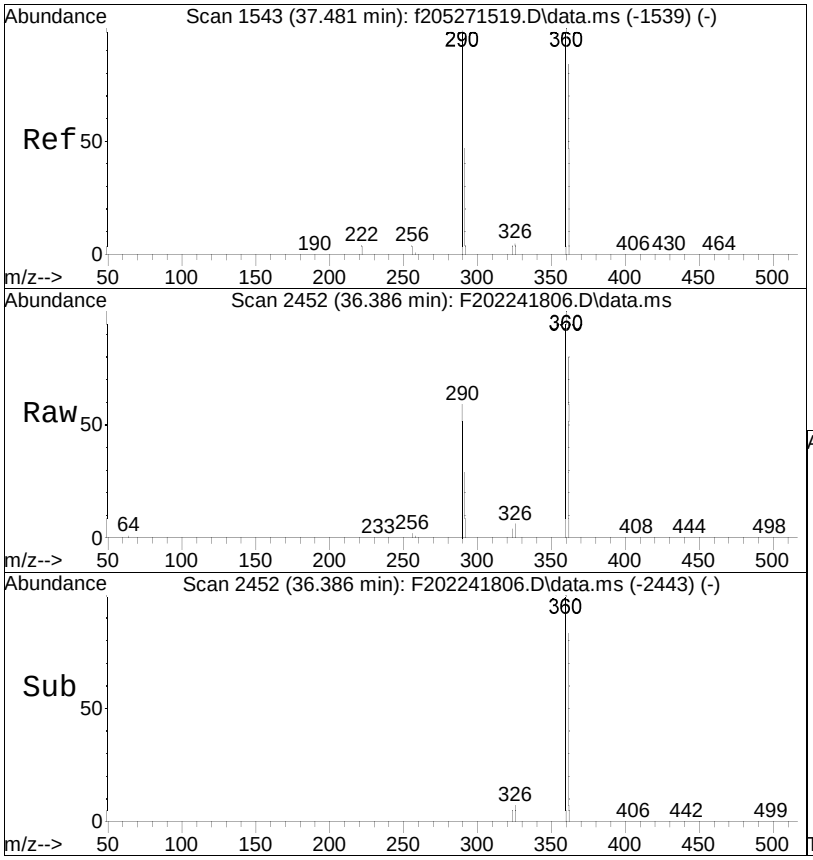


#123
Cl6-BZ#151
Concen: 36.98 ng/mL
RT: 36.254 min Scan# 2444
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 66679

Ion	Ratio	Lower	Upper
360	100		
362	80.0	62.7	94.1

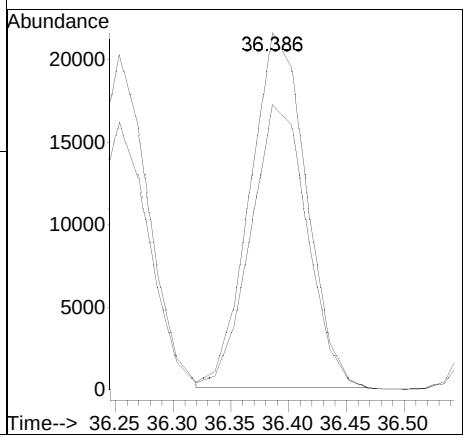


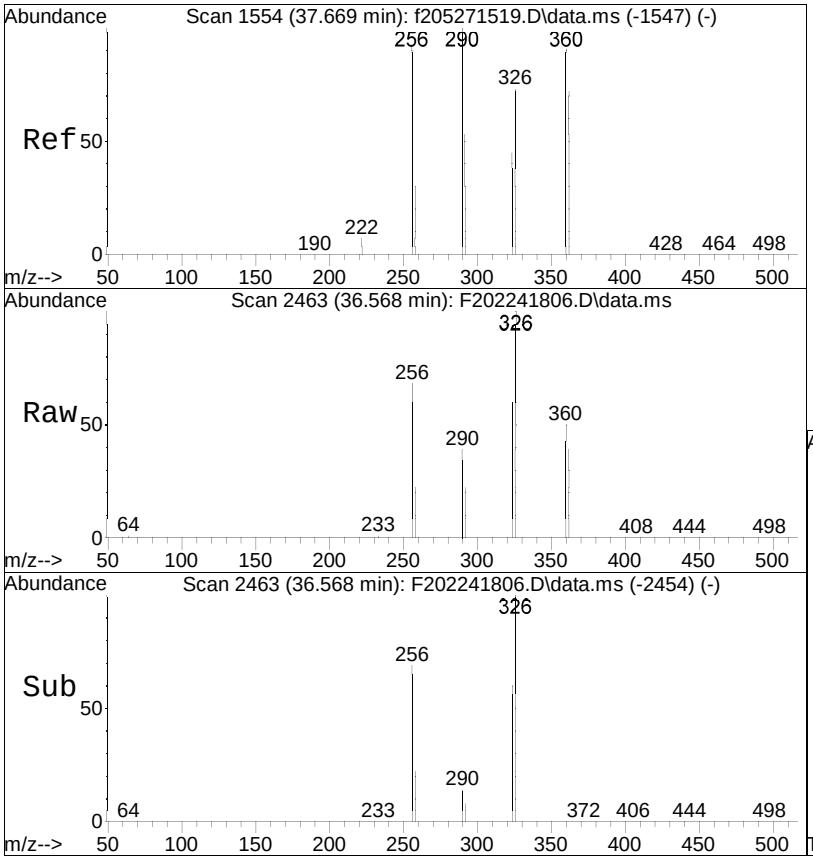


#124
Cl6-BZ#135
Concen: 38.12 ng/mL
RT: 36.386 min Scan# 2452
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 72860

Ion	Ratio	Lower	Upper
360	100		
362	80.3	64.3	96.5

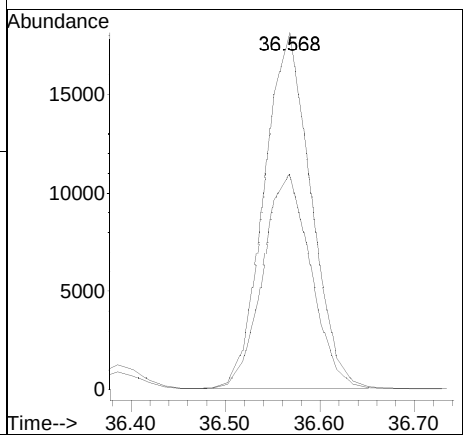


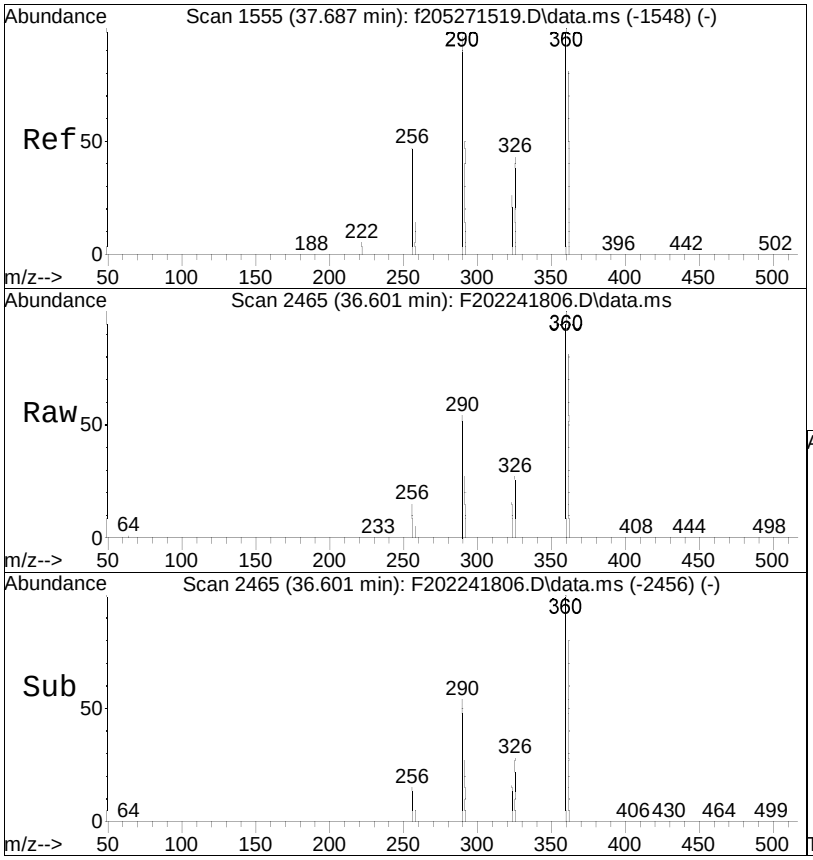


#125
Cl5-BZ#82
Concen: 35.12 ng/mL
RT: 36.568 min Scan# 2463
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 61998

Ion	Ratio	Lower	Upper
326	100		
324	62.0	48.7	73.1

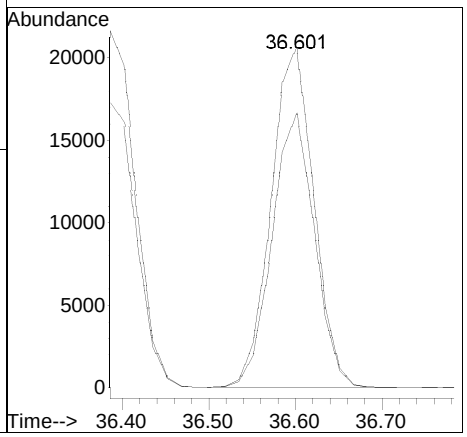


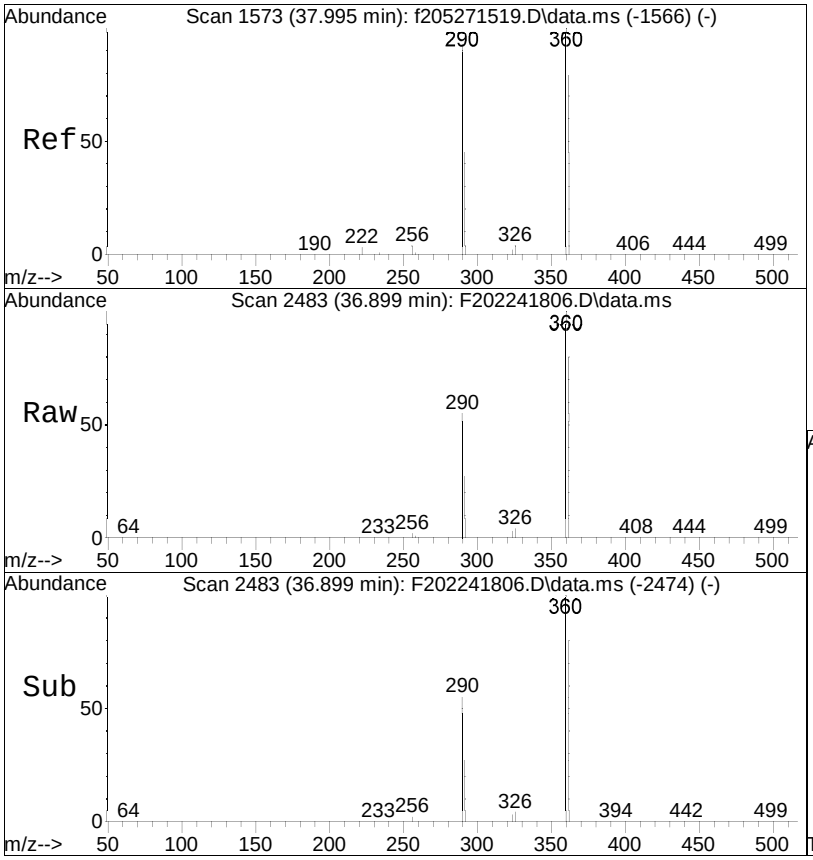


#126
Cl6-BZ#144
Concen: 36.10 ng/mL
RT: 36.601 min Scan# 2465
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 70183

Ion	Ratio	Lower	Upper
360	100		
362	80.1	64.8	97.2

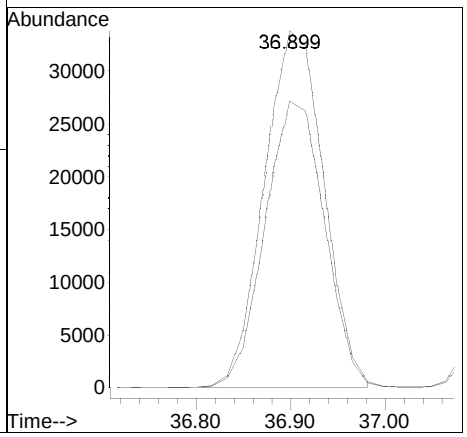


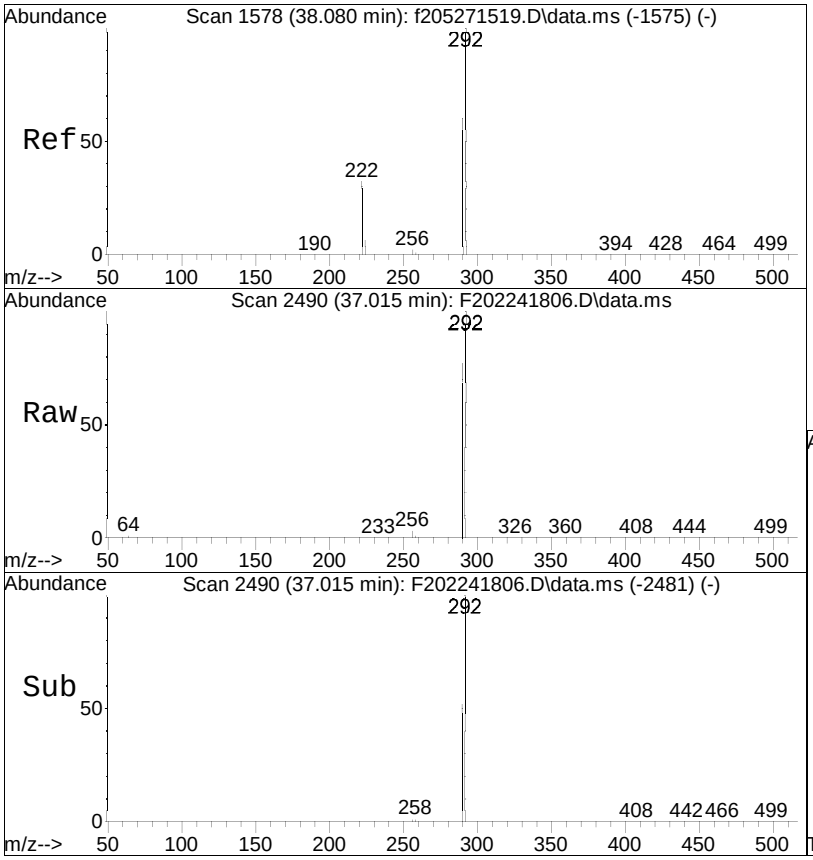


#127
Cl6-BZ#147/#149
Concen: 74.02 ng/mL
RT: 36.899 min Scan# 2483
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 147933

Ion	Ratio	Lower	Upper
360	100		
362	80.1	62.6	94.0

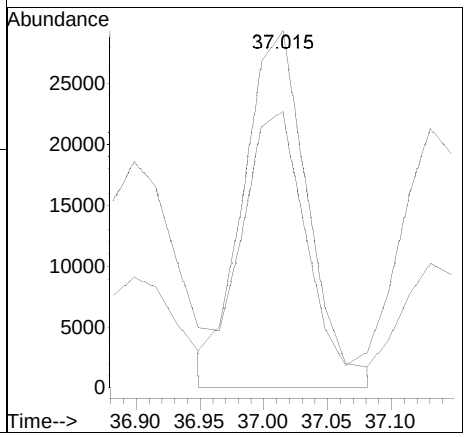


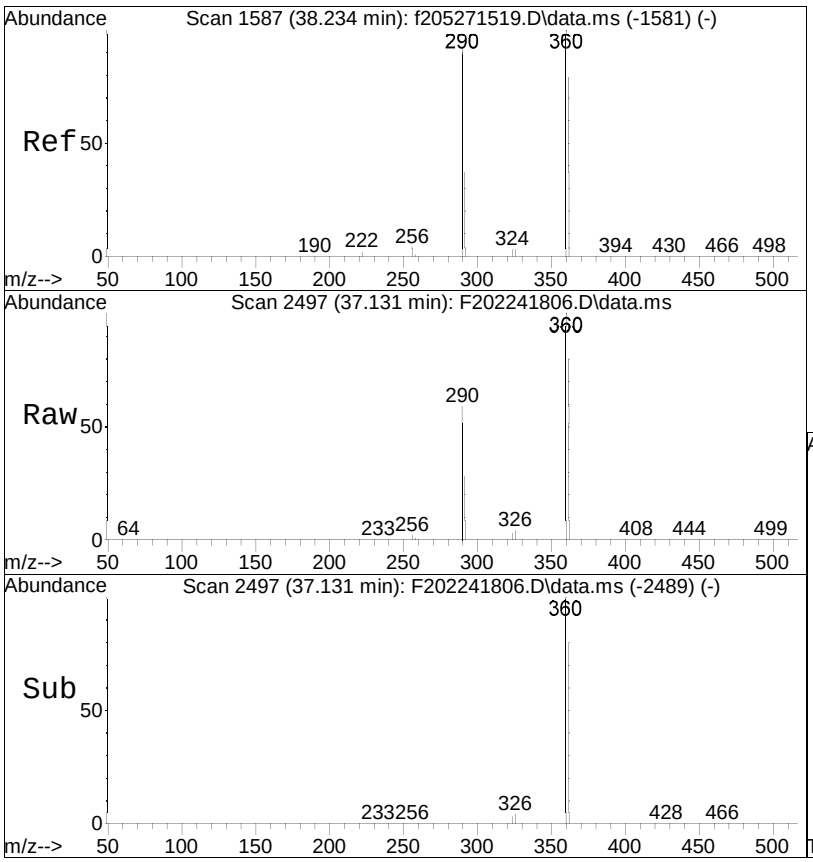


#128
Cl4-BZ#77-RTW
Concen: 39.16 ng/mL M4
RT: 37.015 min Scan# 2490
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:292 Resp: 102337

Ion	Ratio	Lower	Upper
292	100		
290	77.4	62.0	93.0

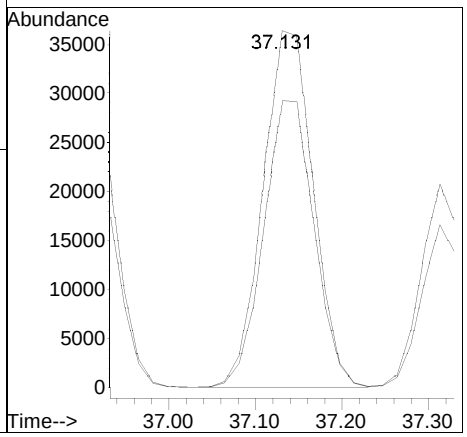


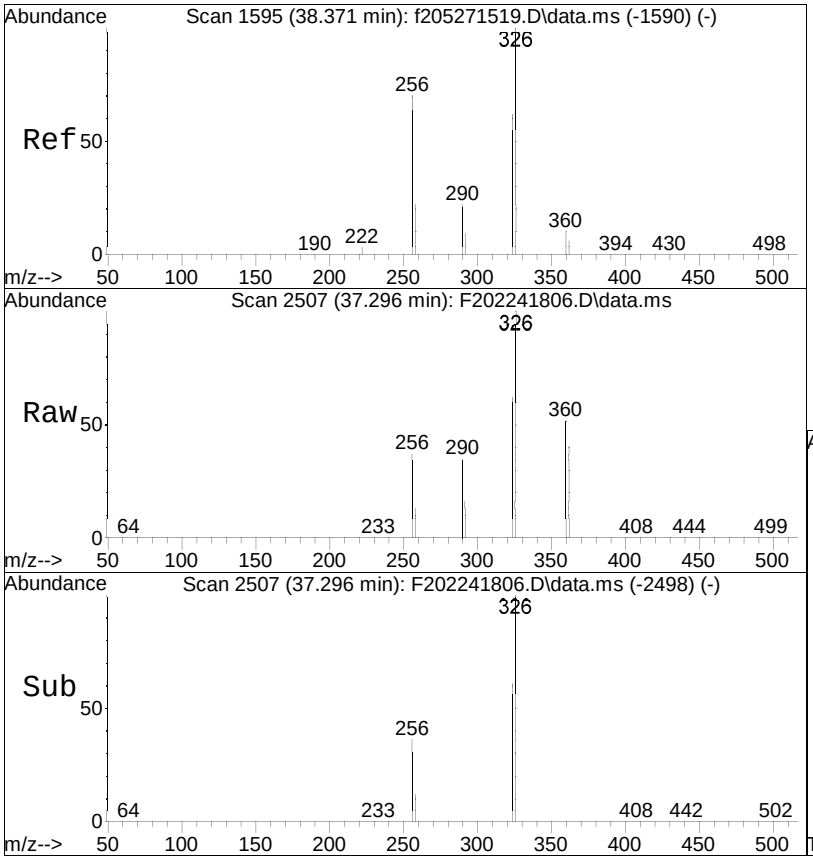


#129
Cl6-BZ#143/#139
Concen: 71.75 ng/mL
RT: 37.131 min Scan# 2497
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 145979

Ion	Ratio	Lower	Upper
360	100		
362	80.4	64.7	97.1

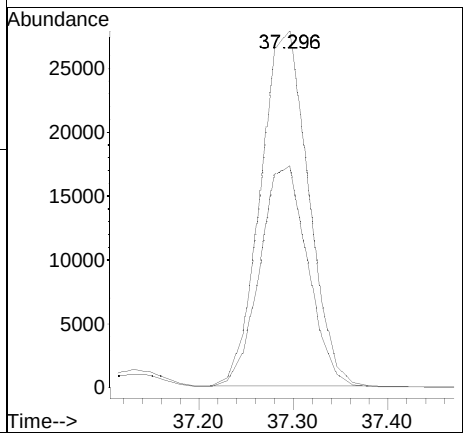


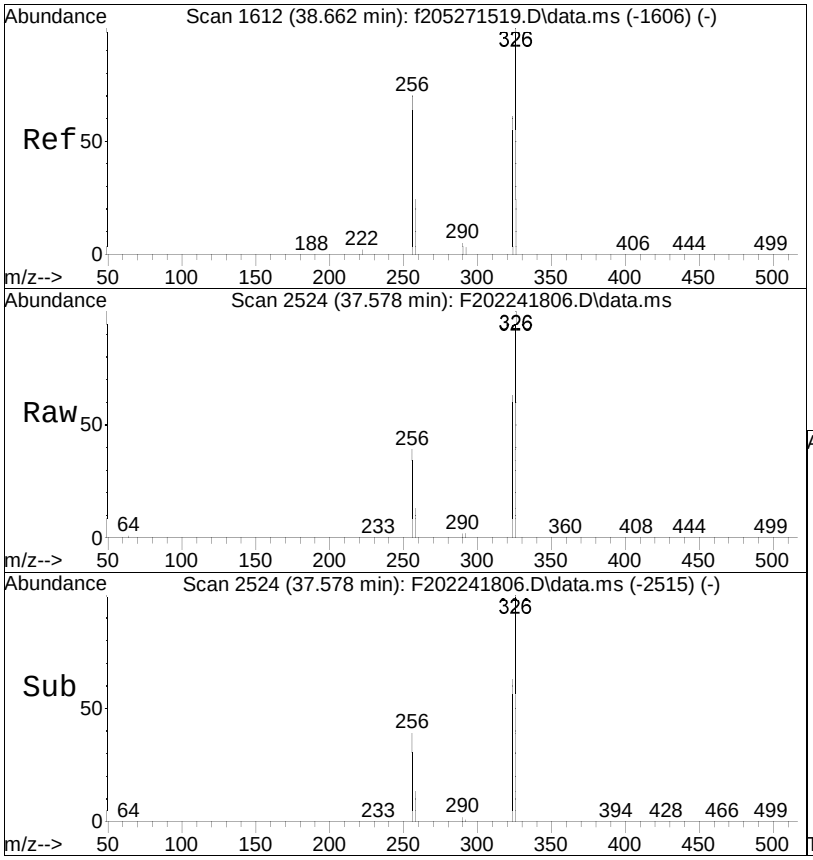


#130
Cl5-BZ#124
Concen: 37.39 ng/mL
RT: 37.296 min Scan# 2507
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 97659

Ion	Ratio	Lower	Upper
326	100		
324	62.2	49.2	73.8

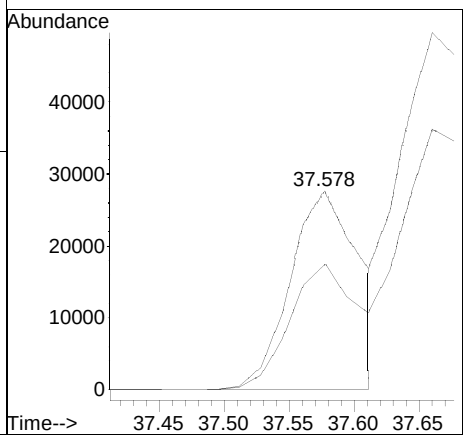


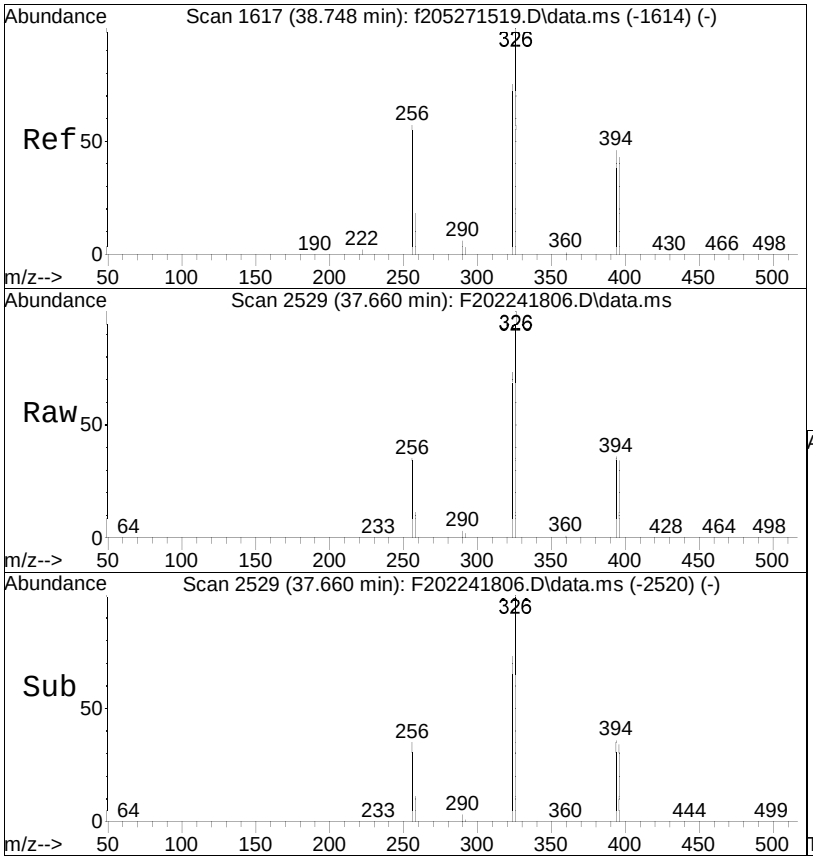


#131
Cl5-BZ#108
Concen: 38.81 ng/mL
RT: 37.578 min Scan# 2524
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 101854

Ion	Ratio	Lower	Upper
326	100		
324	63.2	50.0	75.0

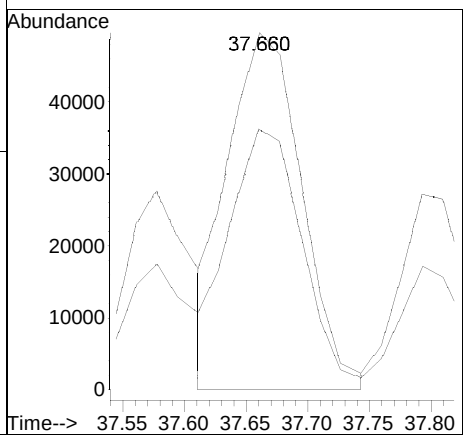


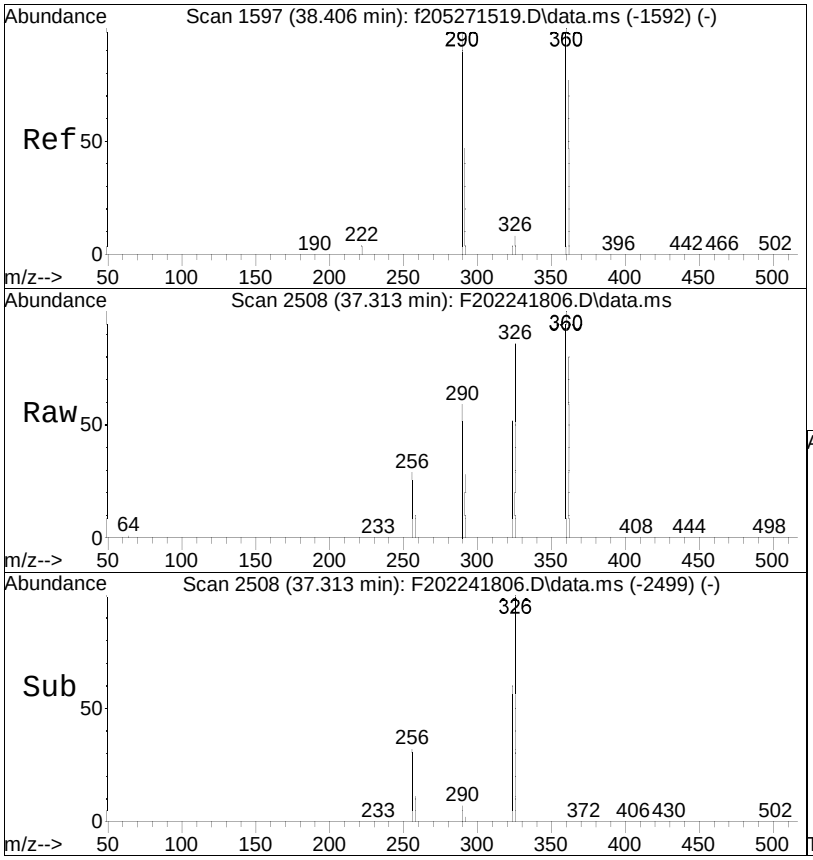


#132
Cl5-BZ#107/#123
Concen: 74.56 ng/mL M4
RT: 37.660 min Scan# 2529
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 207685

Ion	Ratio	Lower	Upper
326	100		
324	65.8	57.6	86.4

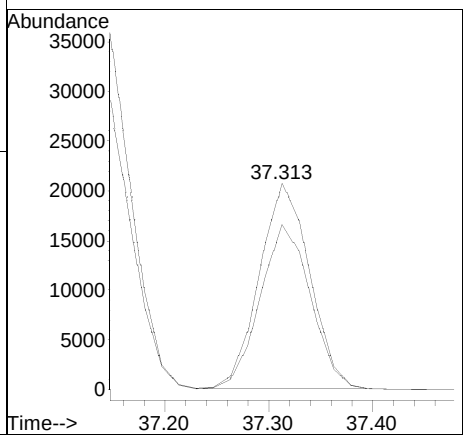


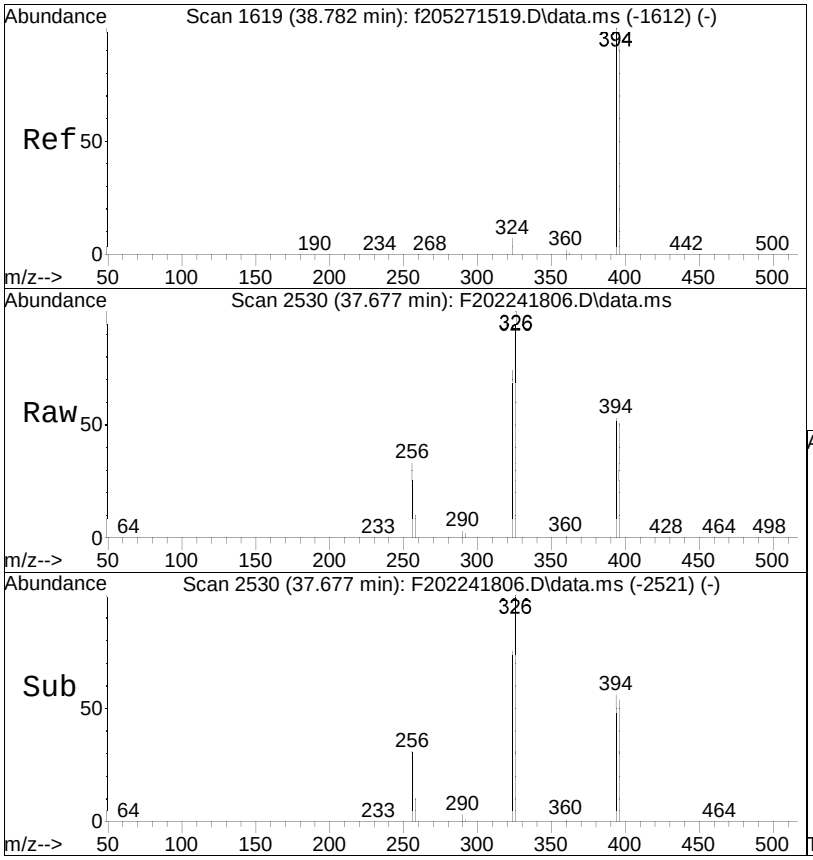


#133
Cl6-BZ#140
Concen: 35.87 ng/mL
RT: 37.313 min Scan# 2508
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 69198

Ion	Ratio	Lower	Upper
360	100		
362	80.2	64.8	97.2

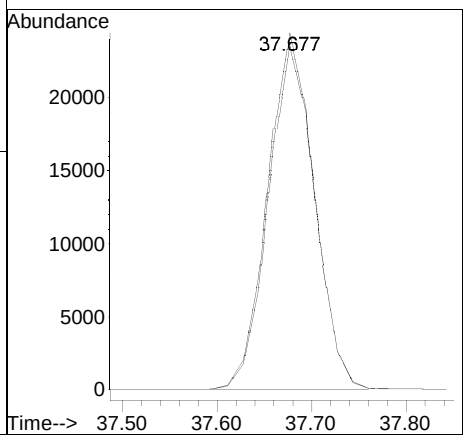


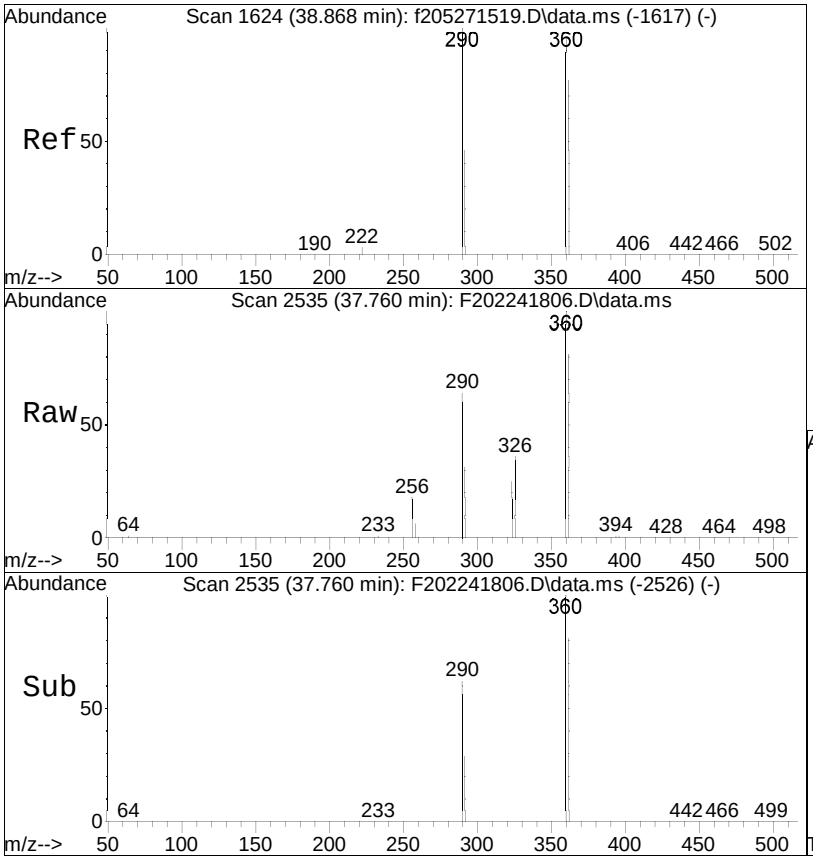


#134
Cl7-BZ#188-Cal/RTW
Concen: 35.09 ng/mL
RT: 37.677 min Scan# 2530
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 83031

Ion	Ratio	Lower	Upper
394	100		
396	96.1	76.3	114.5

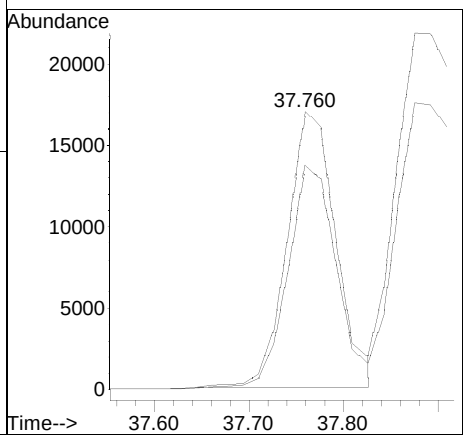


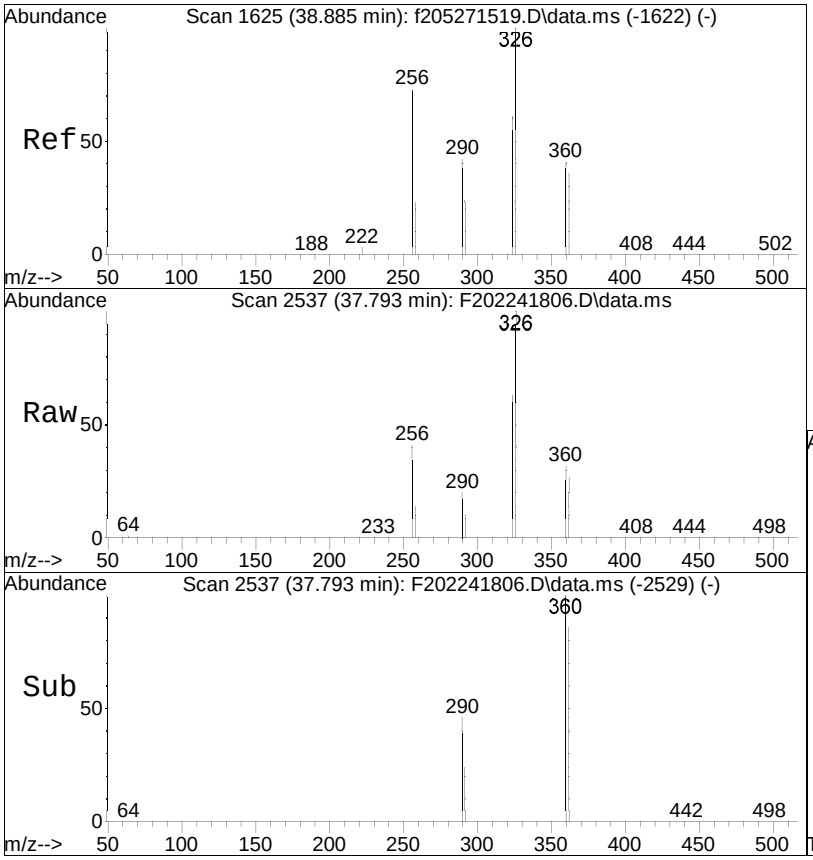


#137
Cl6-BZ#134
Concen: 36.53 ng/mL
RT: 37.760 min Scan# 2535
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 60735

Ion	Ratio	Lower	Upper
360	100		
362	80.5	61.2	91.8

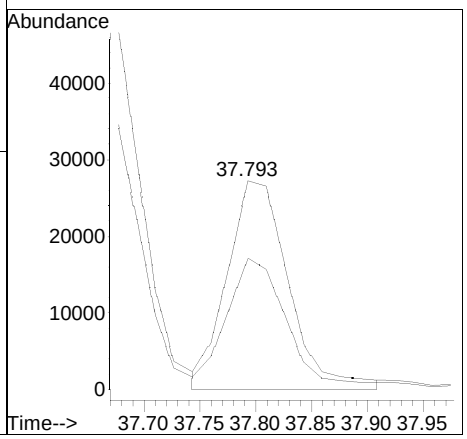


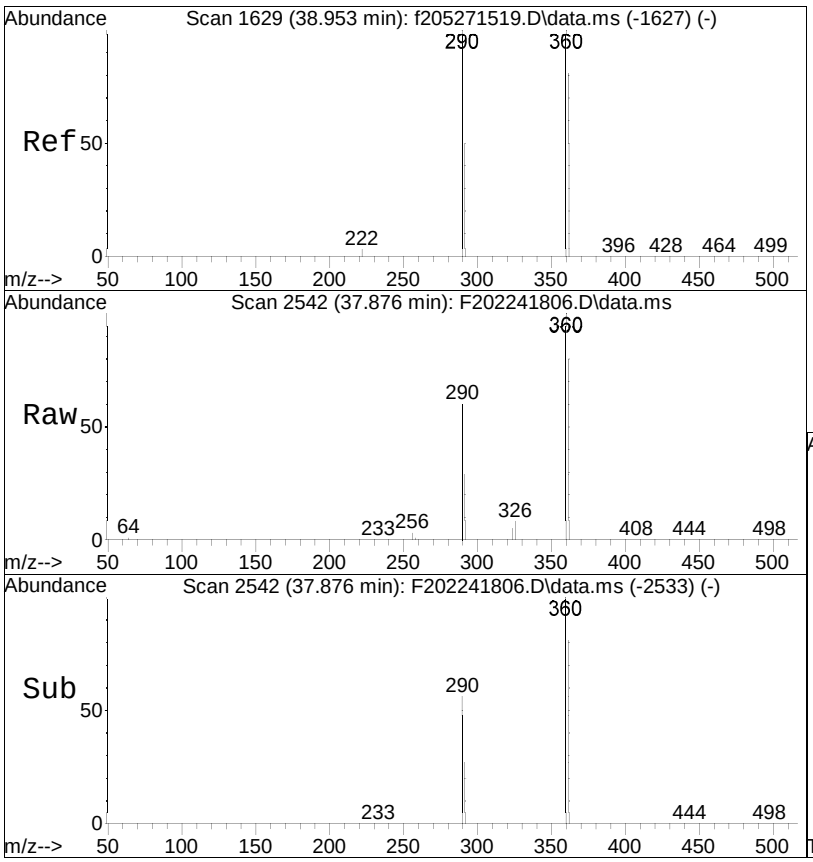


#138
Cl5-BZ#106
Concen: 37.40 ng/mL M4
RT: 37.793 min Scan# 2537
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 103746

Ion	Ratio	Lower	Upper
326	100		
324	53.3	49.8	74.8

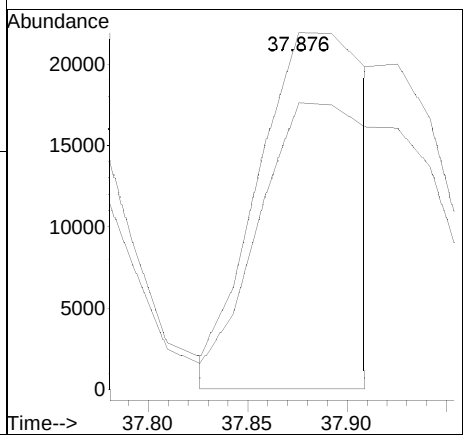


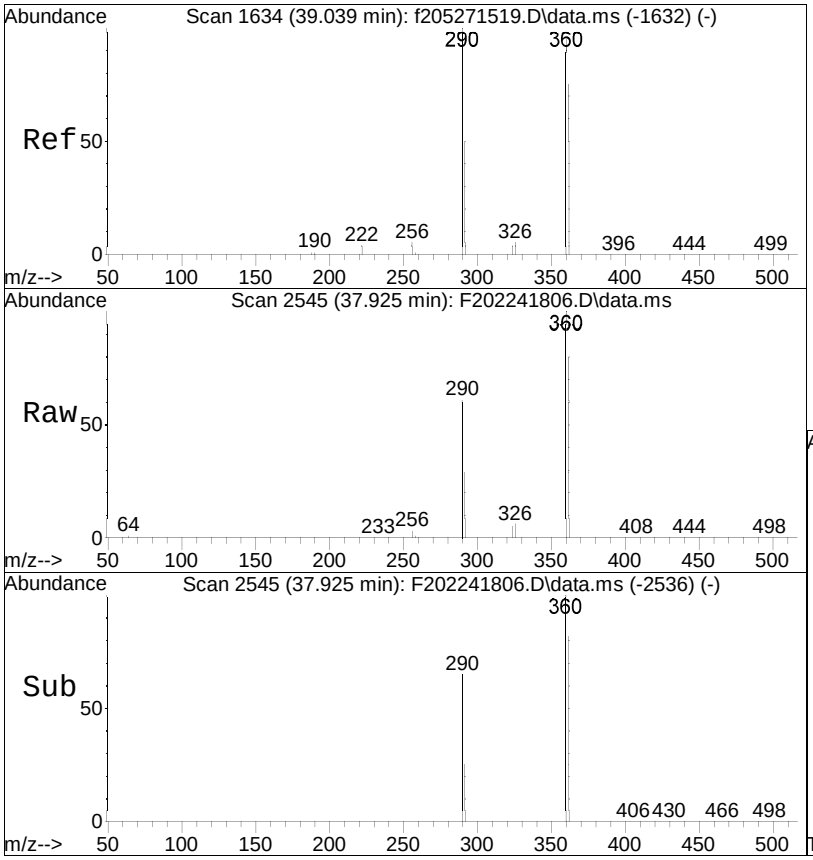


#139
Cl6-BZ#133
Concen: 39.11 ng/mL M3
RT: 37.876 min Scan# 2542
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 84016

Ion	Ratio	Lower	Upper
360	100		
362	108.7	62.5	93.7#

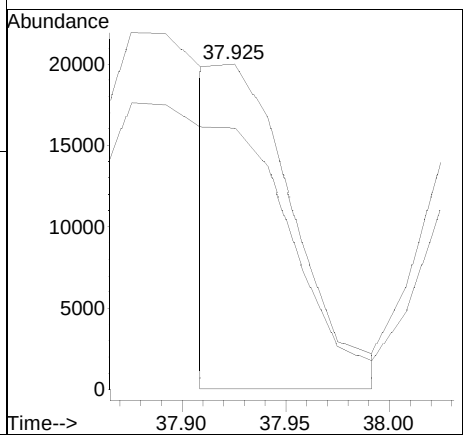


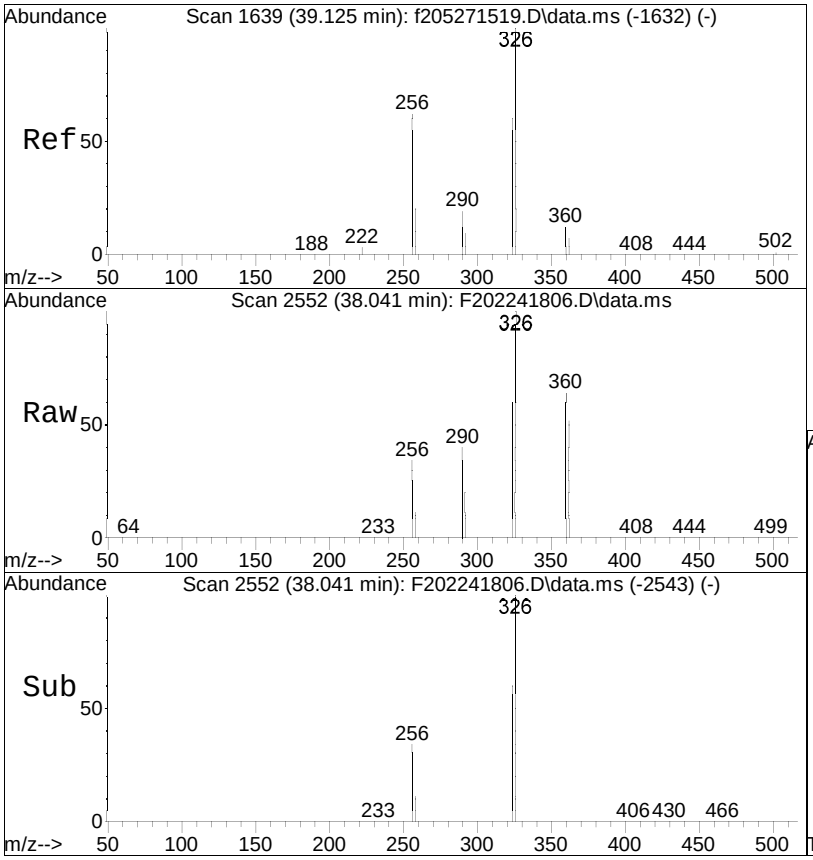


#140
Cl6-BZ#142
Concen: 32.06 ng/mL M3
RT: 37.925 min Scan# 2545
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 49950

Ion	Ratio	Lower	Upper
360	100		
362	185.3	63.2	94.8#

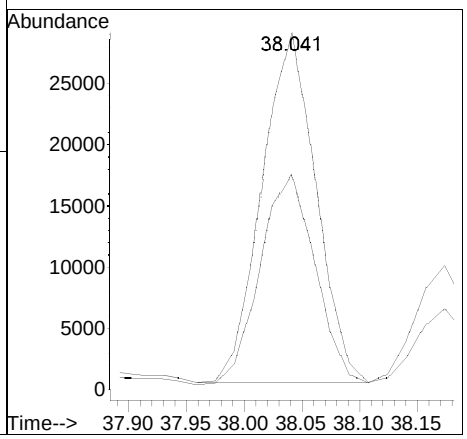


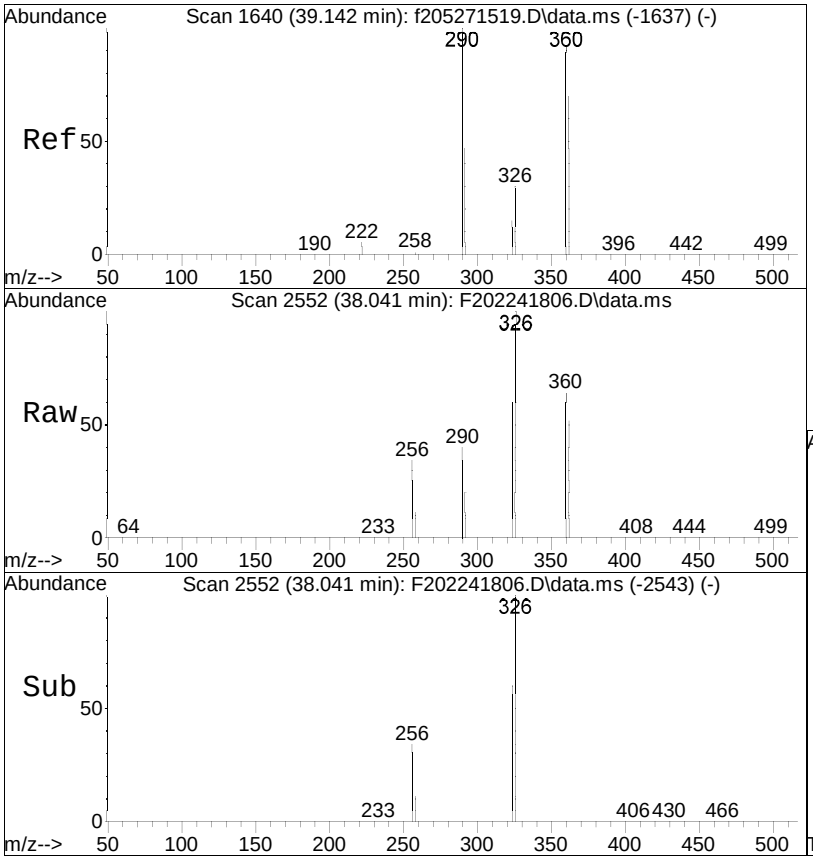


#141
Cl5-BZ#118
Concen: 37.06 ng/mL
RT: 38.041 min Scan# 2552
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 92480

Ion	Ratio	Lower	Upper
326	100		
324	61.6	51.4	77.0

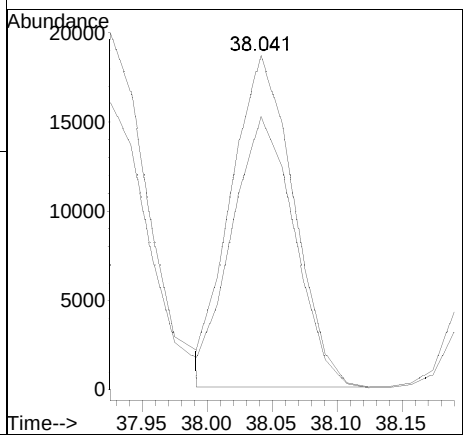


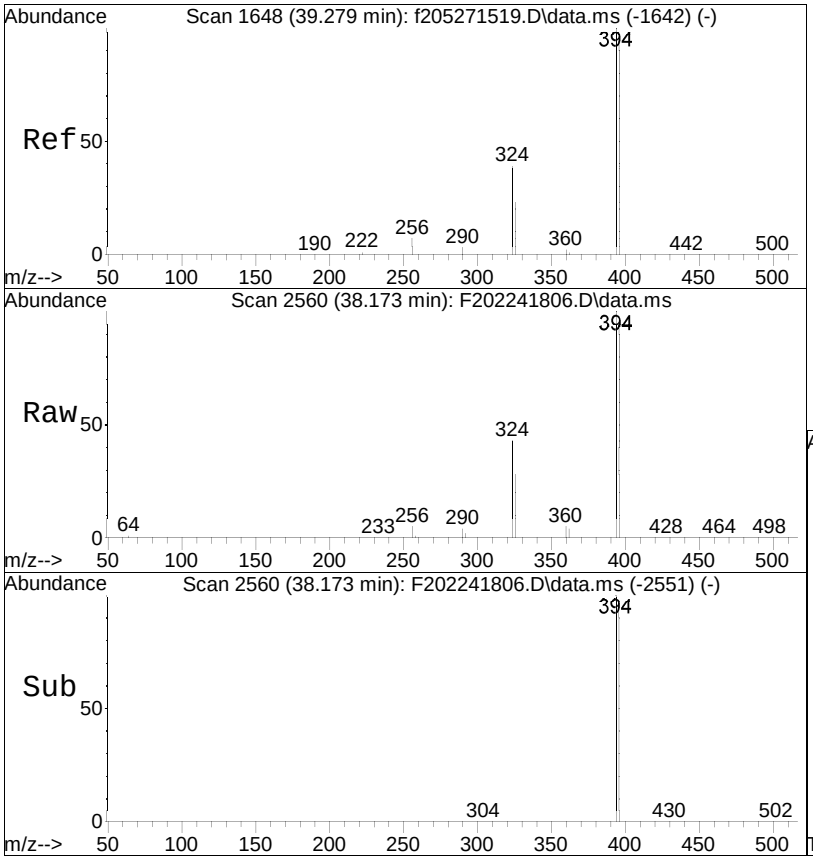


#142
Cl6-BZ#131
Concen: 37.64 ng/mL
RT: 38.041 min Scan# 2552
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 61798

Ion	Ratio	Lower	Upper
360	100		
362	81.9	64.2	96.4

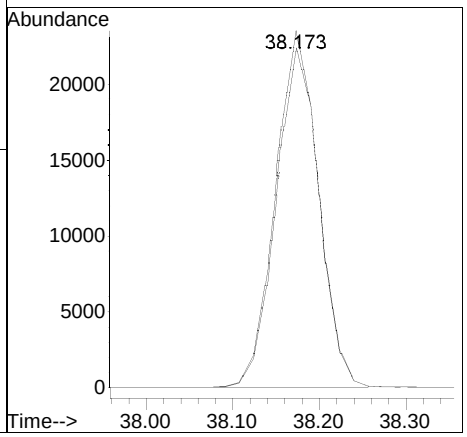


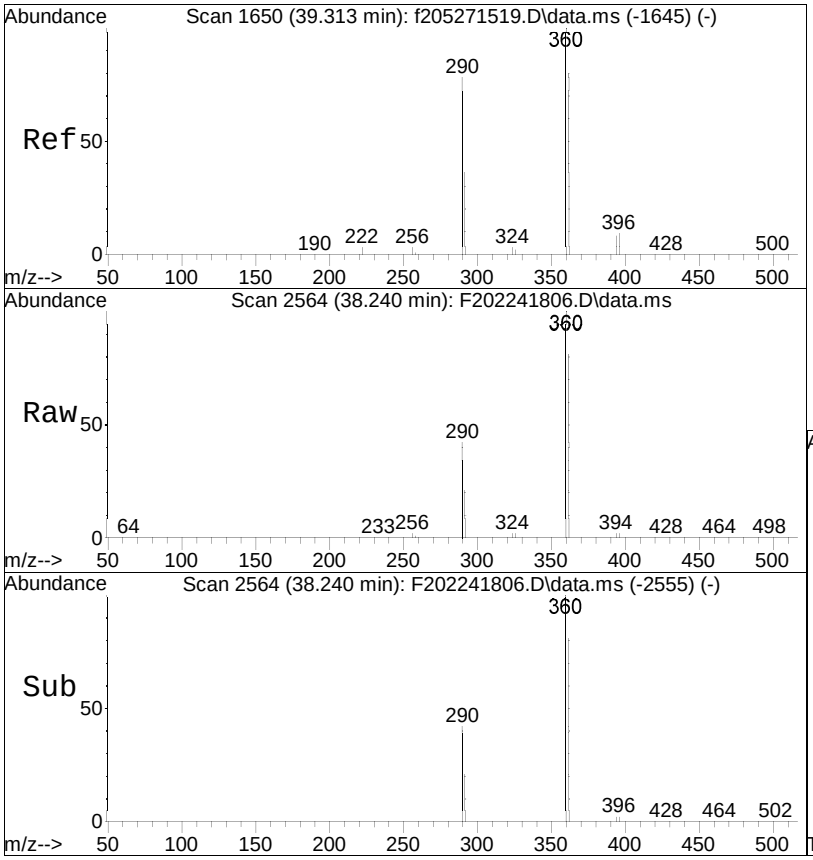


#143
Cl7-BZ#184
Concen: 34.86 ng/mL
RT: 38.173 min Scan# 2560
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 80115

Ion	Ratio	Lower	Upper
394	100		
396	96.3	75.3	112.9

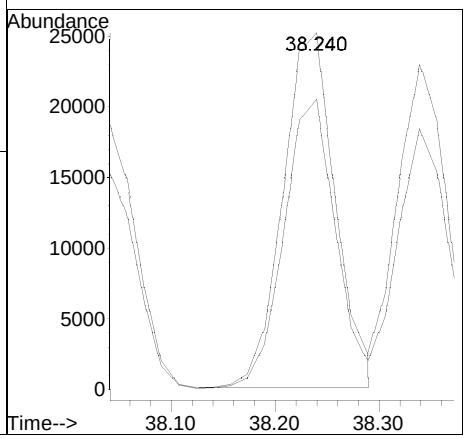


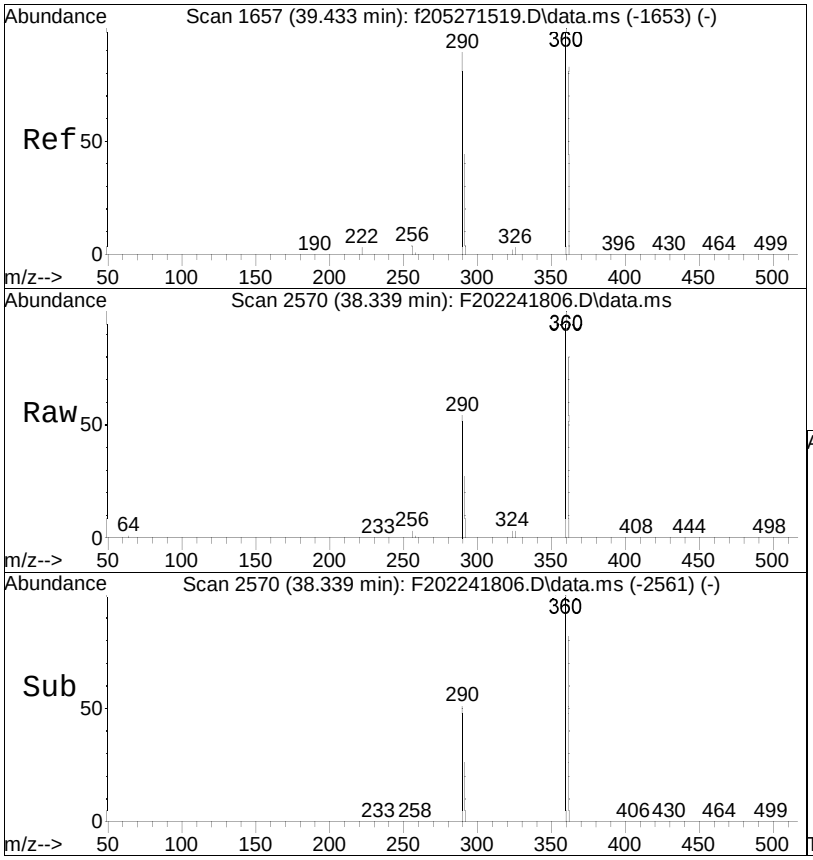


#144
Cl6-BZ#165
Concen: 37.18 ng/mL
RT: 38.240 min Scan# 2564
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 88182

Ion	Ratio	Lower	Upper
360	100		
362	80.8	65.8	98.8

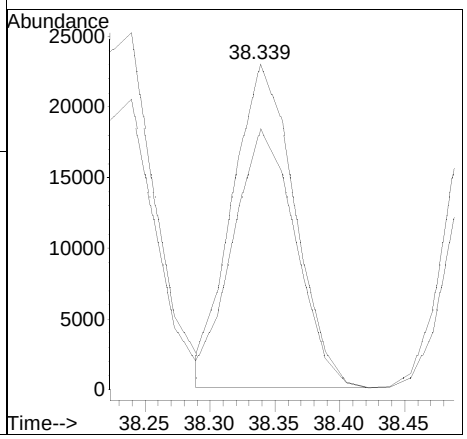


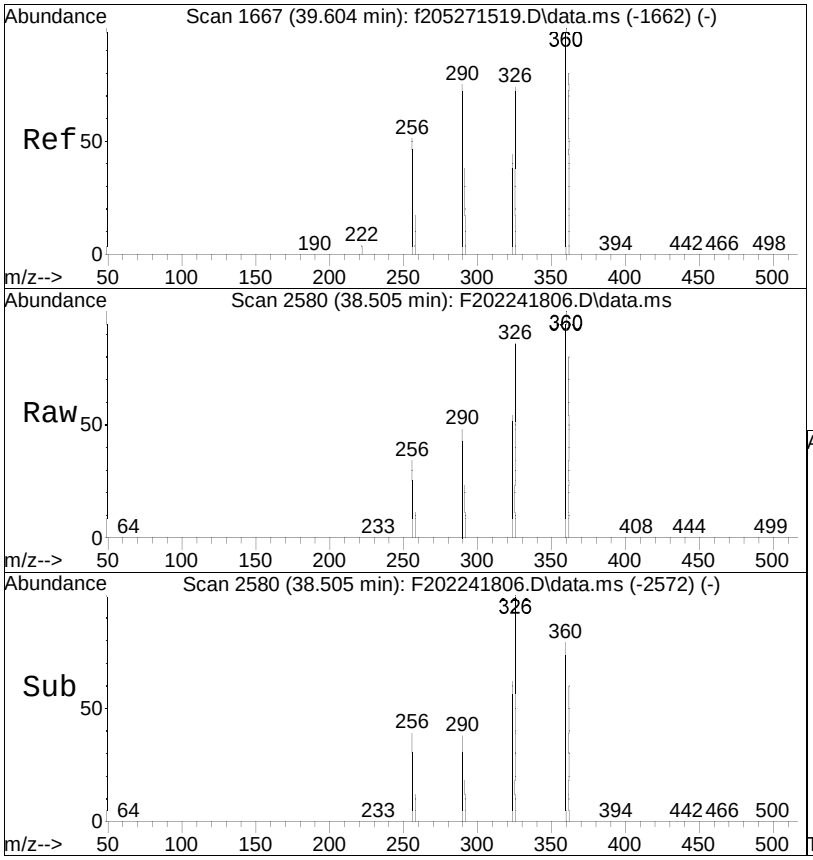


#145
Cl6-BZ#146
Concen: 37.62 ng/mL
RT: 38.339 min Scan# 2570
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 75928

Ion	Ratio	Lower	Upper
360	100		
362	80.5	63.4	95.0

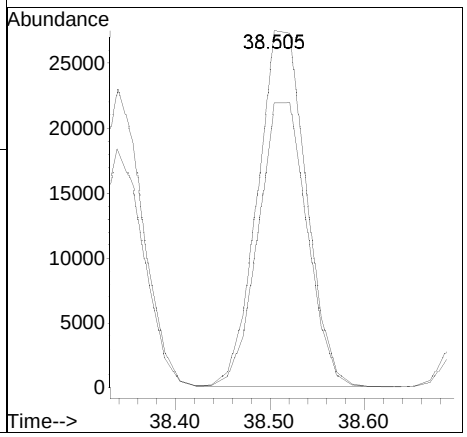


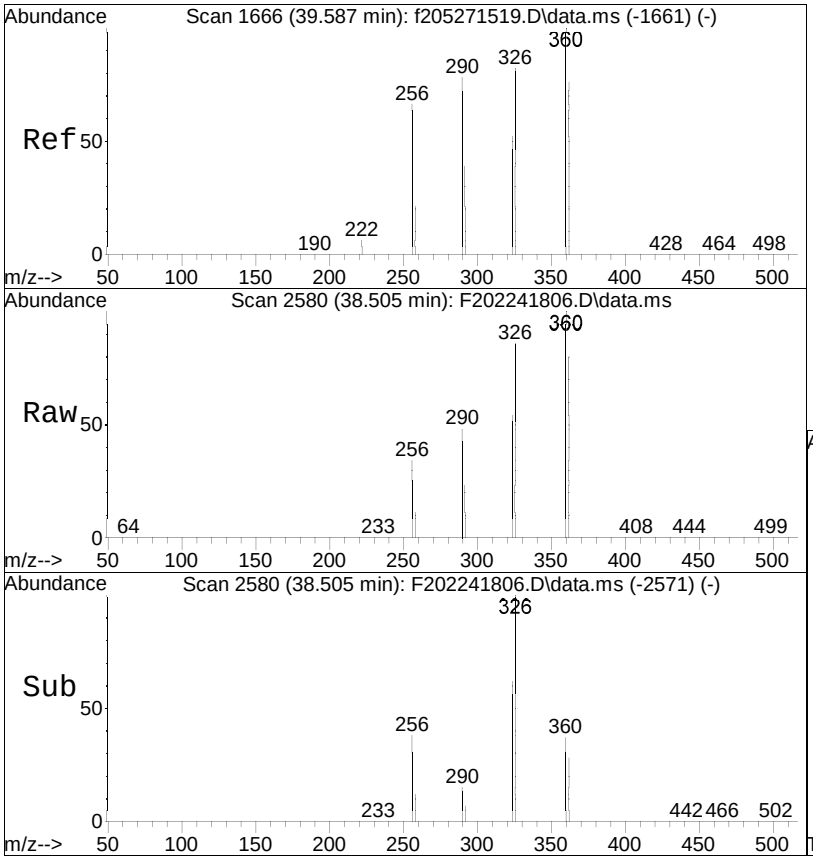


#146
Cl6-BZ#161
Concen: 36.96 ng/mL
RT: 38.505 min Scan# 2580
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 98174

Ion	Ratio	Lower	Upper
360	100		
362	80.0	64.0	96.0

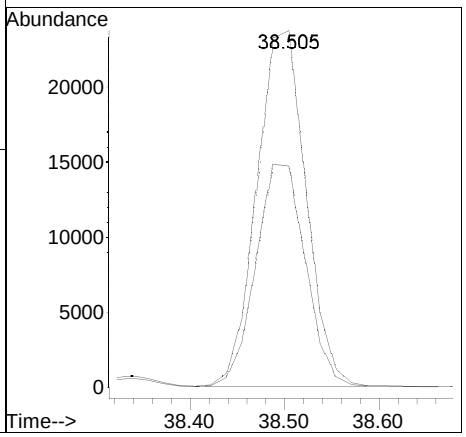


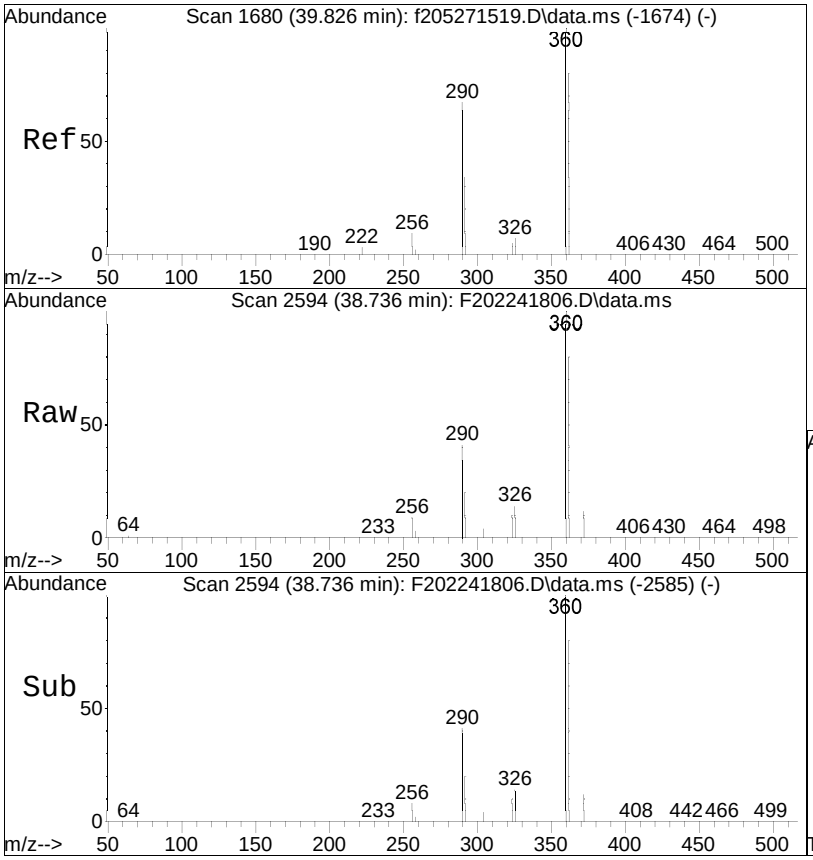


#147
Cl5-BZ#122
Concen: 37.31 ng/mL
RT: 38.505 min Scan# 2580
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 85126

Ion	Ratio	Lower	Upper
326	100		
324	63.4	50.1	75.1

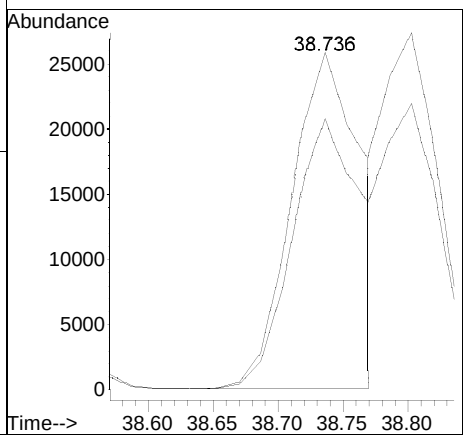


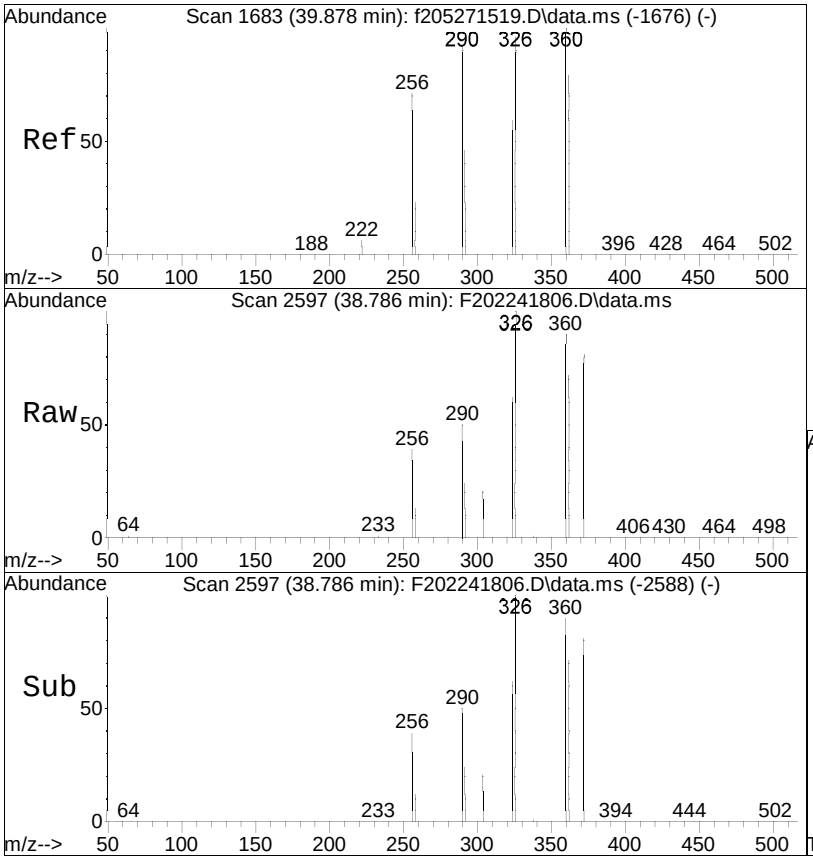


#148
Cl6-BZ#168
Concen: 38.65 ng/mL
RT: 38.736 min Scan# 2594
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 96529

Ion	Ratio	Lower	Upper
360	100		
362	79.6	64.2	96.4

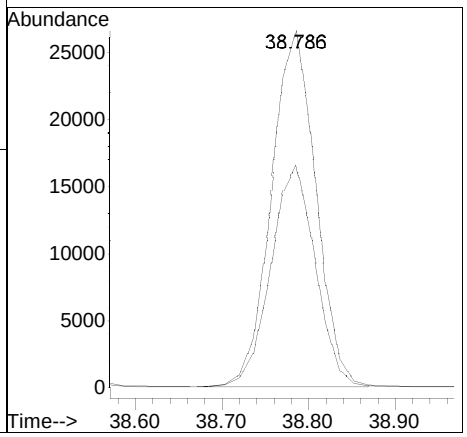


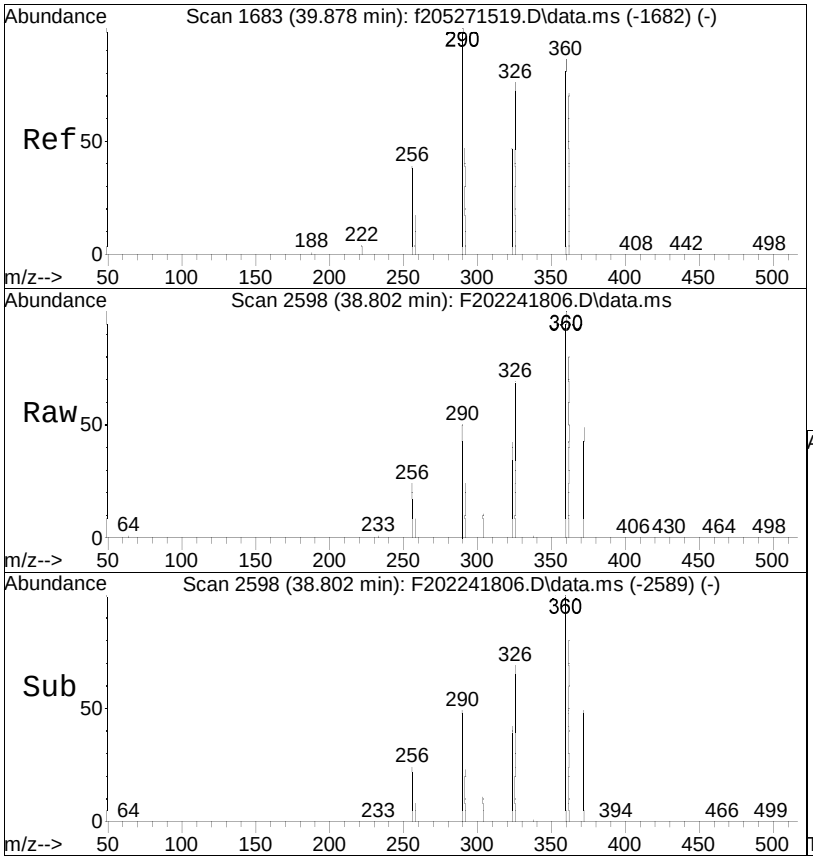


#149
Cl5-BZ#114
Concen: 36.30 ng/mL
RT: 38.786 min Scan# 2597
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 94356

Ion	Ratio	Lower	Upper
326	100		
324	62.4	50.4	75.6

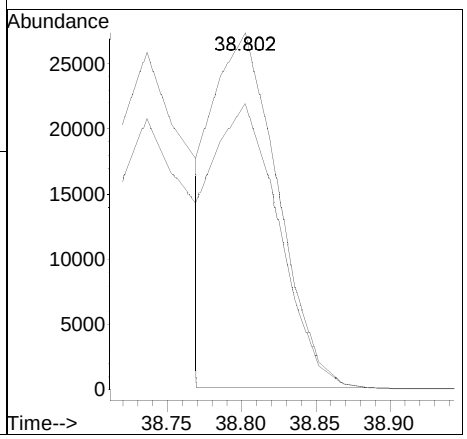


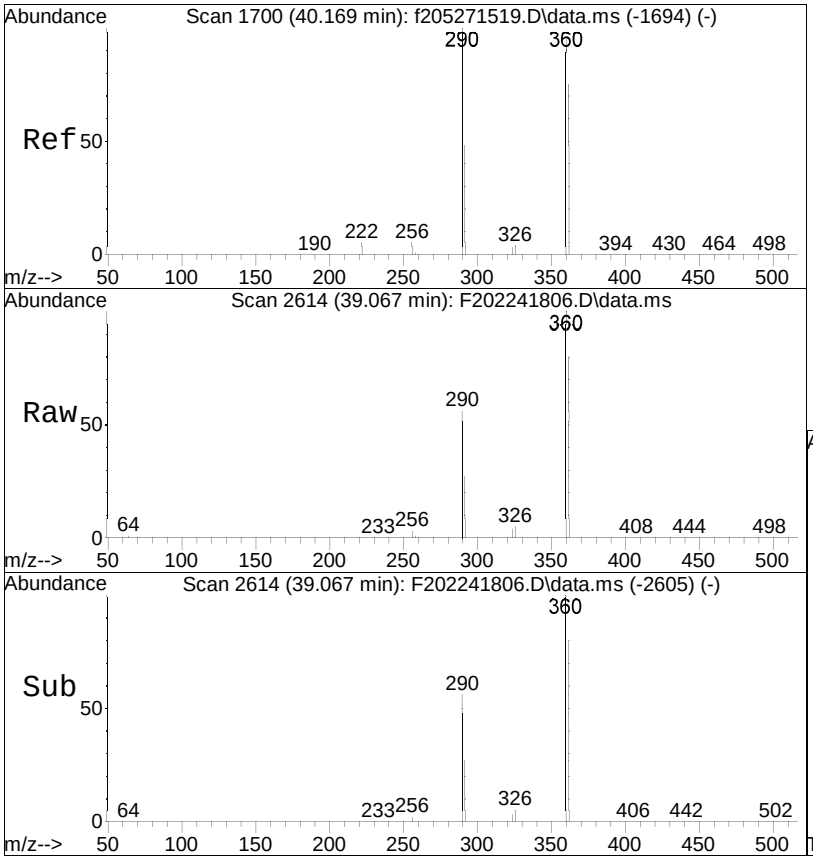


#150
Cl6-BZ#153
Concen: 34.63 ng/mL
RT: 38.802 min Scan# 2598
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 79663

Ion	Ratio	Lower	Upper
360	100		
362	81.3	63.0	94.6

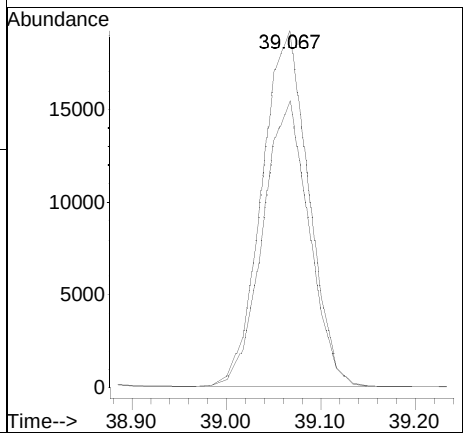


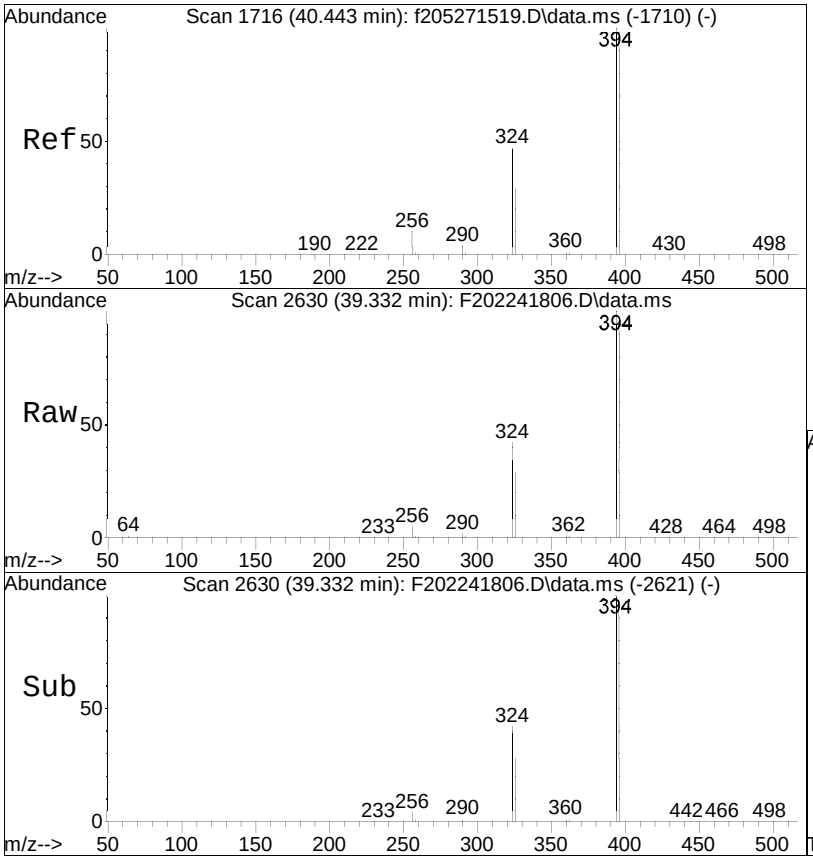


#152
Cl6-BZ#132
Concen: 35.48 ng/mL
RT: 39.067 min Scan# 2614
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 65897

Ion	Ratio	Lower	Upper
360	100		
362	79.5	65.2	97.8

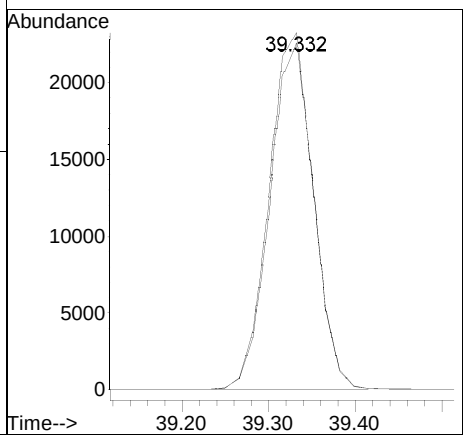


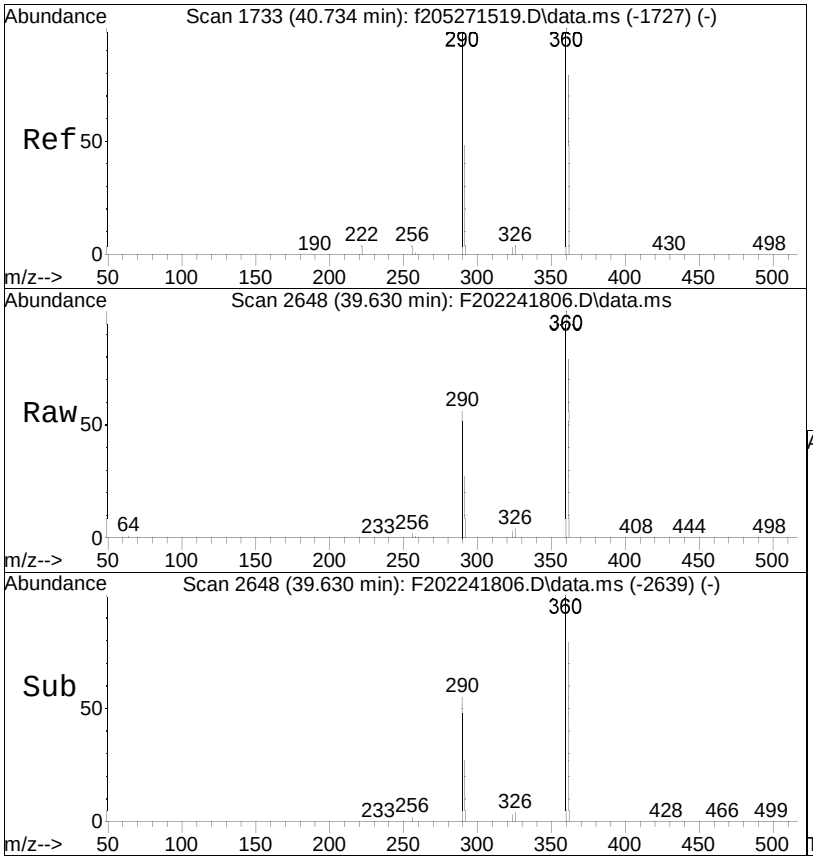


#153
Cl7-BZ#179
Concen: 36.29 ng/mL
RT: 39.332 min Scan# 2630
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 81882

Ion	Ratio	Lower	Upper
394	100		
396	96.4	76.2	114.4

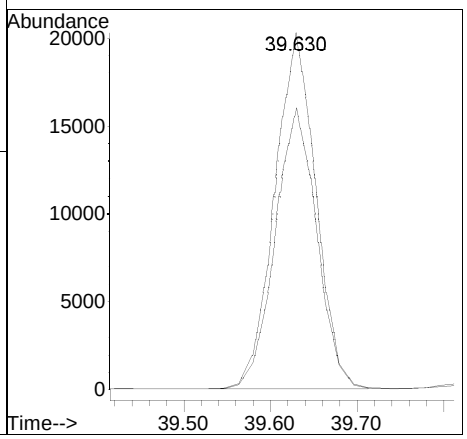


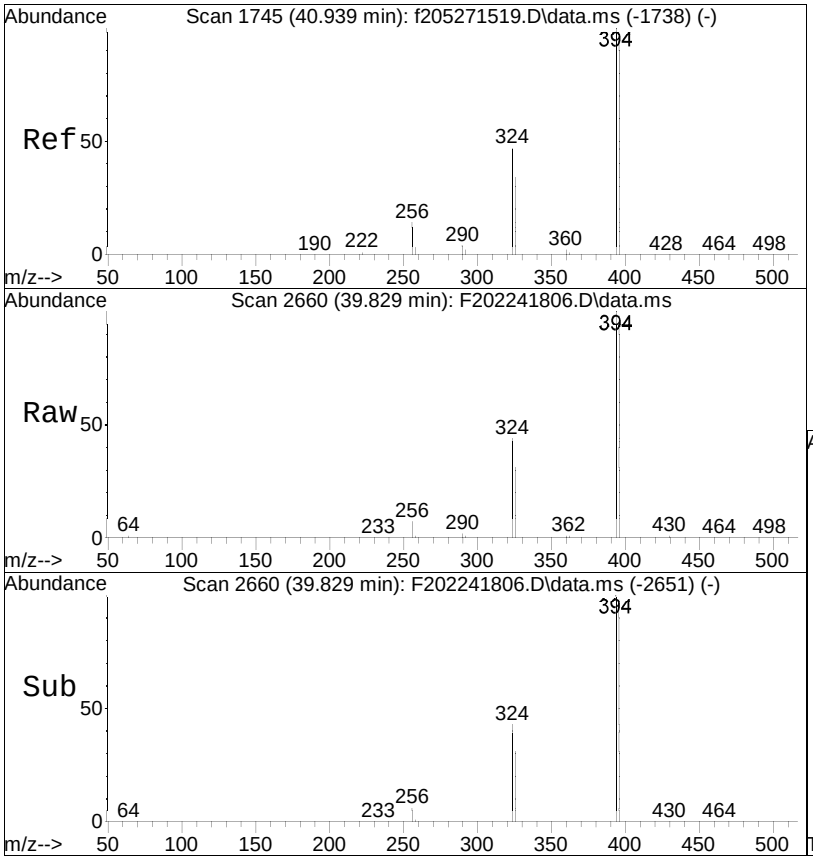


#154
Cl6-BZ#141
Concen: 39.84 ng/mL
RT: 39.630 min Scan# 2648
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 66339

Ion	Ratio	Lower	Upper
360	100		
362	79.9	64.1	96.1

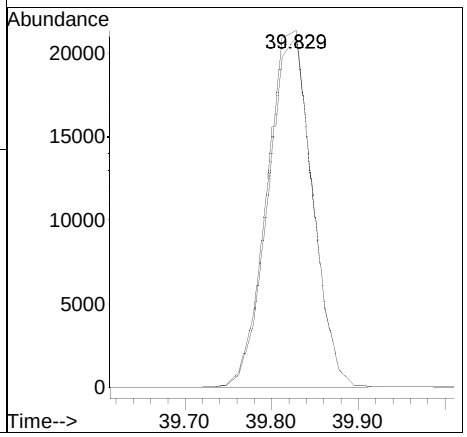


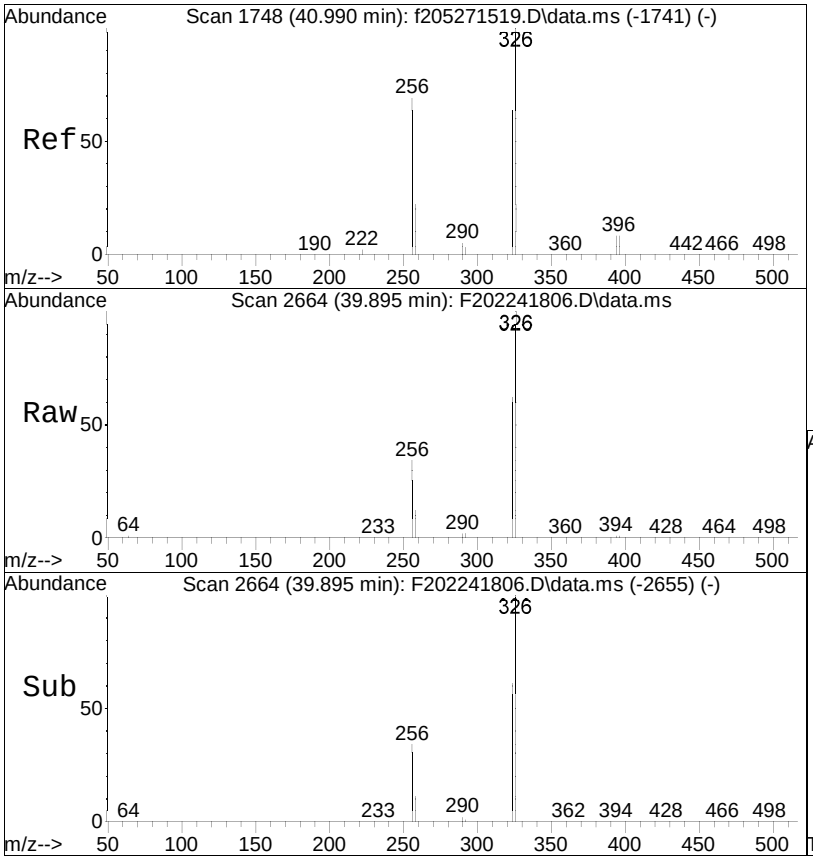


#155
Cl7-BZ#176
Concen: 36.15 ng/mL
RT: 39.829 min Scan# 2660
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 77304

Ion	Ratio	Lower	Upper
394	100		
396	96.0	77.4	116.0

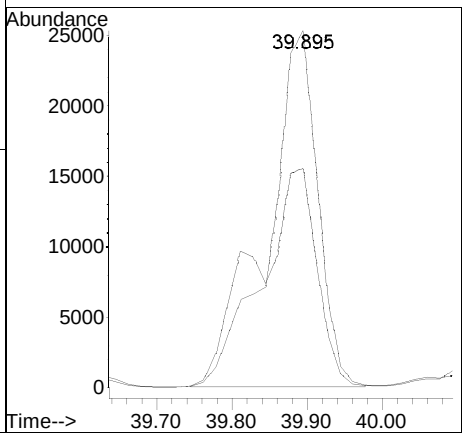


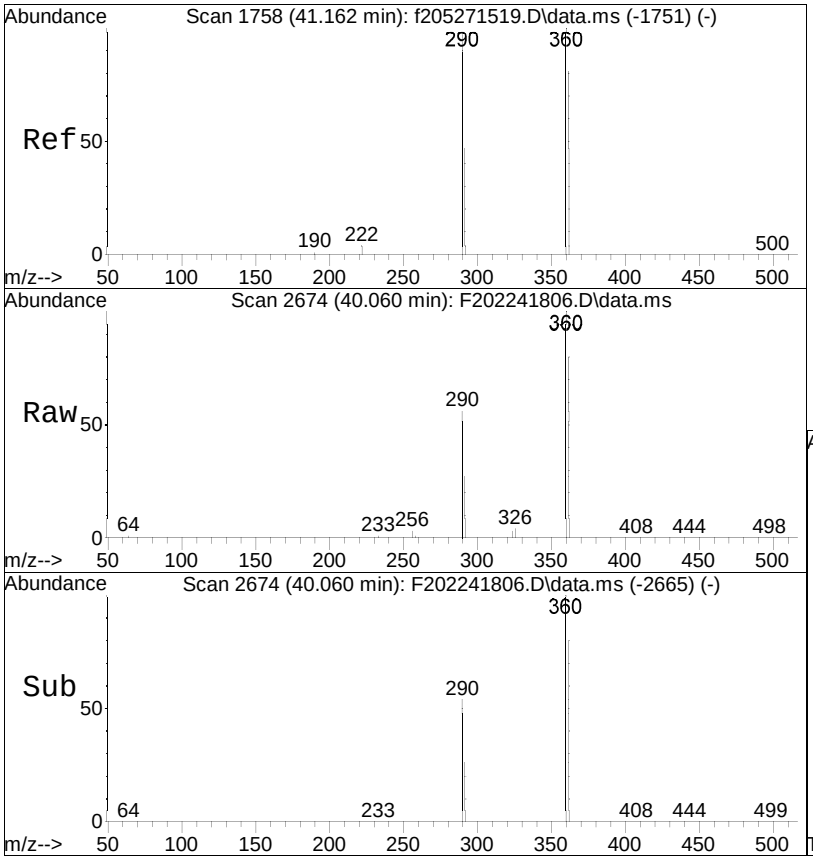


#156
Cl5-BZ#105
Concen: 38.06 ng/mL M4
RT: 39.895 min Scan# 2664
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 110489

Ion	Ratio	Lower	Upper
326	100		
324	76.7	49.0	73.4#

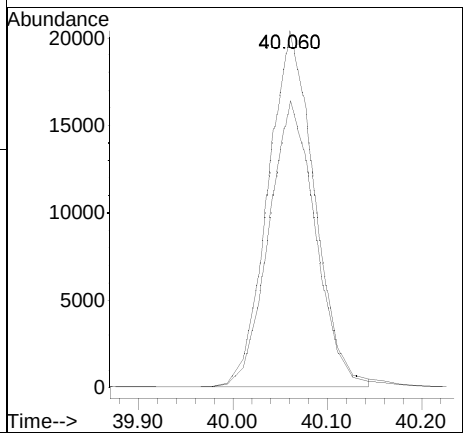


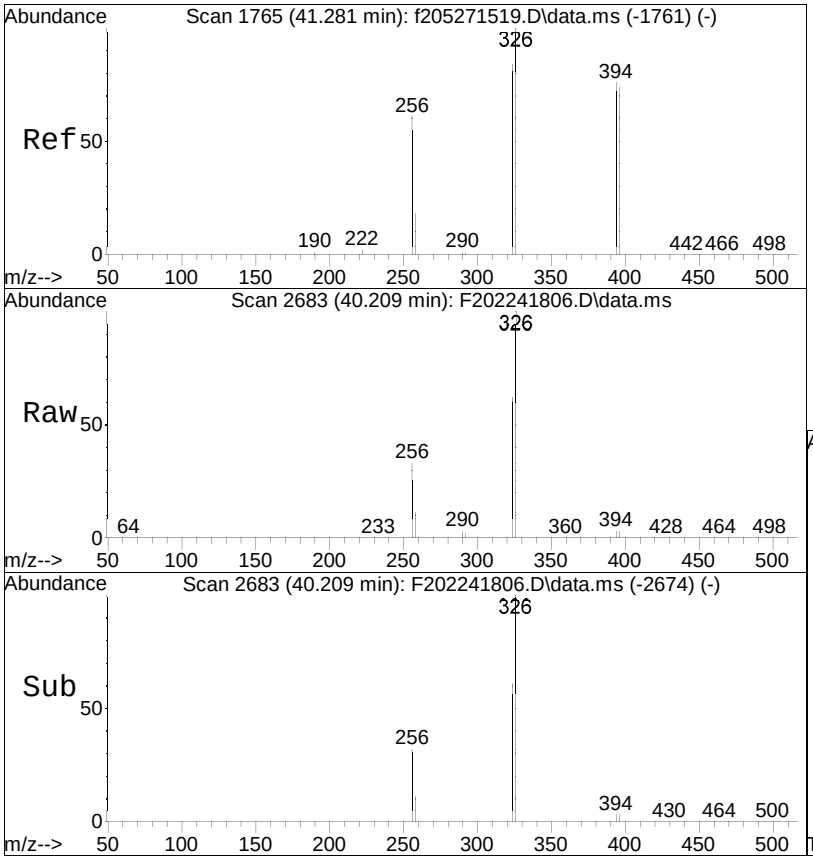


#157
Cl6-BZ#137
Concen: 37.96 ng/mL
RT: 40.060 min Scan# 2674
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 69266

Ion	Ratio	Lower	Upper
360	100		
362	80.5	65.7	98.5

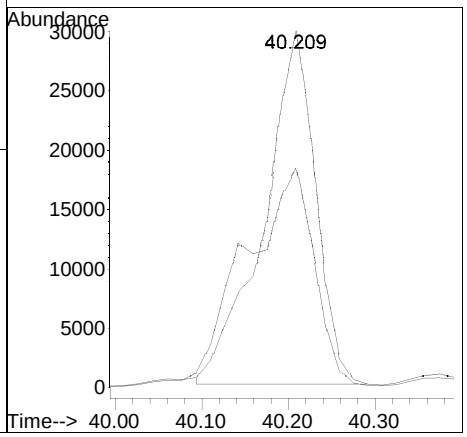


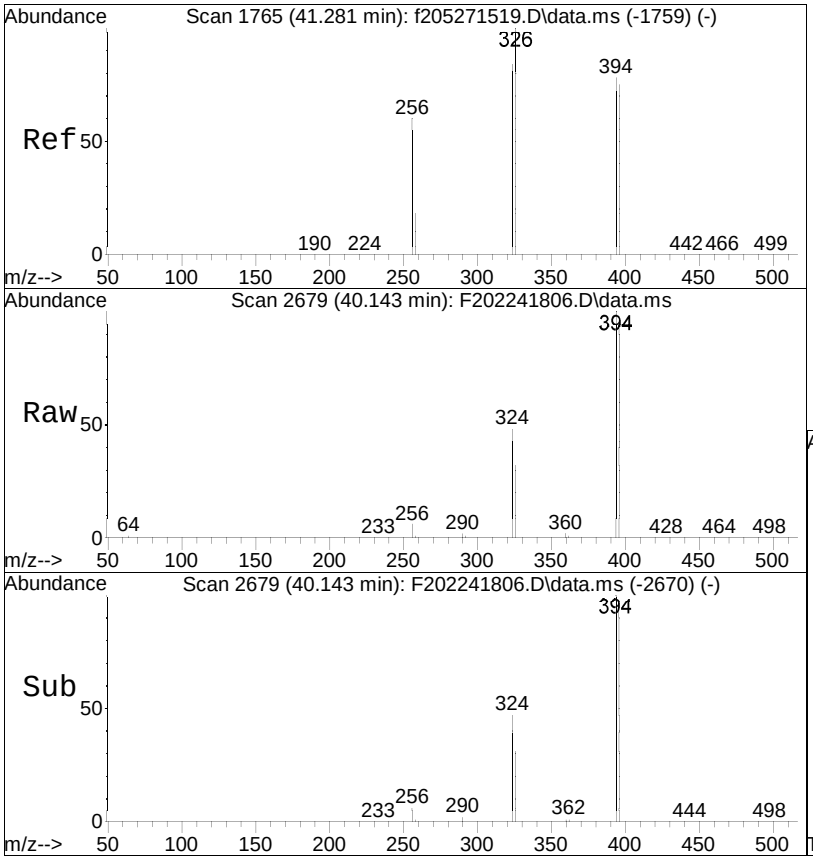


#158
Cl5-BZ#127
Concen: 37.94 ng/mL
RT: 40.209 min Scan# 2683
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 122830

Ion	Ratio	Lower	Upper
326	100		
324	80.2	49.2	73.8#

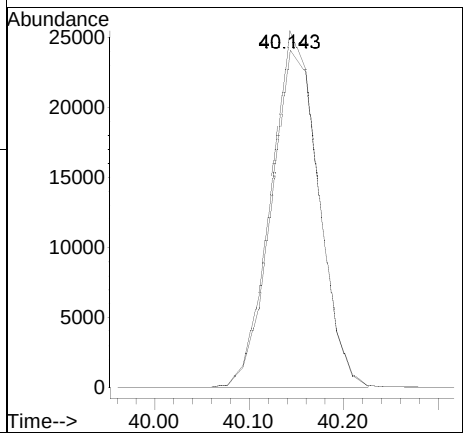


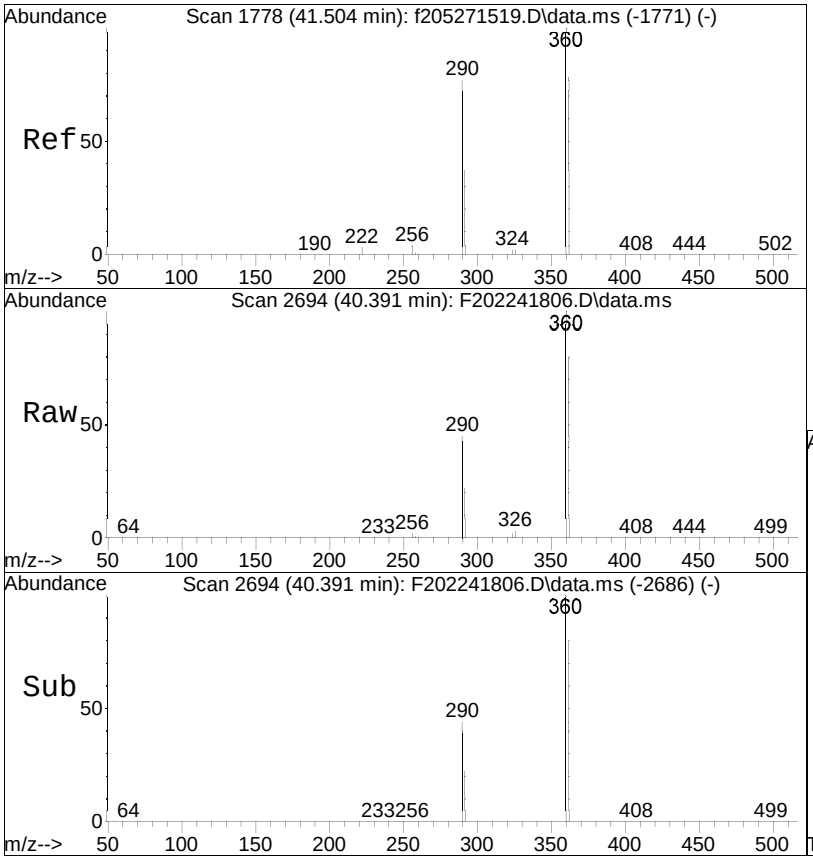


#159
Cl7-BZ#186
Concen: 35.77 ng/mL
RT: 40.143 min Scan# 2679
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 88477

Ion	Ratio	Lower	Upper
394	100		
396	95.9	76.7	115.1

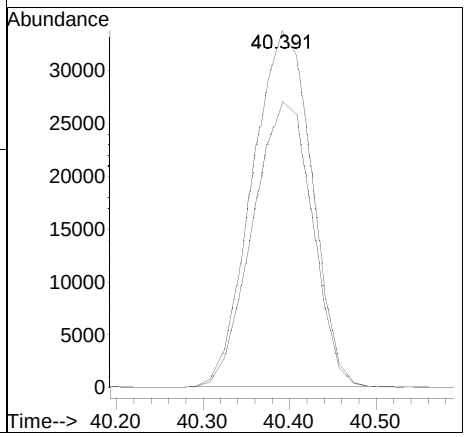


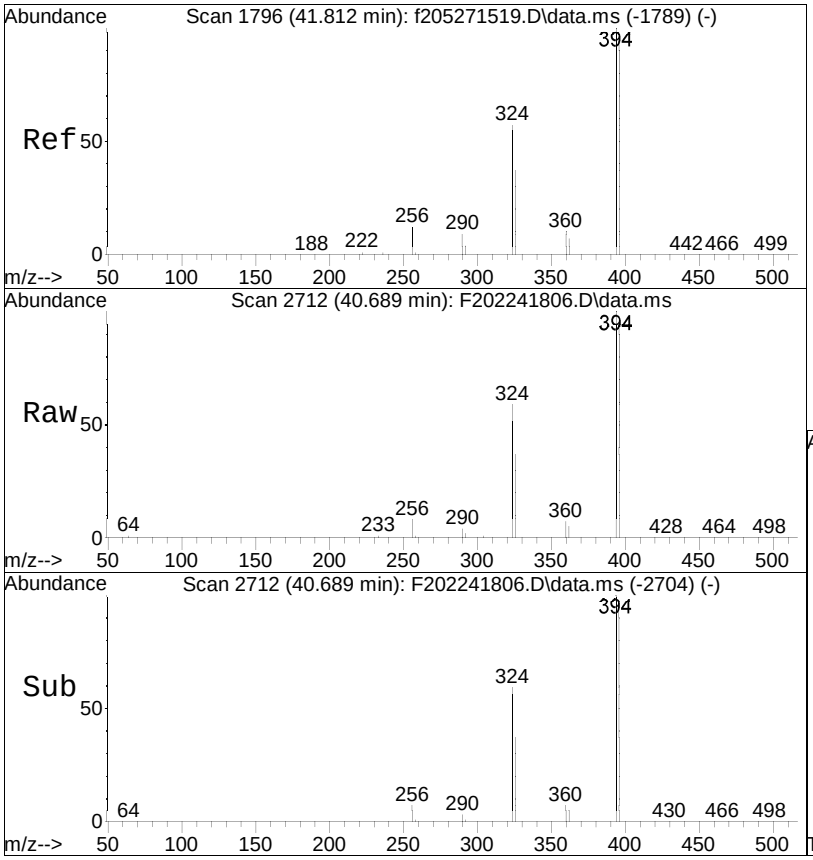


#160
Cl6-BZ#130/#164
Concen: 76.30 ng/mL
RT: 40.391 min Scan# 2694
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 160372

Ion	Ratio	Lower	Upper
360	100		
362	80.1	65.6	98.4

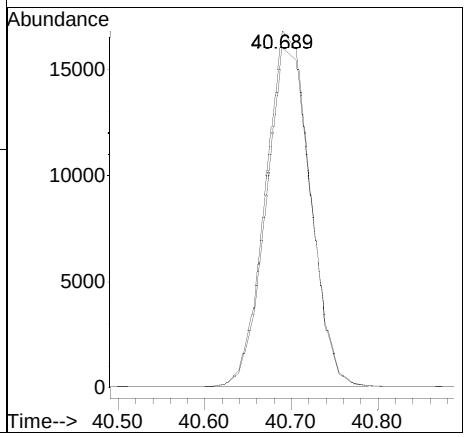


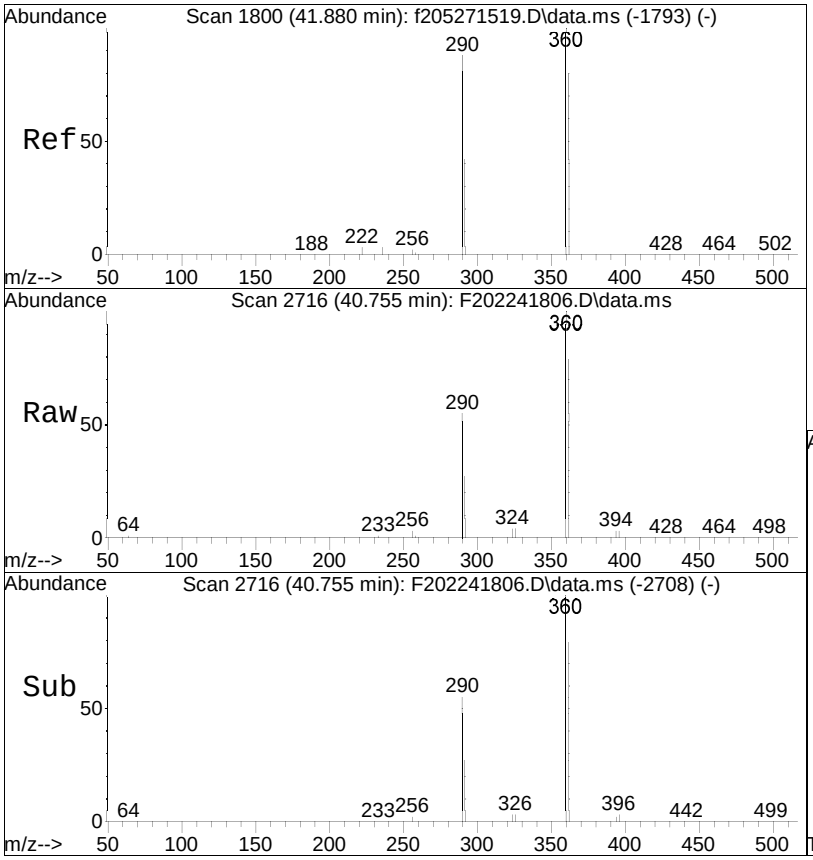


#161
Cl7-BZ#178
Concen: 37.87 ng/mL
RT: 40.689 min Scan# 2712
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 59739

Ion	Ratio	Lower	Upper
394	100		
396	95.5	78.0	117.0

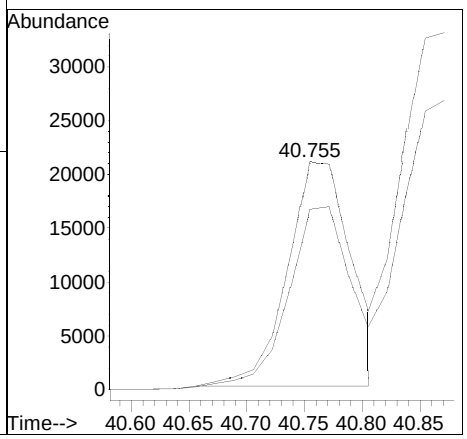


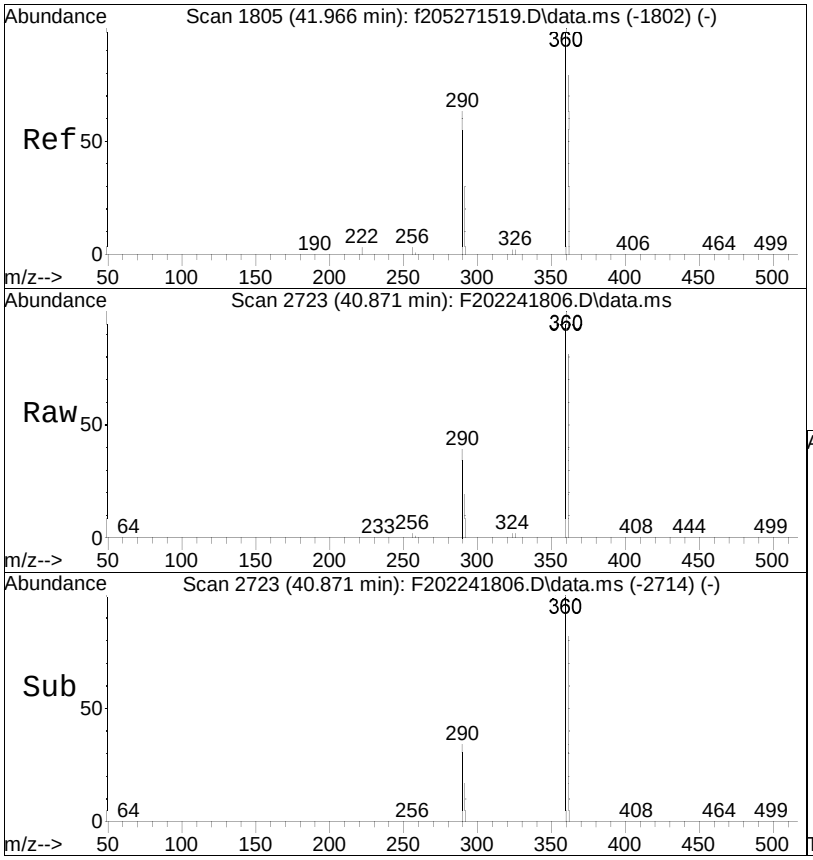


#162
Cl6-BZ#138
Concen: 36.45 ng/mL
RT: 40.755 min Scan# 2716
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 80255

Ion	Ratio	Lower	Upper
360	100		
362	79.2	65.3	97.9

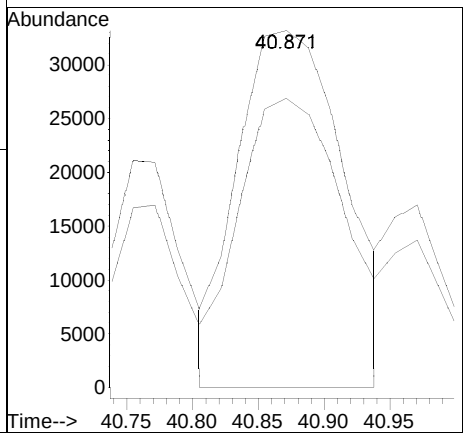


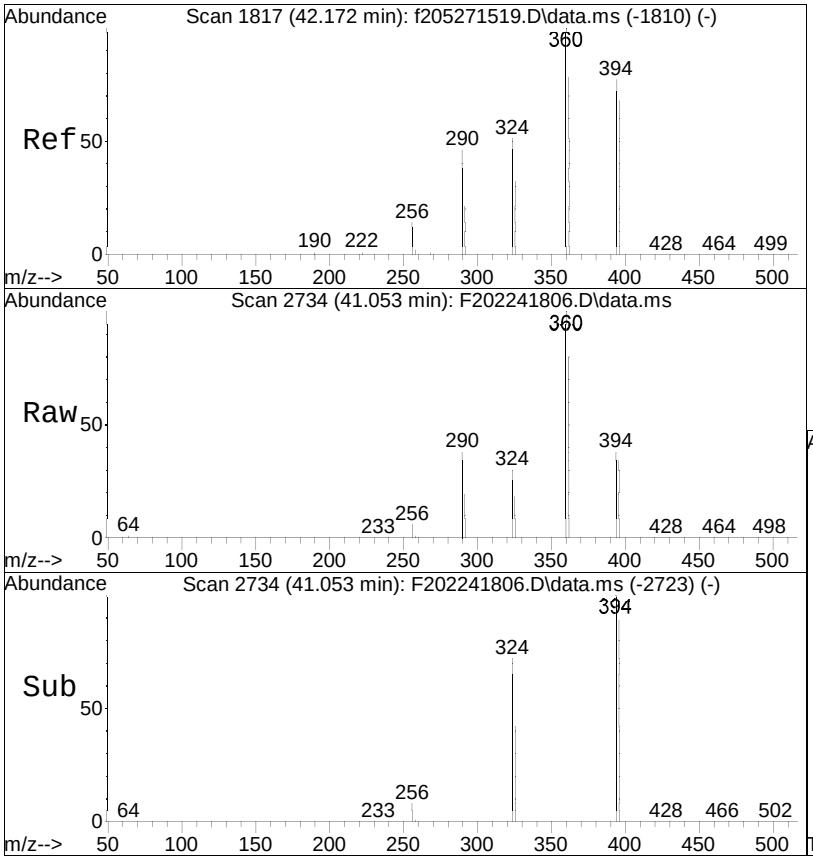


#163
Cl6-BZ#163/#160
Concen: 77.34 ng/mL M4
RT: 40.871 min Scan# 2723
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 187163

Ion	Ratio	Lower	Upper
360	100		
362	55.1	64.6	96.8#

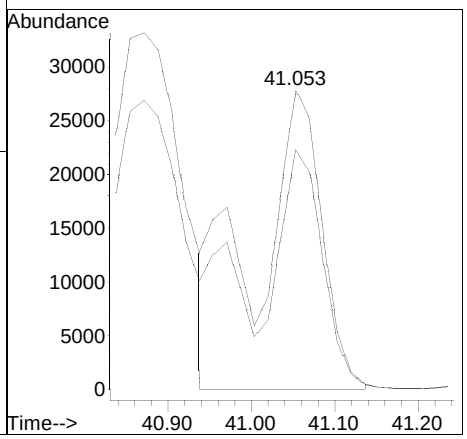


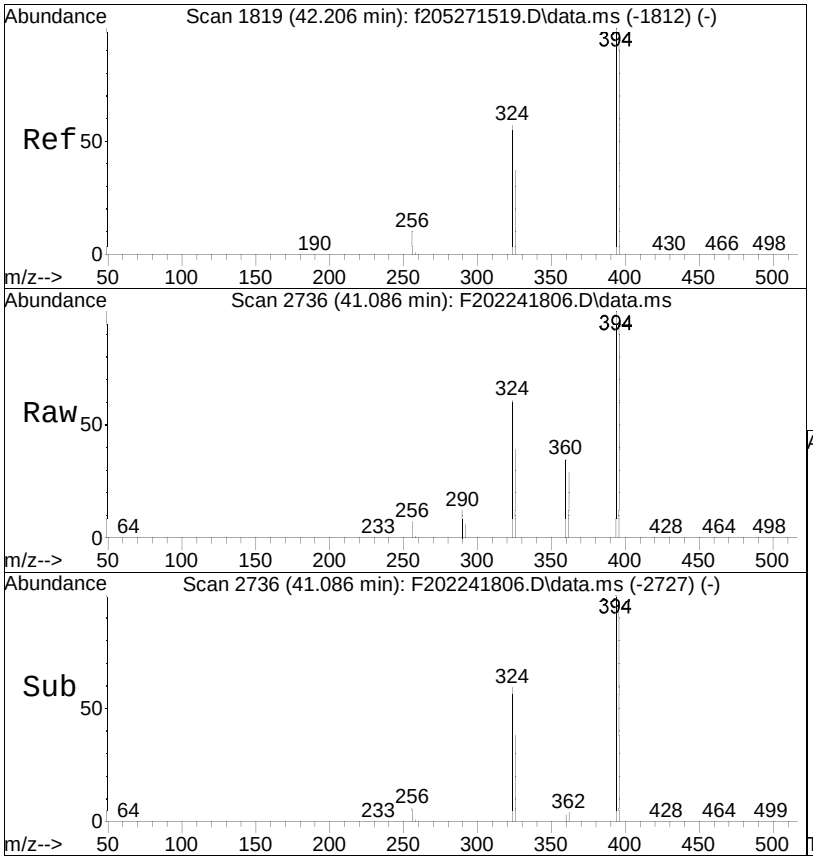


#164
Cl6-BZ#129/#158
Concen: 70.48 ng/mL M4
RT: 41.053 min Scan# 2734
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 150742

Ion	Ratio	Lower	Upper
360	100		
362	53.1	64.0	96.0#

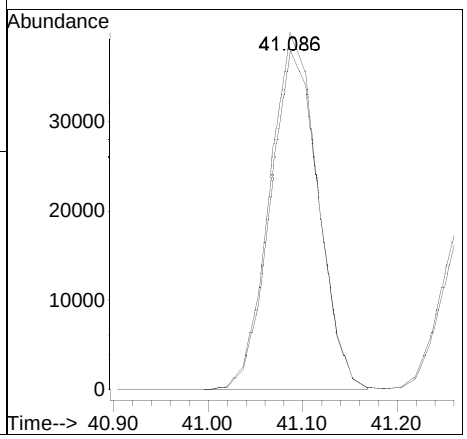


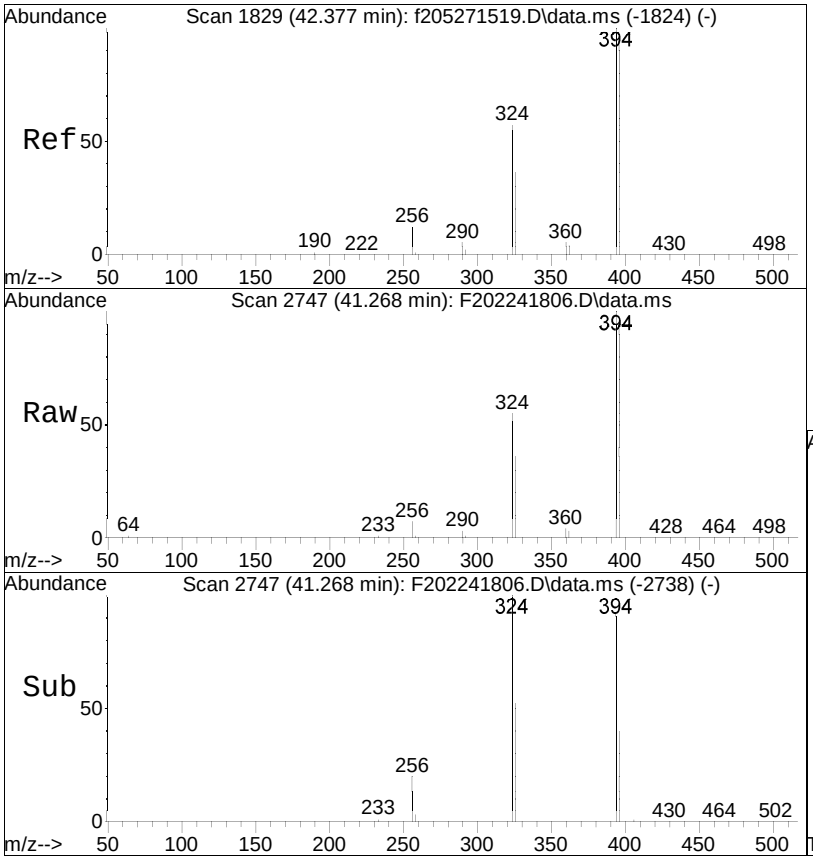


#165
Cl7-BZ#182/#175
Concen: 73.20 ng/mL
RT: 41.086 min Scan# 2736
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 140835

Ion	Ratio	Lower	Upper
394	100		
396	95.2	76.9	115.3

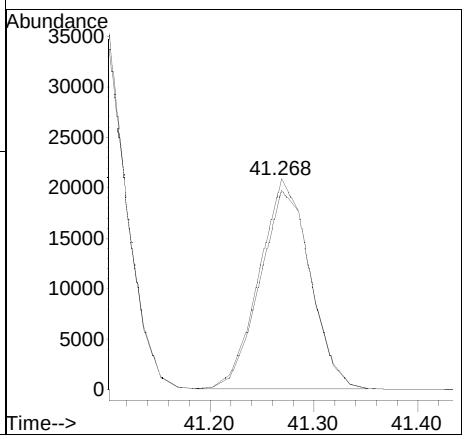


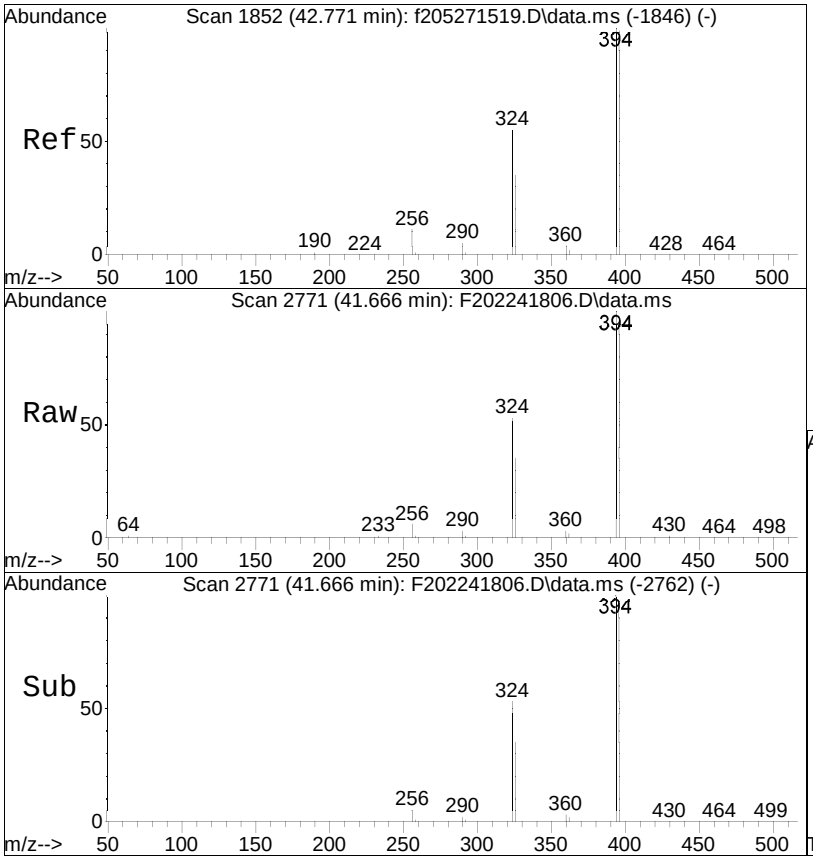


#166
Cl7-BZ#187
Concen: 36.77 ng/mL
RT: 41.268 min Scan# 2747
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 69719

Ion	Ratio	Lower	Upper
394	100		
396	95.6	73.7	110.5

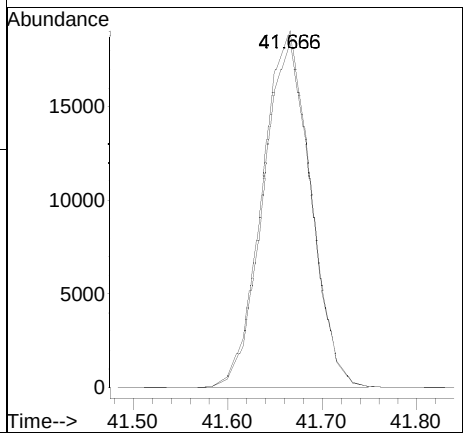


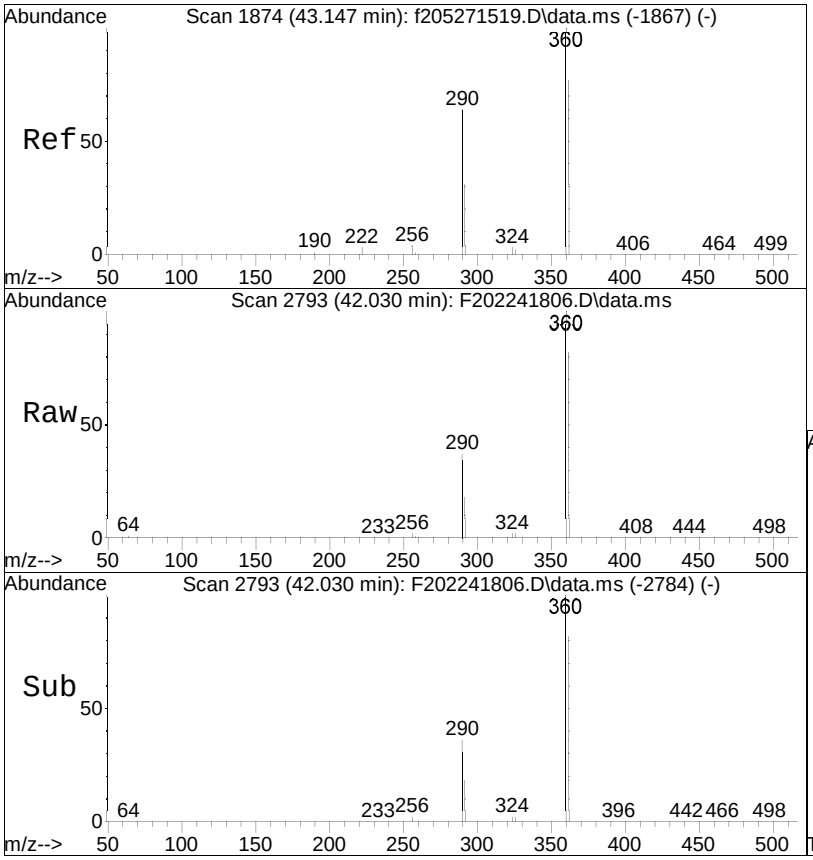


#167
Cl7-BZ#183
Concen: 41.48 ng/mL
RT: 41.666 min Scan# 2771
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 67459

Ion	Ratio	Lower	Upper
394	100		
396	95.0	76.2	114.2

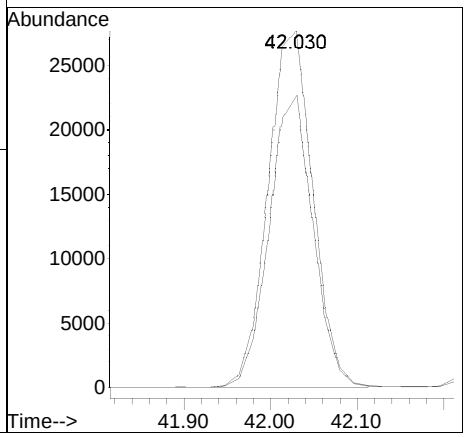


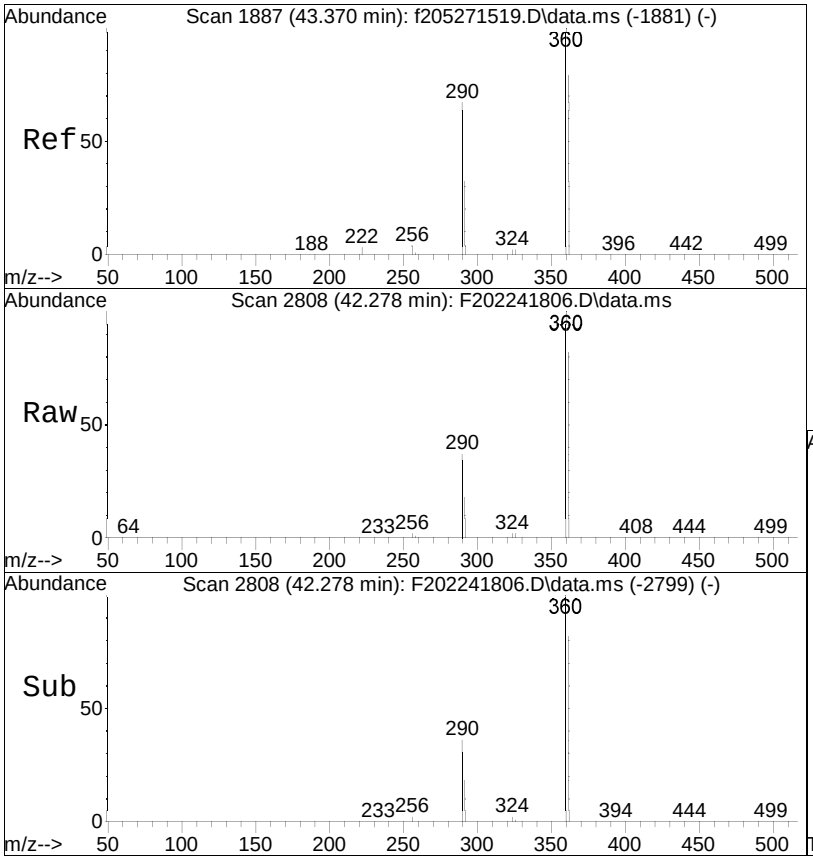


#168
Cl6-BZ#166
Concen: 38.72 ng/mL
RT: 42.030 min Scan# 2793
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 99123

Ion	Ratio	Lower	Upper
360	100		
362	80.1	65.8	98.6

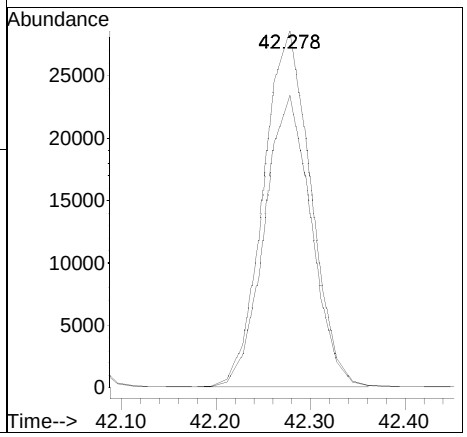


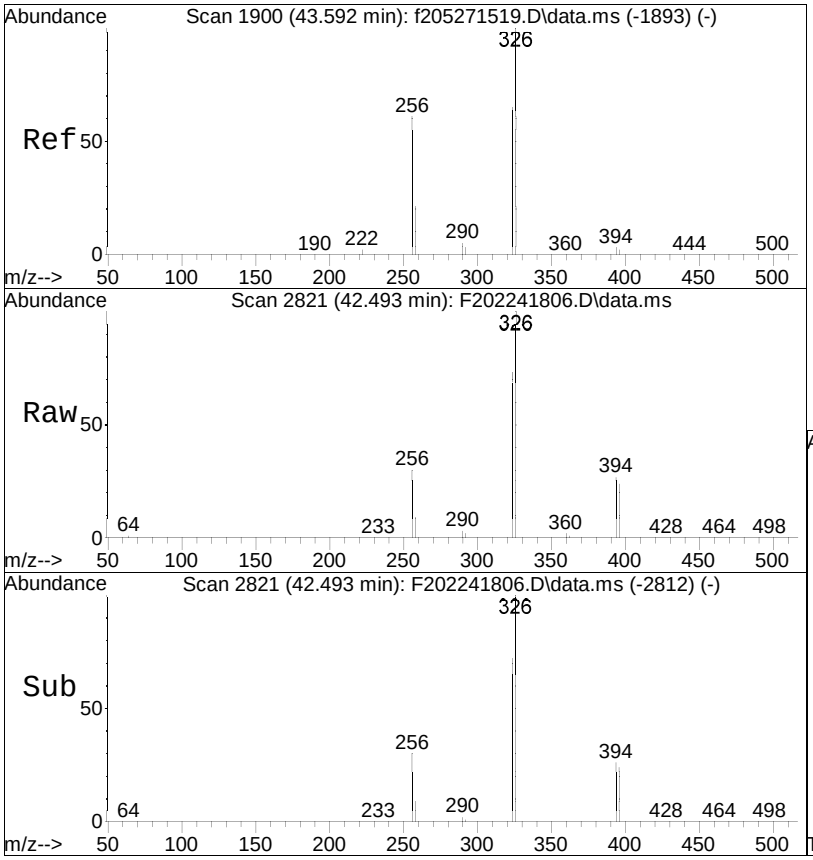


#169
Cl6-BZ#159
Concen: 40.15 ng/mL
RT: 42.278 min Scan# 2808
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 99343

Ion	Ratio	Lower	Upper
360	100		
362	80.9	65.0	97.6

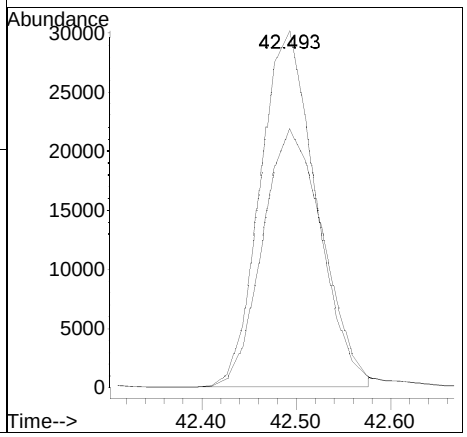


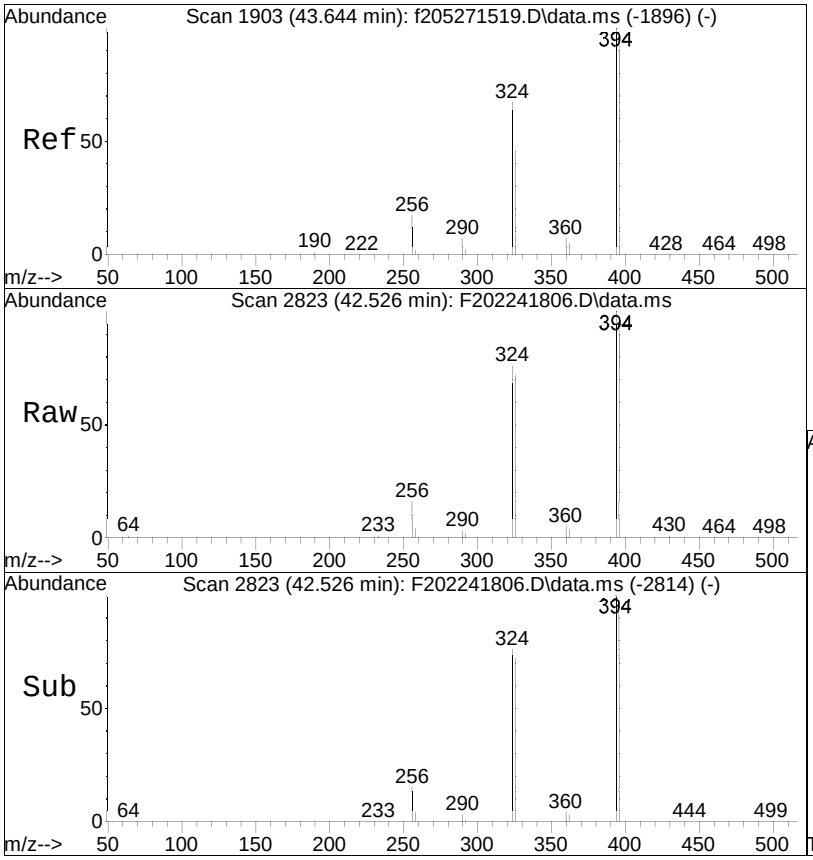


#170
Cl5-BZ#126-RTW
Concen: 39.61 ng/mL
RT: 42.493 min Scan# 2821
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:326 Resp: 122645

Ion	Ratio	Lower	Upper
326	100		
324	79.4	56.5	84.7

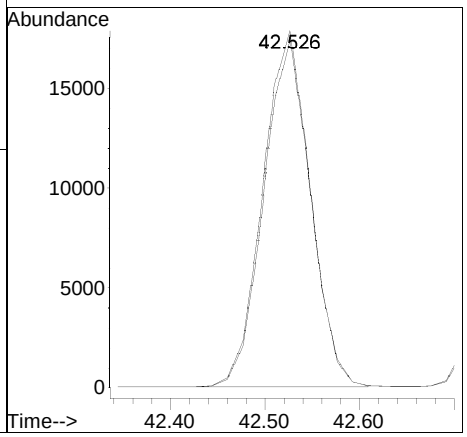


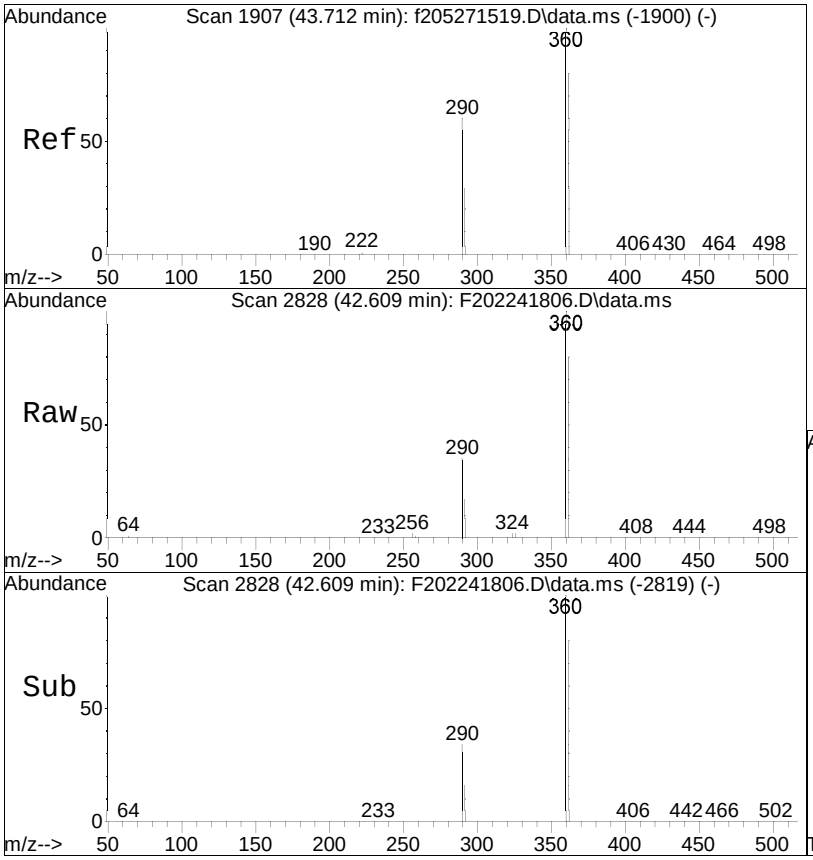


#171
Cl7-BZ#185
Concen: 37.73 ng/mL
RT: 42.526 min Scan# 2823
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 61956

Ion	Ratio	Lower	Upper
394	100		
396	96.4	75.9	113.9

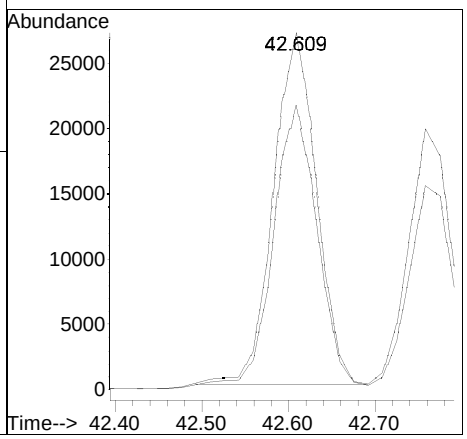


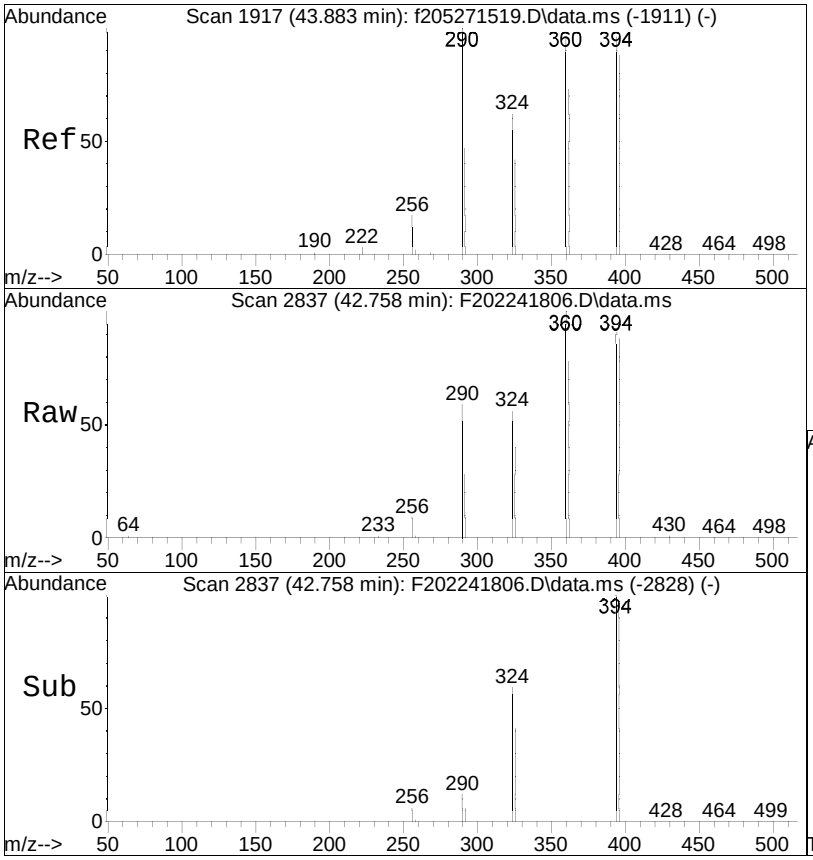


#172
Cl6-BZ#162
Concen: 38.74 ng/mL
RT: 42.609 min Scan# 2828
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 92479

Ion	Ratio	Lower	Upper
360	100		
362	80.1	62.8	94.2

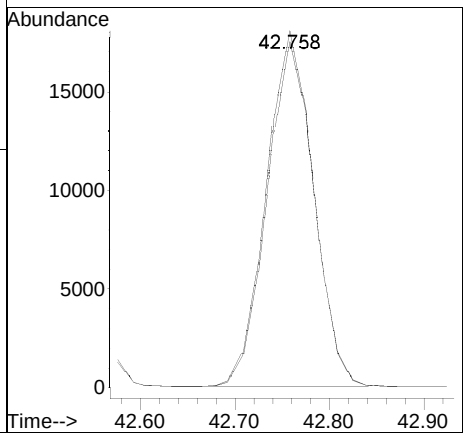


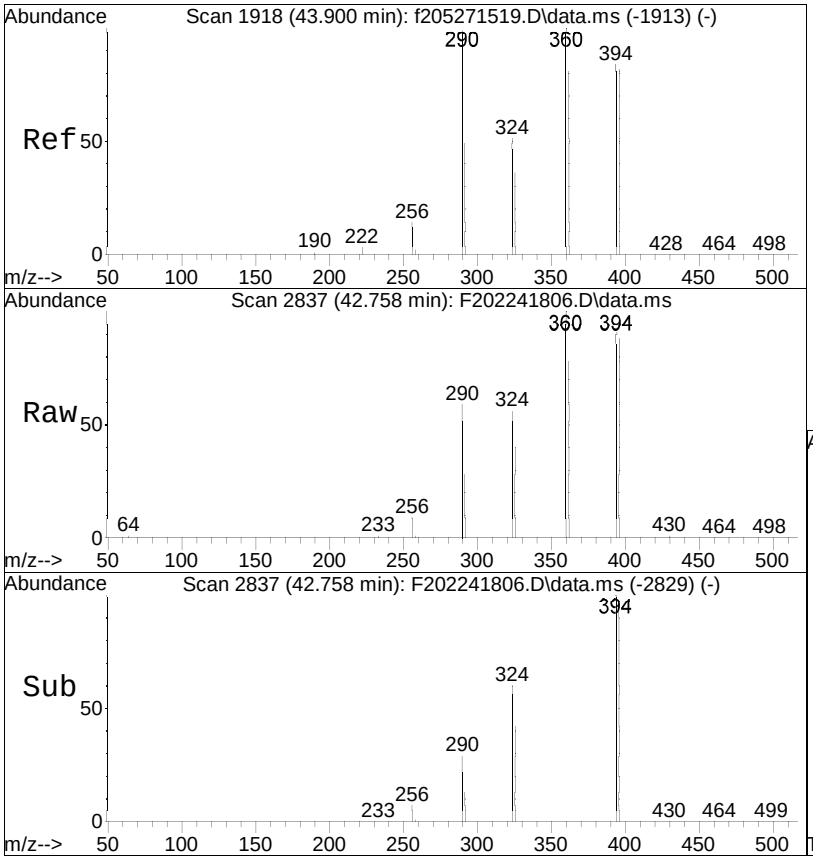


#173
Cl7-BZ#174
Concen: 36.57 ng/mL
RT: 42.758 min Scan# 2837
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 62330

Ion	Ratio	Lower	Upper
394	100		
396	96.8	77.1	115.7

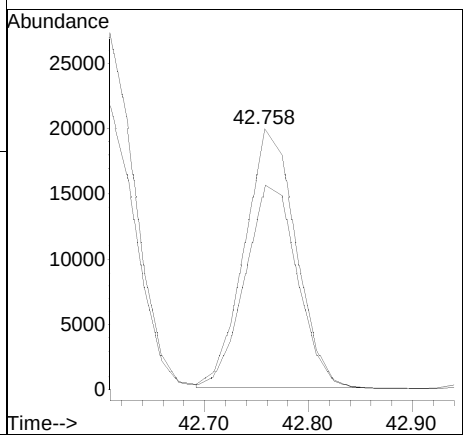


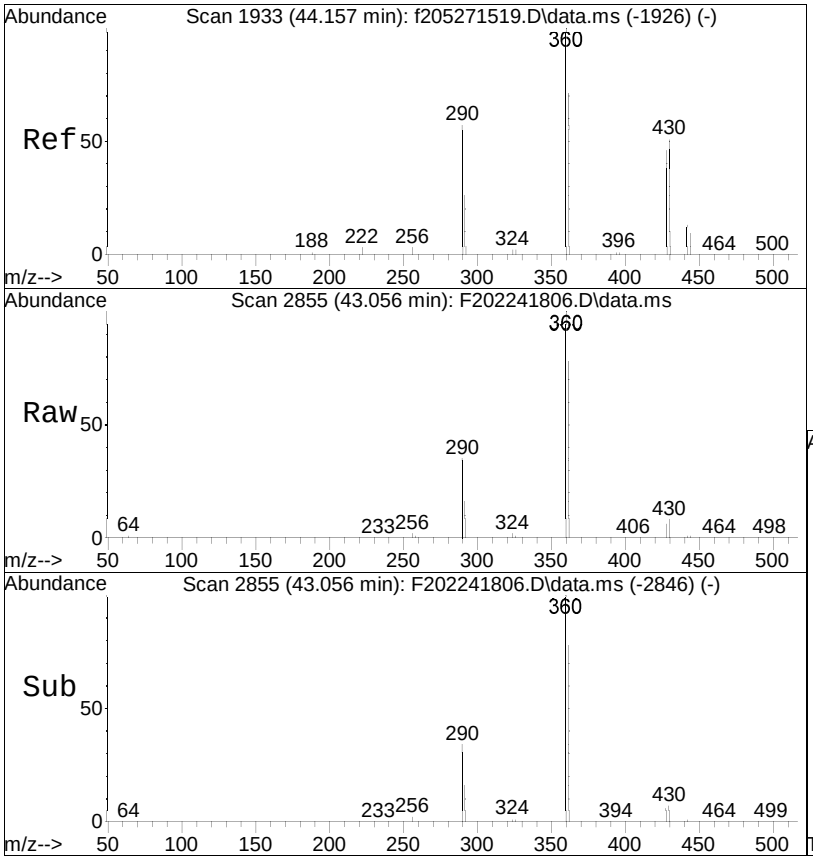


#174
Cl6-BZ#128
Concen: 36.34 ng/mL
RT: 42.758 min Scan# 2837
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 68344

Ion	Ratio	Lower	Upper
360	100		
362	80.2	64.4	96.6

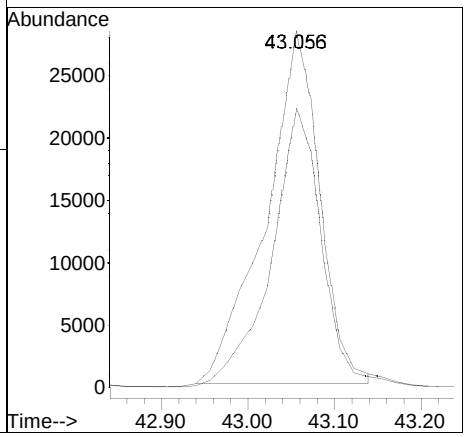


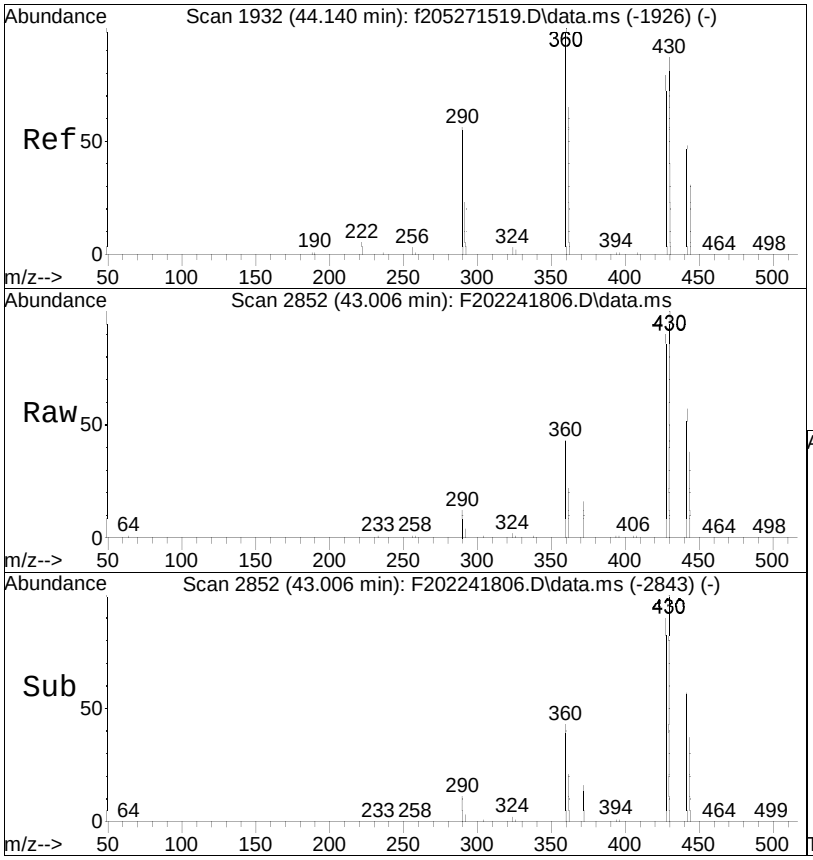


#175
Cl6-BZ#167
Concen: 38.87 ng/mL
RT: 43.056 min Scan# 2855
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 122335

Ion	Ratio	Lower	Upper
360	100		
362	71.9	63.0	94.4

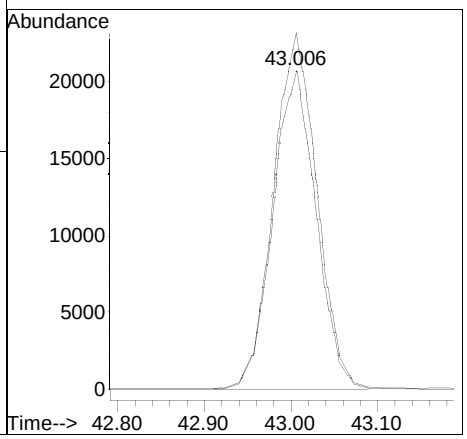


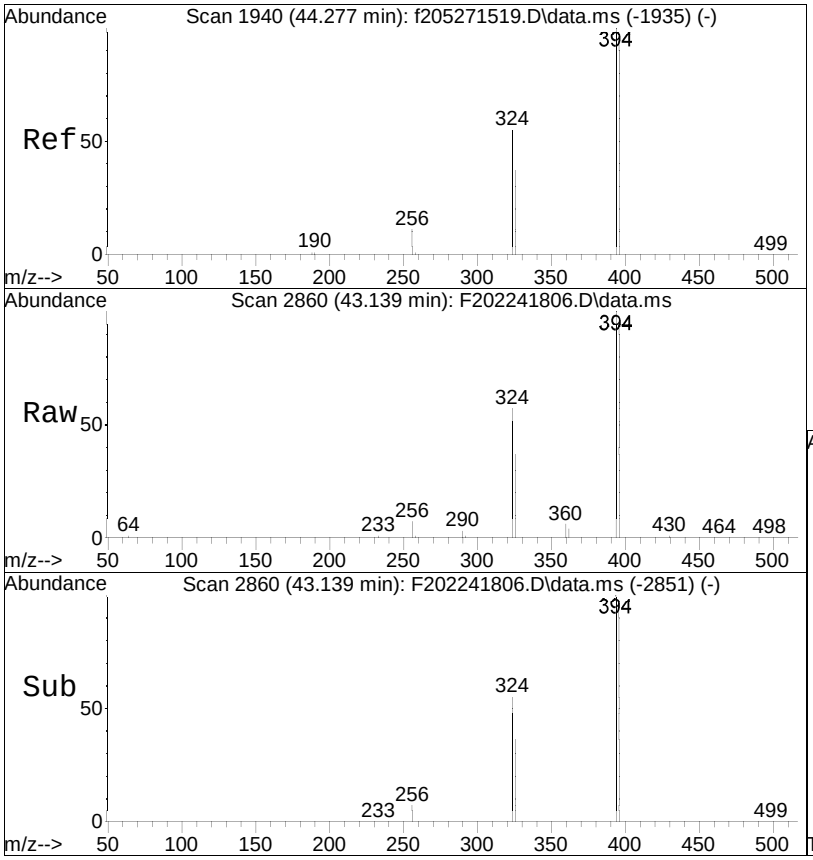


#176
Cl8-BZ#202-RTW
Concen: 37.52 ng/mL
RT: 43.006 min Scan# 2852
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 71002

Ion	Ratio	Lower	Upper
428	100		
430	112.4	89.4	134.2

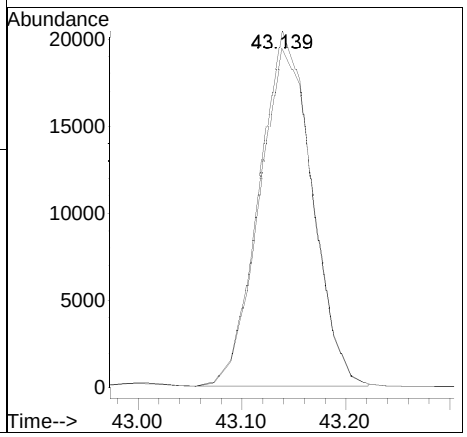


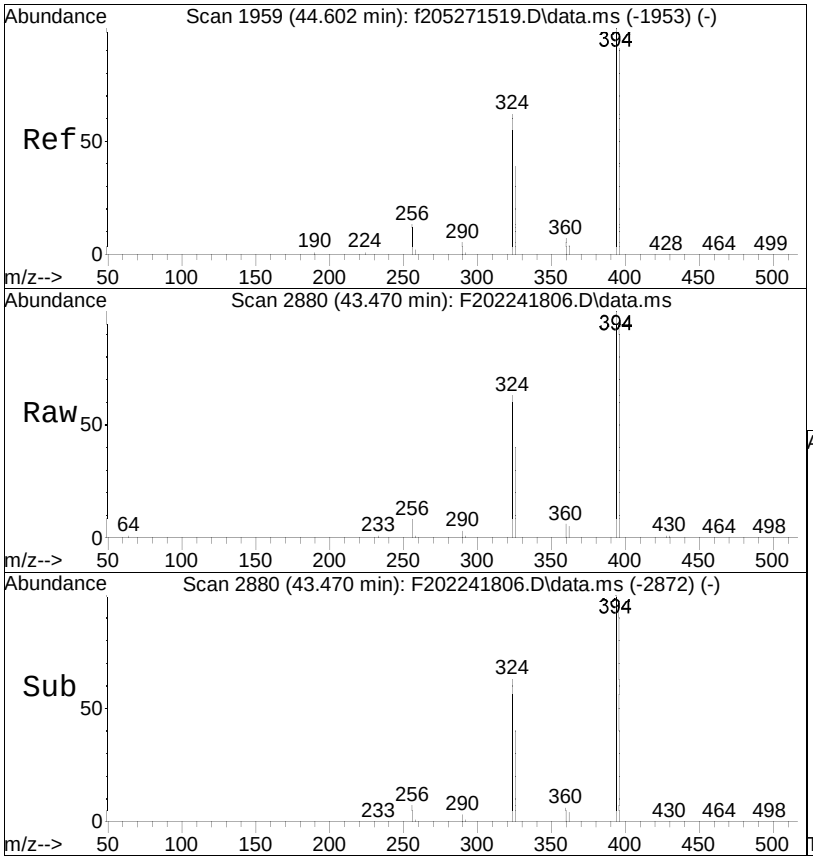


#178
Cl7-BZ#181
Concen: 38.55 ng/mL
RT: 43.139 min Scan# 2860
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 71575

Ion	Ratio	Lower	Upper
394	100		
396	96.9	75.3	112.9

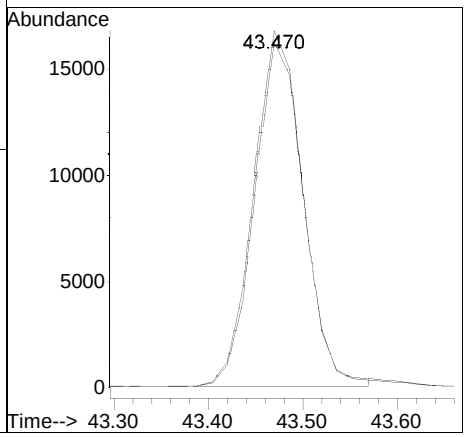


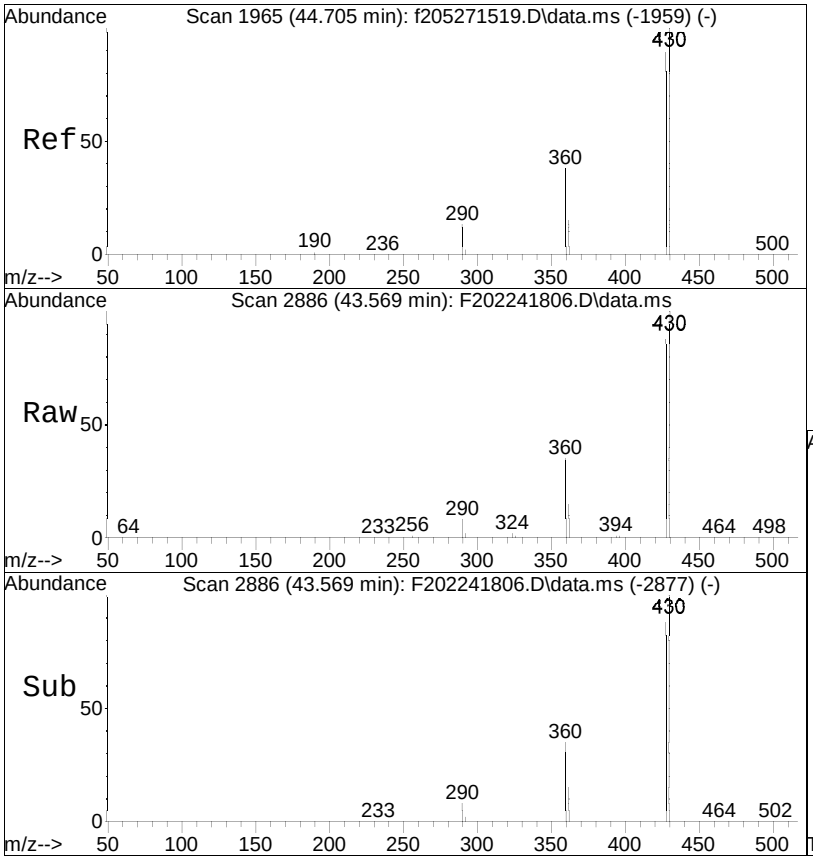


#179
Cl7-BZ#177
Concen: 38.25 ng/mL
RT: 43.470 min Scan# 2880
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 60620

Ion	Ratio	Lower	Upper
394	100		
396	96.1	77.8	116.6

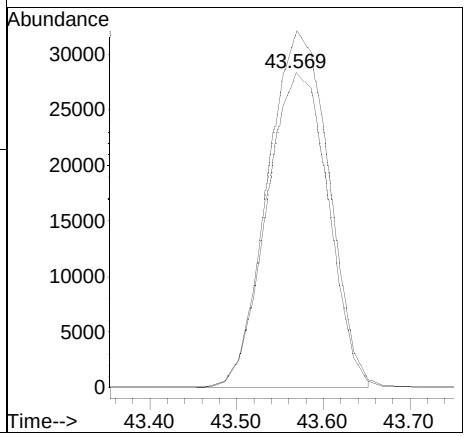


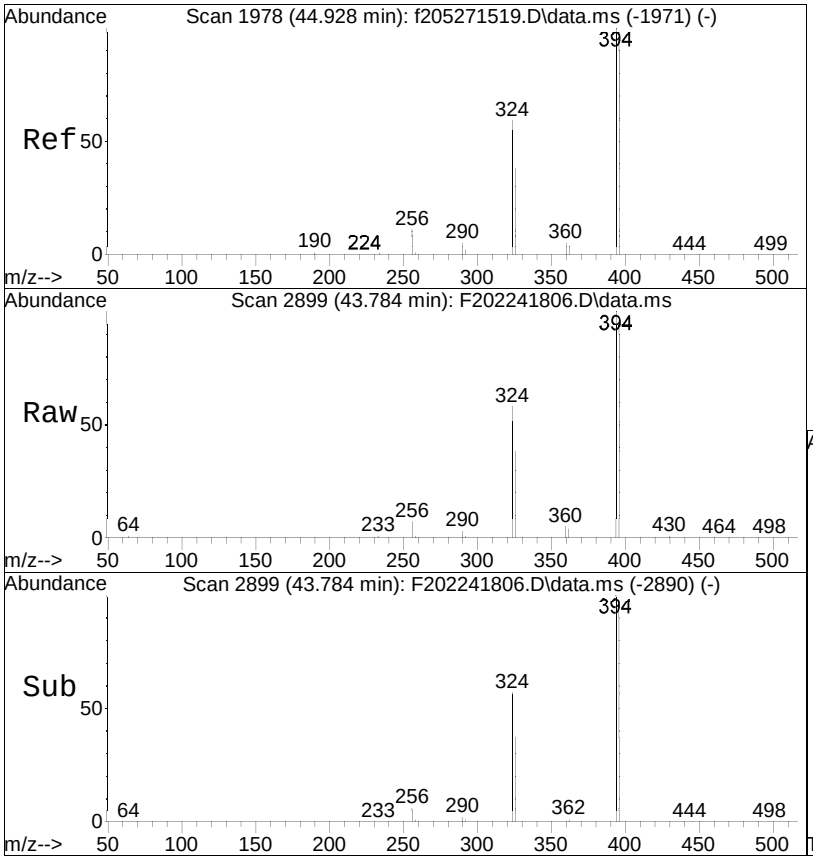


#180
Cl8-BZ#204/#200-Cal
Concen: 73.22 ng/mL
RT: 43.569 min Scan# 2886
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 138791

Ion	Ratio	Lower	Upper
428	100		
430	112.3	89.8	134.6

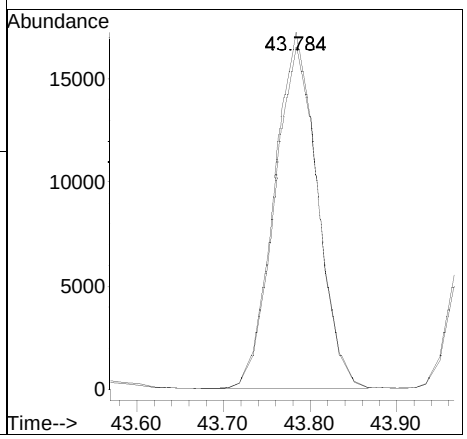


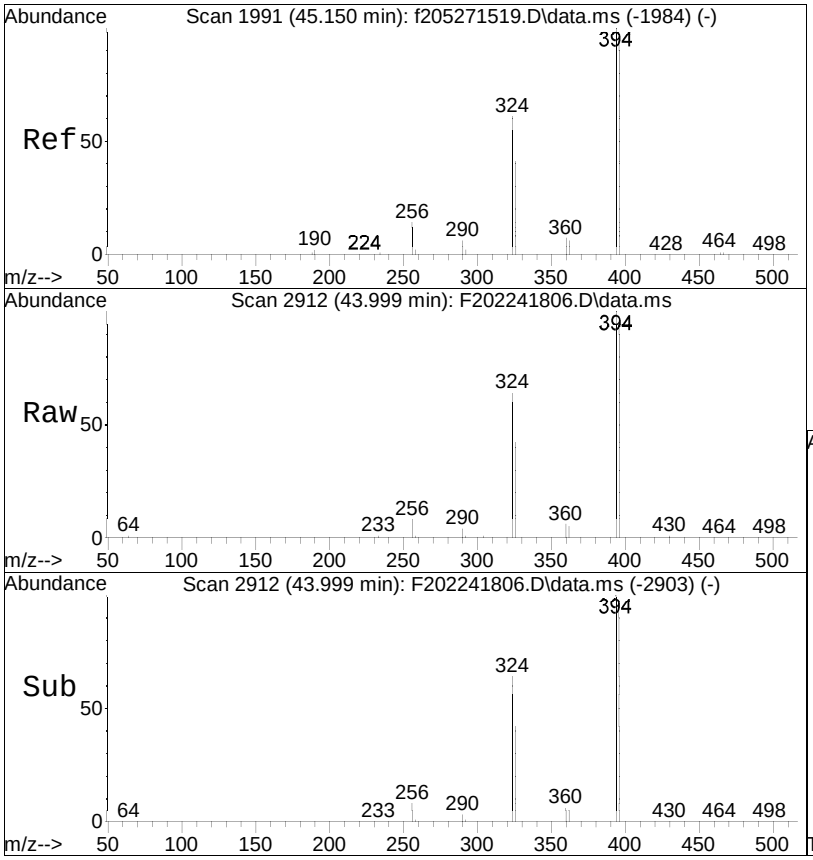


#183
Cl7-BZ#171
Concen: 41.36 ng/mL
RT: 43.784 min Scan# 2899
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 59341

Ion	Ratio	Lower	Upper
394	100		
396	96.7	75.4	113.0

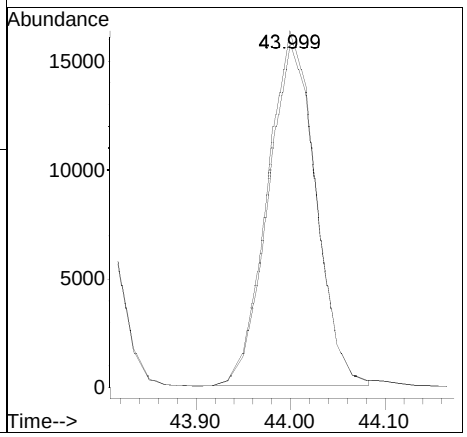


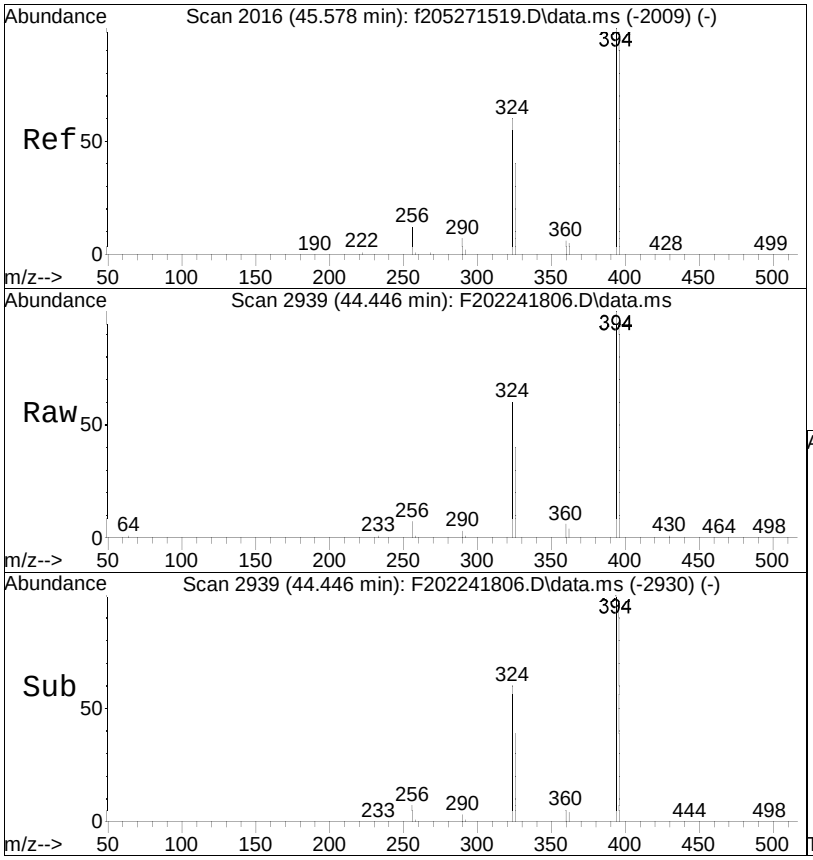


#184
Cl7-BZ#173
Concen: 38.03 ng/mL
RT: 43.999 min Scan# 2912
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 57938

Ion	Ratio	Lower	Upper
394	100		
396	95.7	76.3	114.5

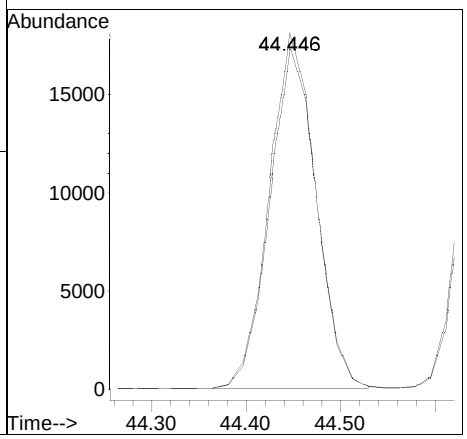


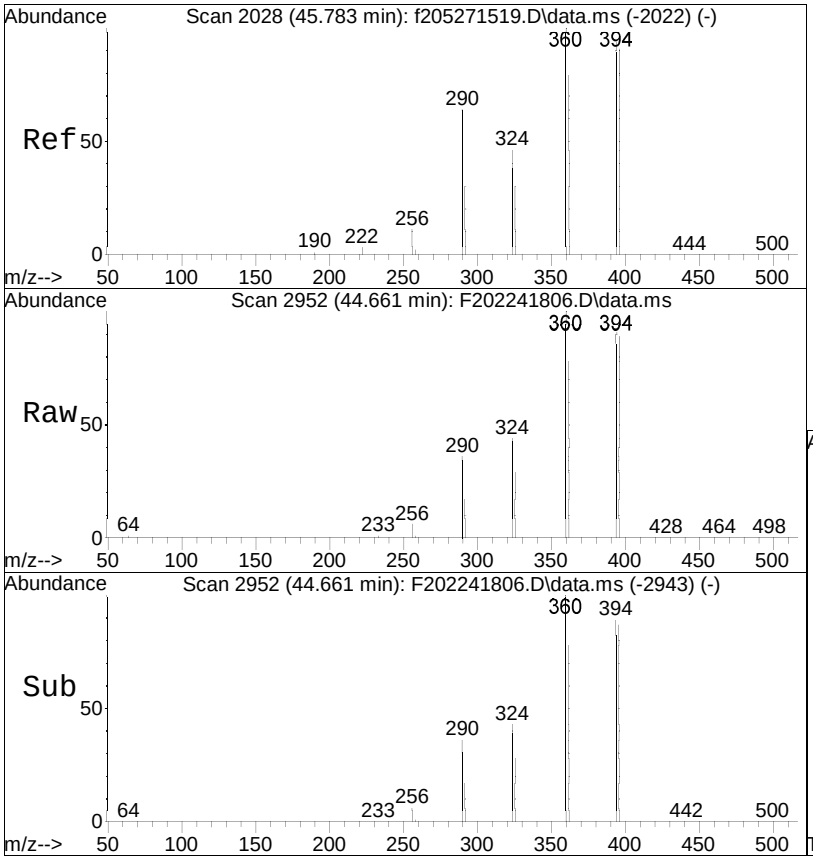


#185
Cl7-BZ#172
Concen: 37.93 ng/mL
RT: 44.446 min Scan# 2939
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 61508

Ion	Ratio	Lower	Upper
394	100		
396	96.5	75.4	113.2

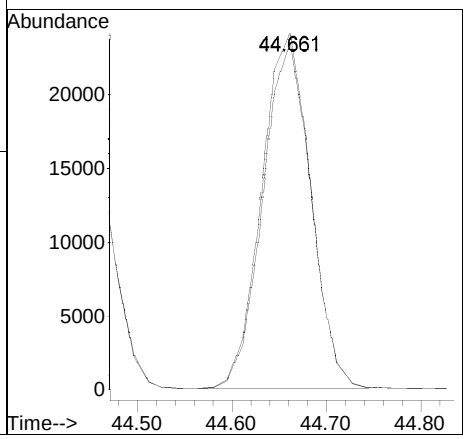


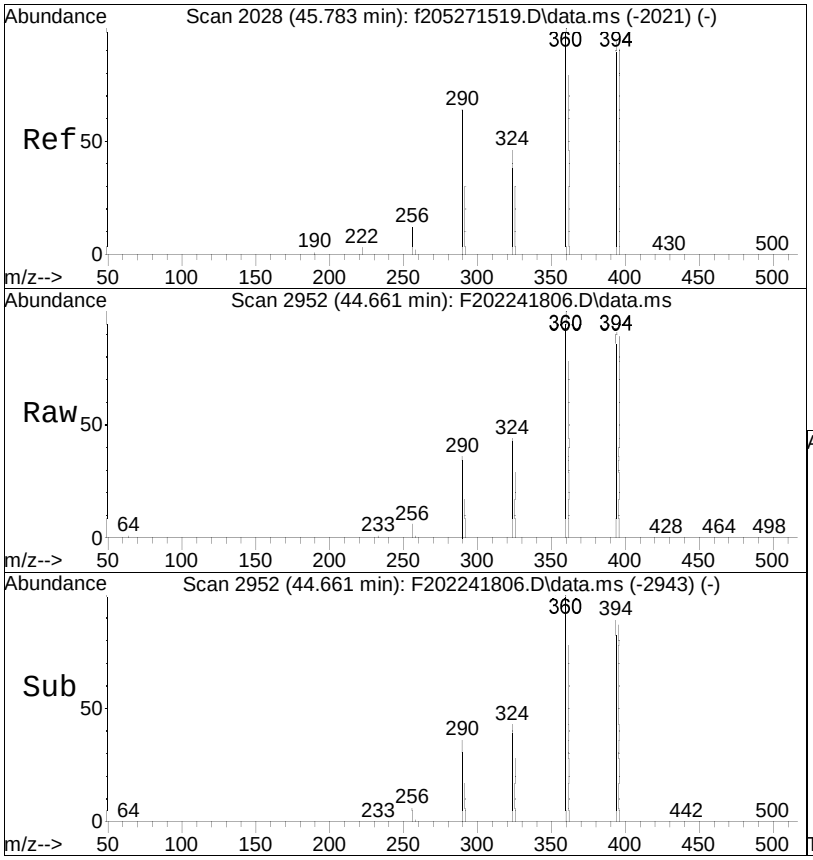


#186
Cl7-BZ#192
Concen: 38.90 ng/mL
RT: 44.661 min Scan# 2952
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 86510

Ion	Ratio	Lower	Upper
394	100		
396	95.5	76.9	115.3

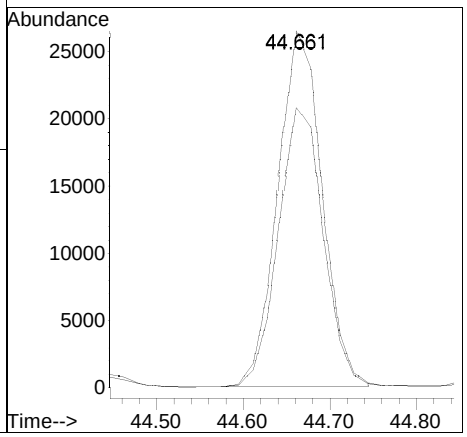


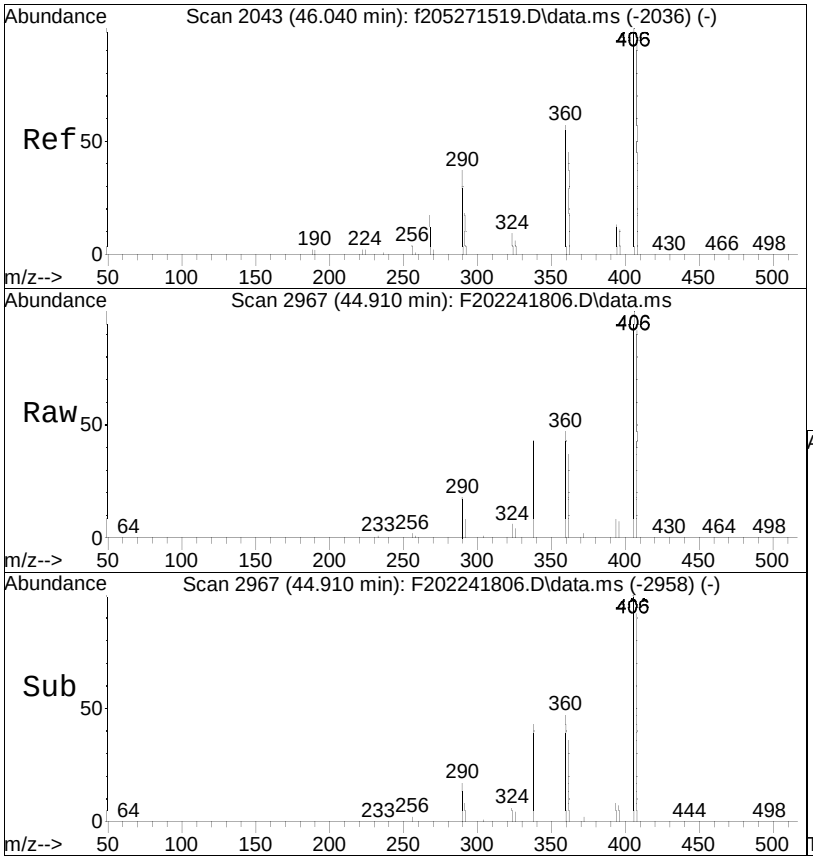


#187
Cl6-BZ#156
Concen: 38.59 ng/mL
RT: 44.661 min Scan# 2952
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 94299

Ion	Ratio	Lower	Upper
360	100		
362	79.6	63.4	95.2

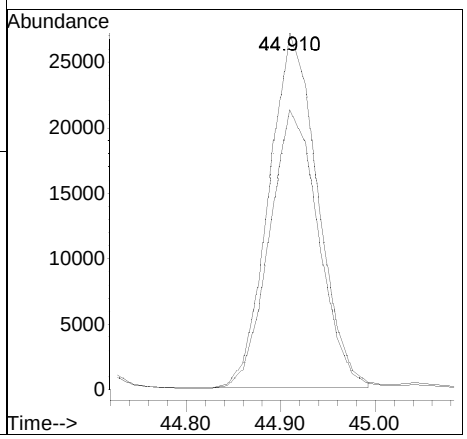


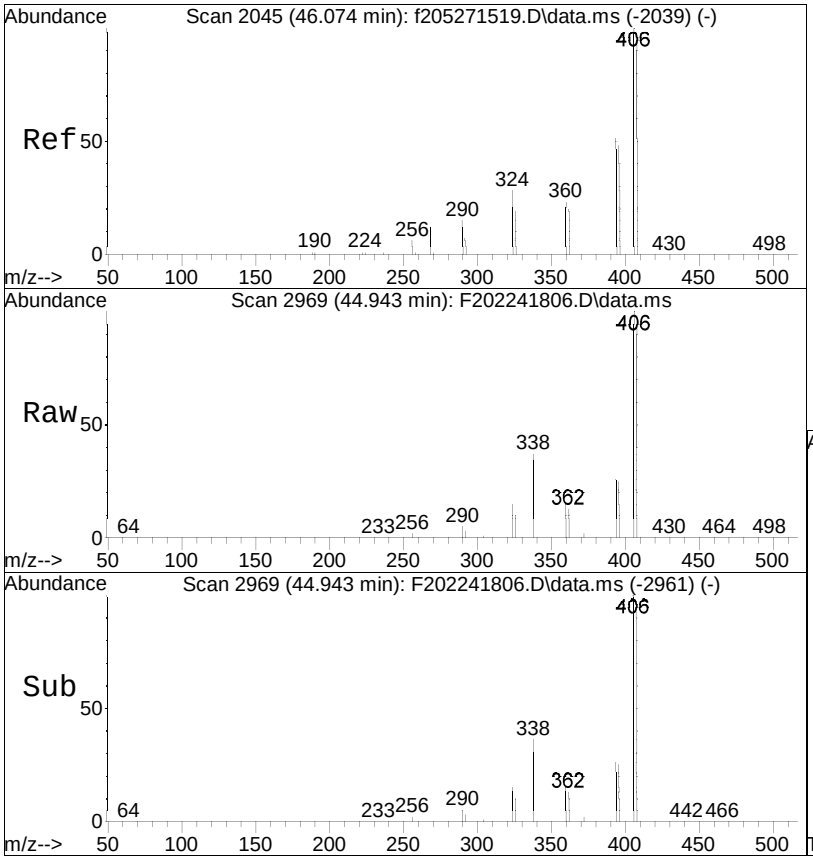


#188
Cl6-BZ#157
Concen: 38.37 ng/mL
RT: 44.910 min Scan# 2967
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 97075

Ion	Ratio	Lower	Upper
360	100		
362	79.4	62.6	93.8

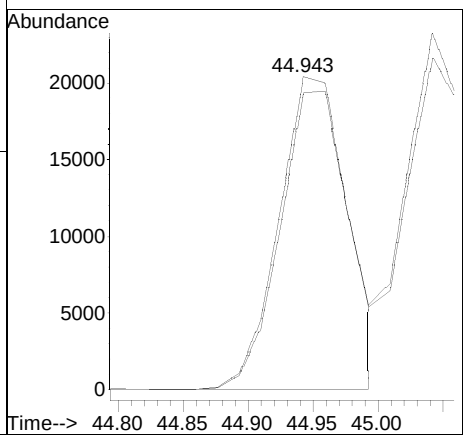


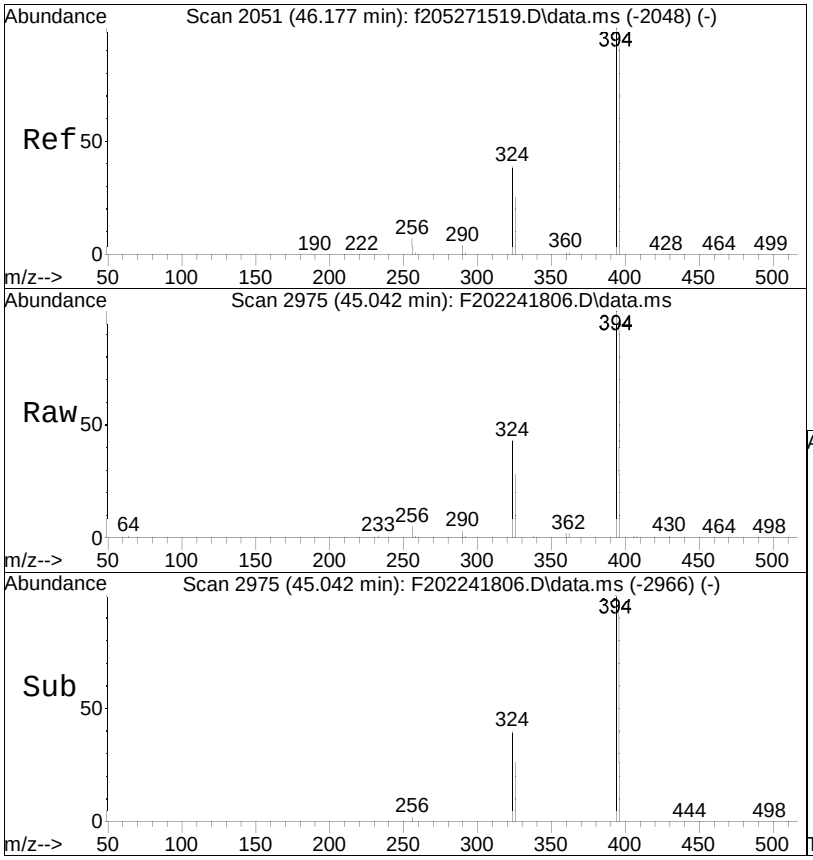


#189
Cl7-BZ#180
Concen: 34.81 ng/mL
RT: 44.943 min Scan# 2969
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 74802

Ion	Ratio	Lower	Upper
394	100		
396	95.3	74.2	111.2

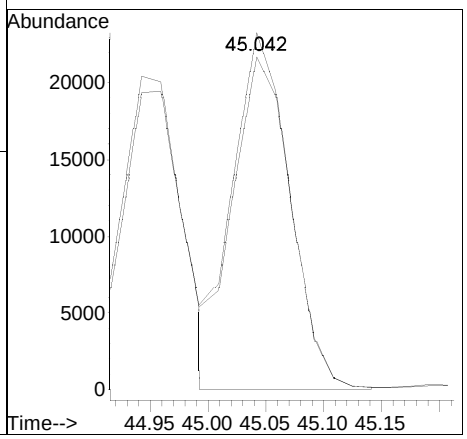


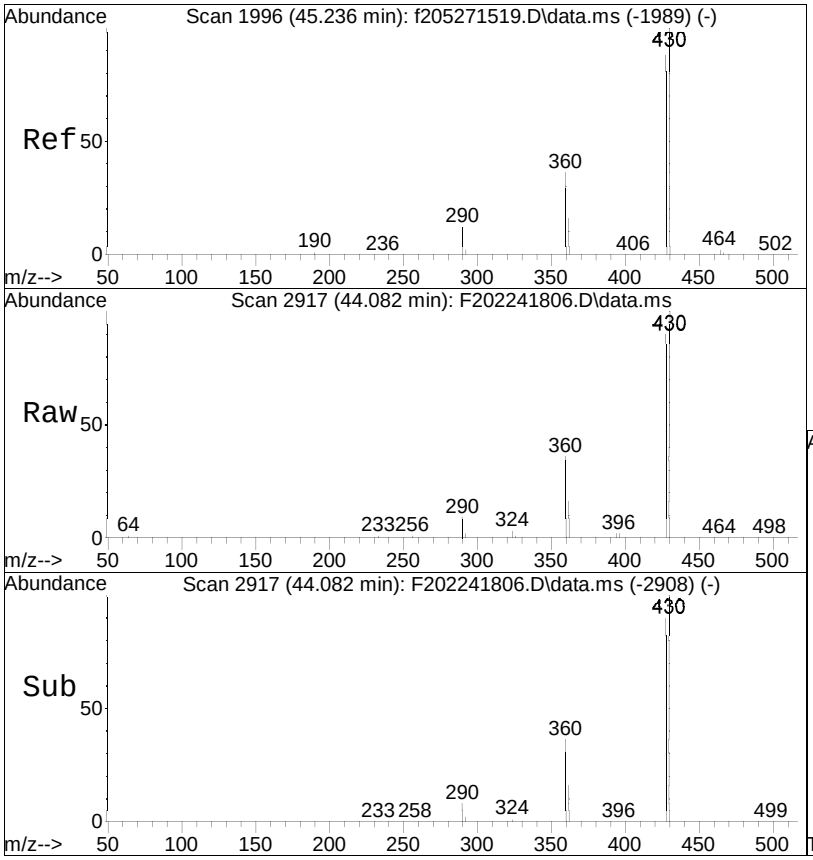


#190
Cl7-BZ#193
Concen: 32.34 ng/mL M4
RT: 45.042 min Scan# 2975
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 79385

Ion	Ratio	Lower	Upper
394	100		
396	93.5	76.3	114.5

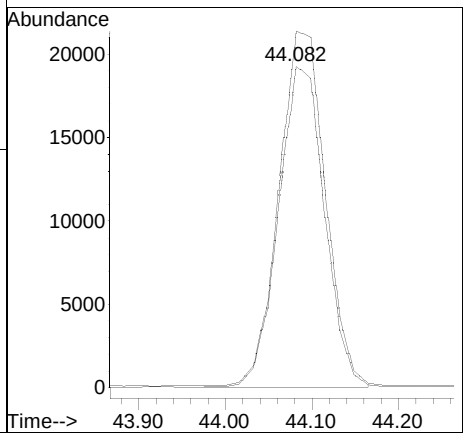


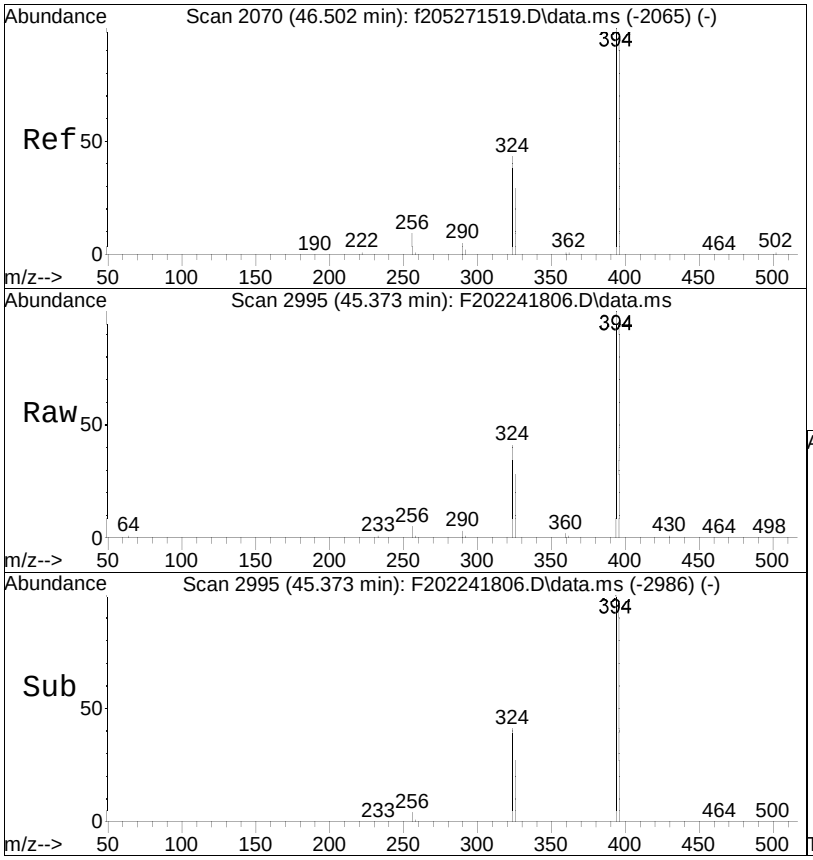


#191
Cl8-BZ#197
Concen: 37.05 ng/mL
RT: 44.082 min Scan# 2917
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 70400

Ion	Ratio	Lower	Upper
428	100		
430	111.8	88.4	132.6

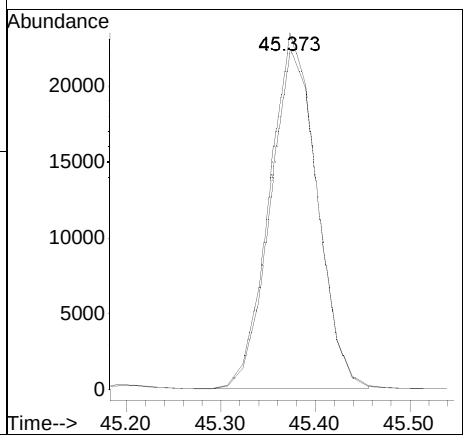


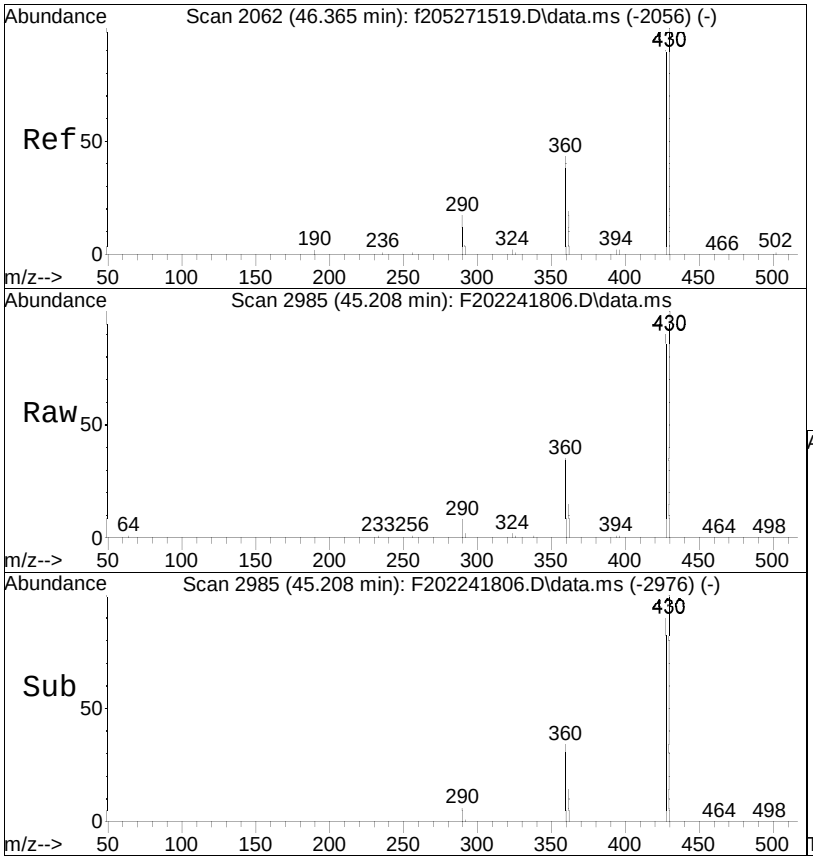


#192
Cl7-BZ#191
Concen: 39.70 ng/mL
RT: 45.373 min Scan# 2995
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 81014

Ion	Ratio	Lower	Upper
394	100		
396	96.0	74.6	111.8

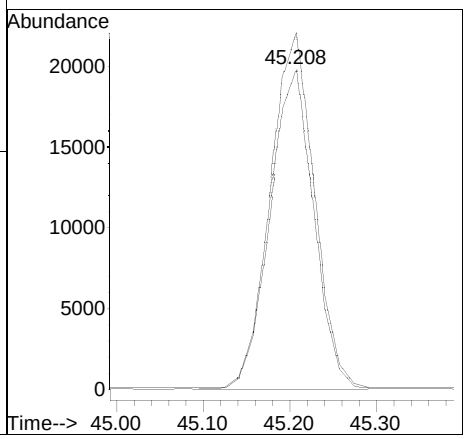


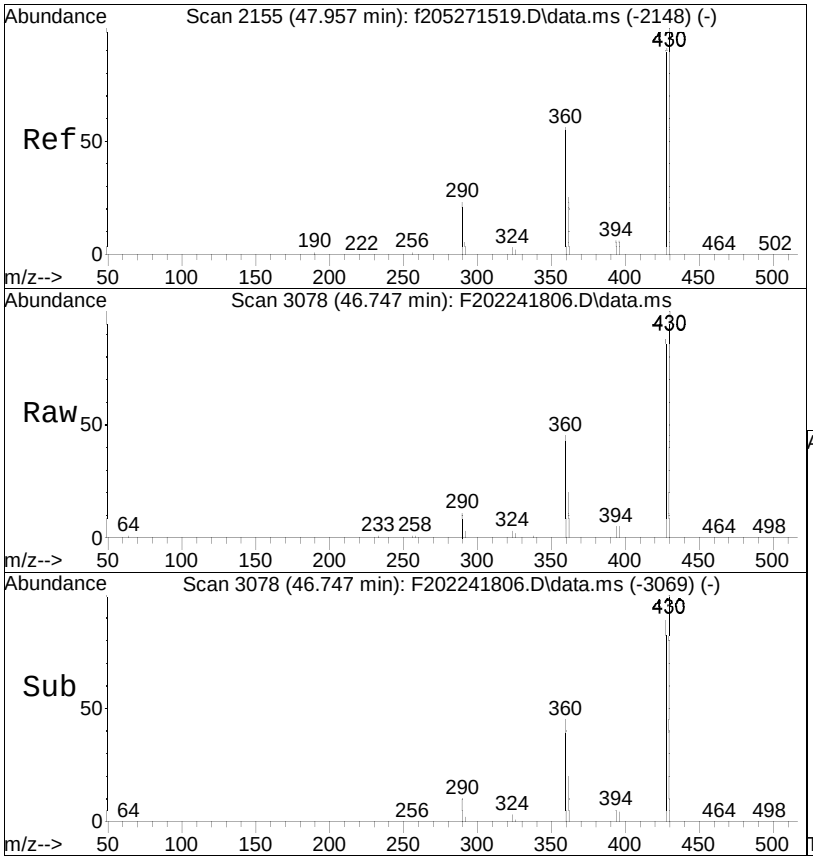


#193
Cl8-BZ#199
Concen: 37.58 ng/mL
RT: 45.208 min Scan# 2985
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 69047

Ion	Ratio	Lower	Upper
428	100		
430	111.5	90.5	135.7

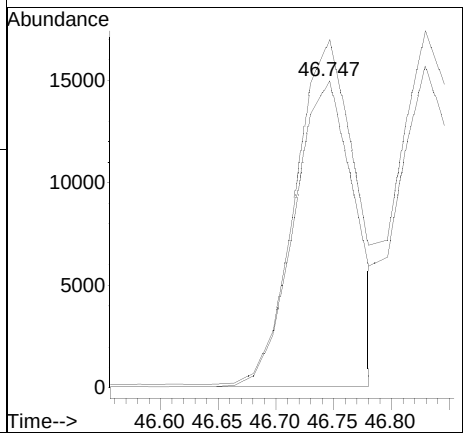


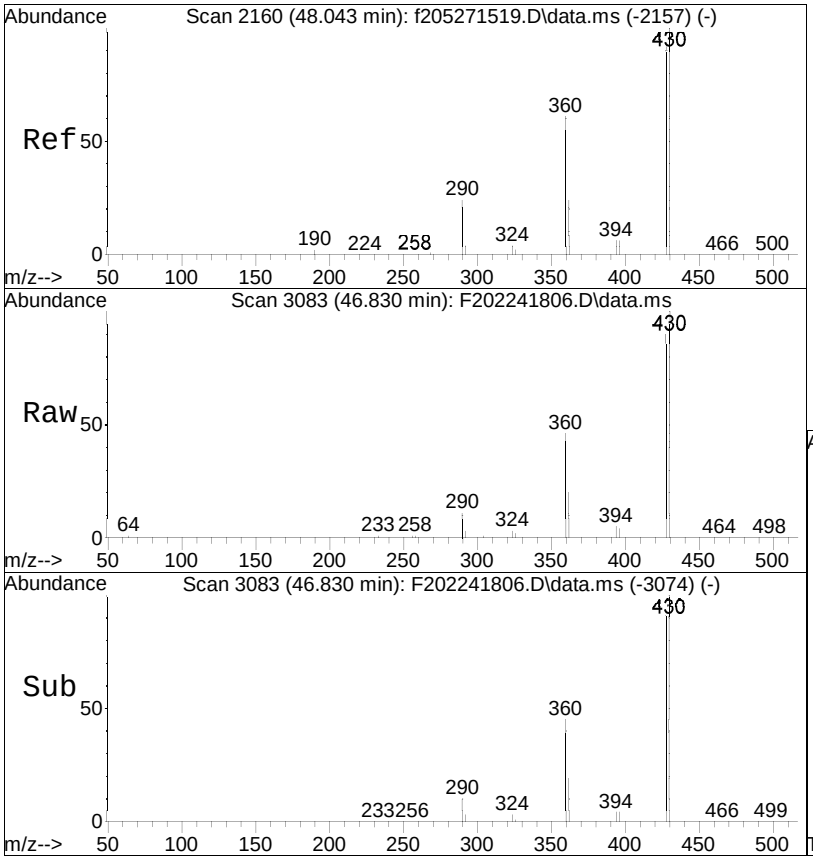


#194
Cl8-BZ#198
Concen: 39.47 ng/mL
RT: 46.747 min Scan# 3078
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 54730

Ion	Ratio	Lower	Upper
428	100		
430	112.0	90.0	135.0

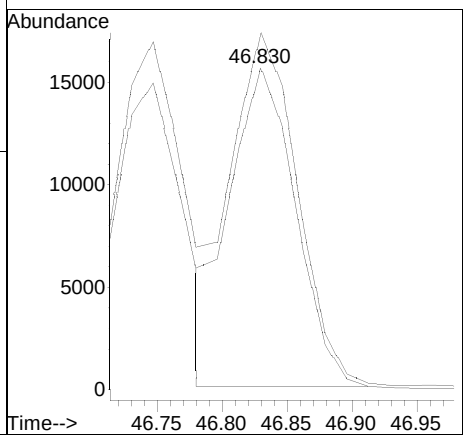


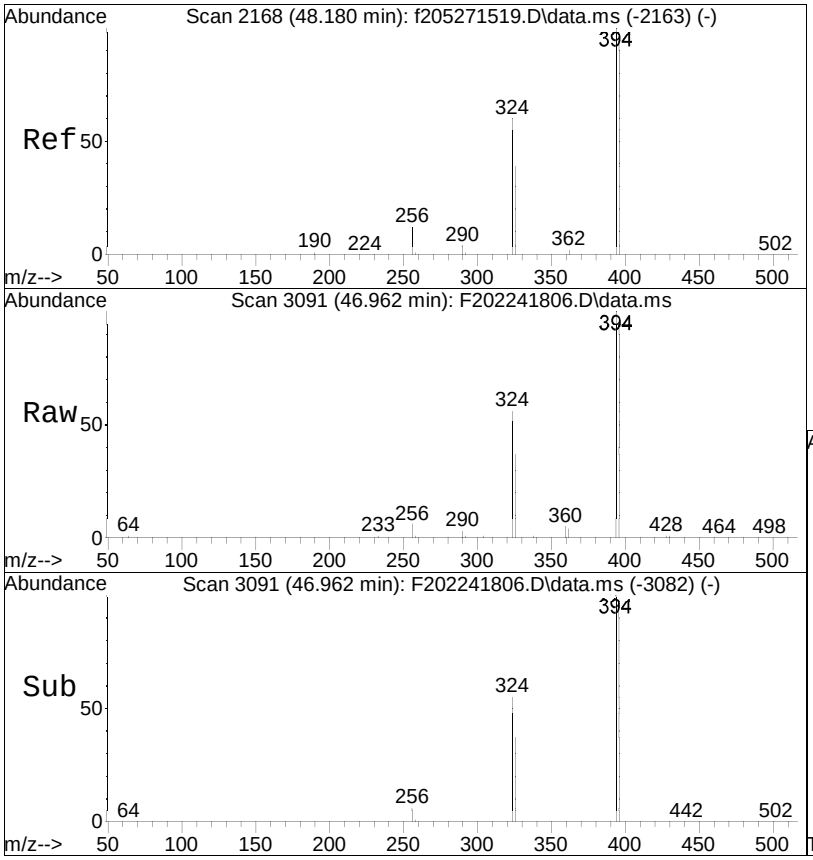


#195
Cl8-BZ#201
Concen: 39.75 ng/mL
RT: 46.830 min Scan# 3083
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 54548

Ion	Ratio	Lower	Upper
428	100		
430	112.1	91.3	136.9

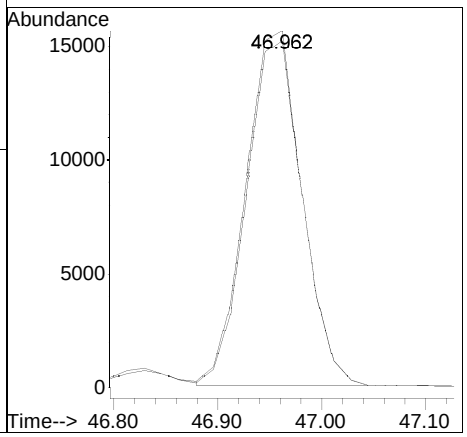


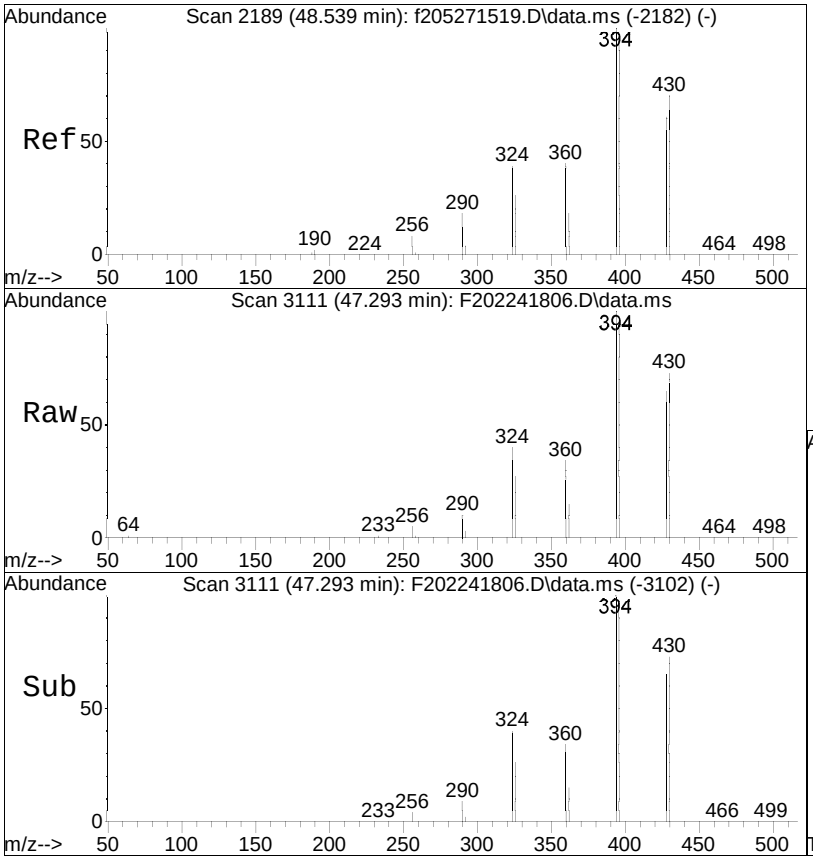


#196
Cl7-BZ#170
Concen: 42.93 ng/mL
RT: 46.962 min Scan# 3091
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 58063

Ion	Ratio	Lower	Upper
394	100		
396	96.6	80.2	120.4

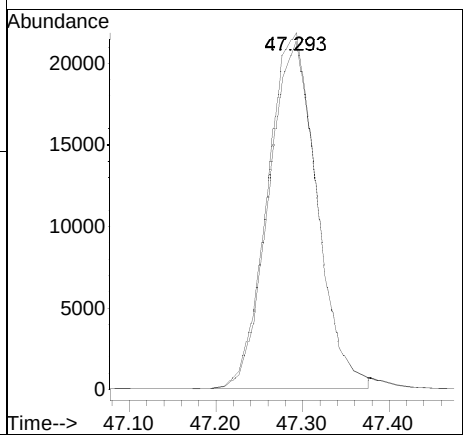


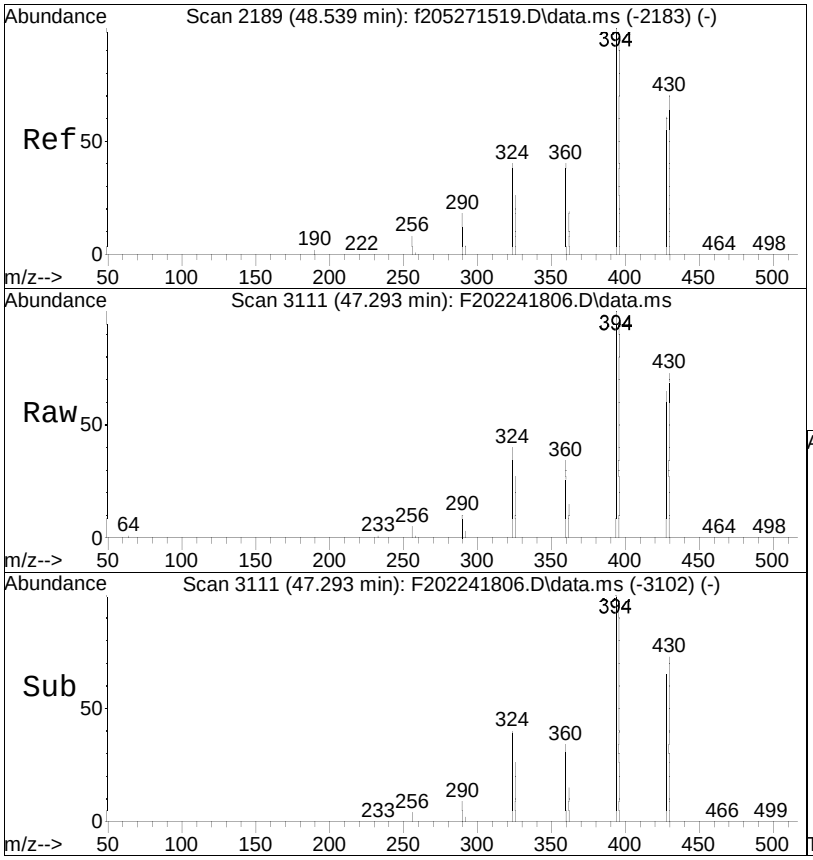


#197
Cl7-BZ#190
Concen: 38.78 ng/mL
RT: 47.293 min Scan# 3111
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 86051

Ion	Ratio	Lower	Upper
394	100		
396	95.8	78.9	118.3

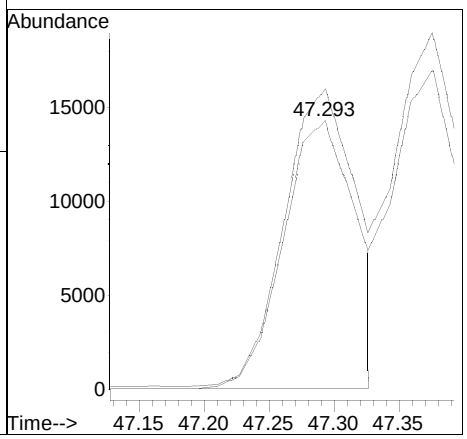


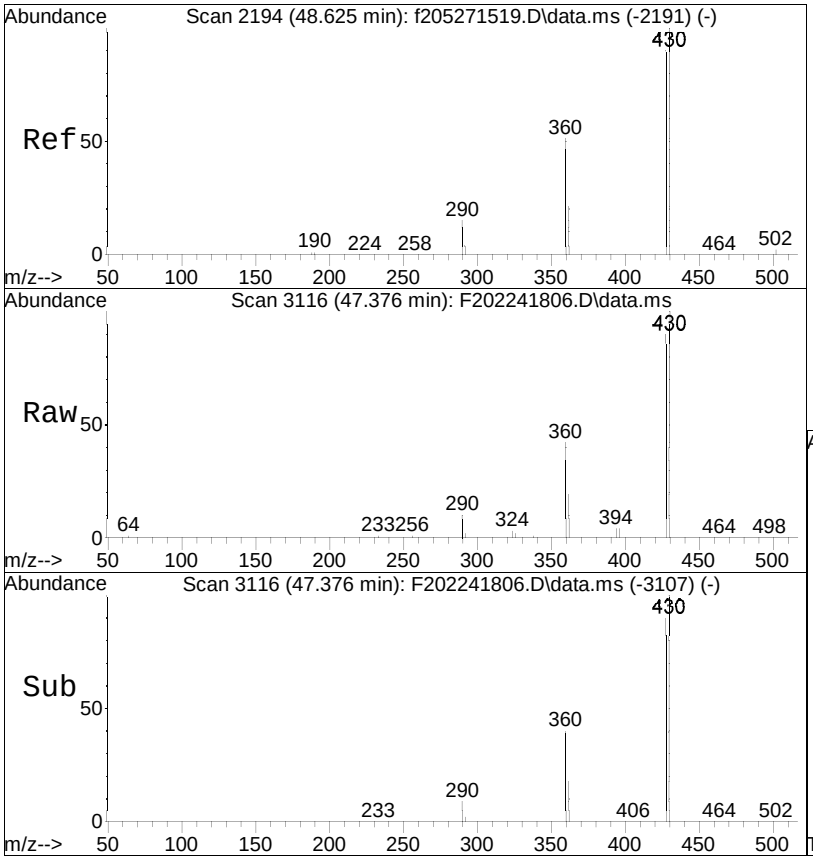


#198
Cl8-BZ#196
Concen: 38.76 ng/mL
RT: 47.293 min Scan# 3111
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 56111

Ion	Ratio	Lower	Upper
428	100		
430	109.9	90.2	135.2

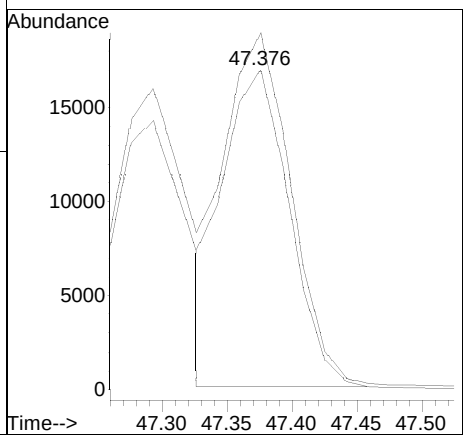


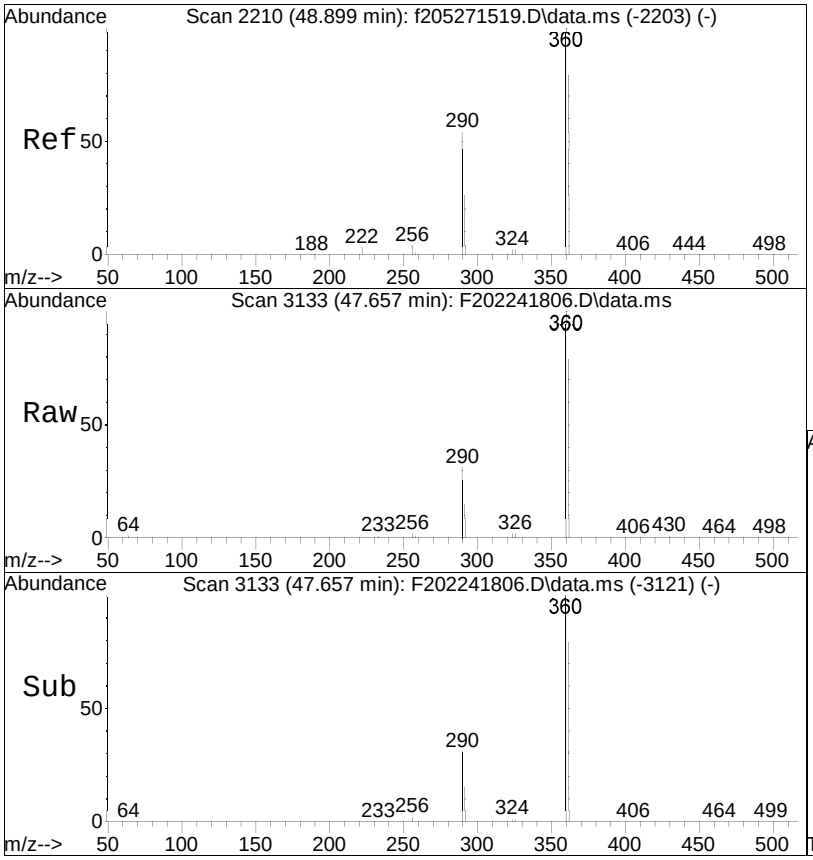


#199
Cl8-BZ#203
Concen: 39.71 ng/mL
RT: 47.376 min Scan# 3116
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 59894

Ion	Ratio	Lower	Upper
428	100		
430	111.2	90.0	135.0

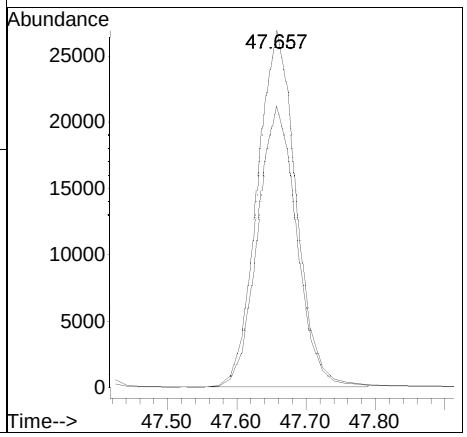


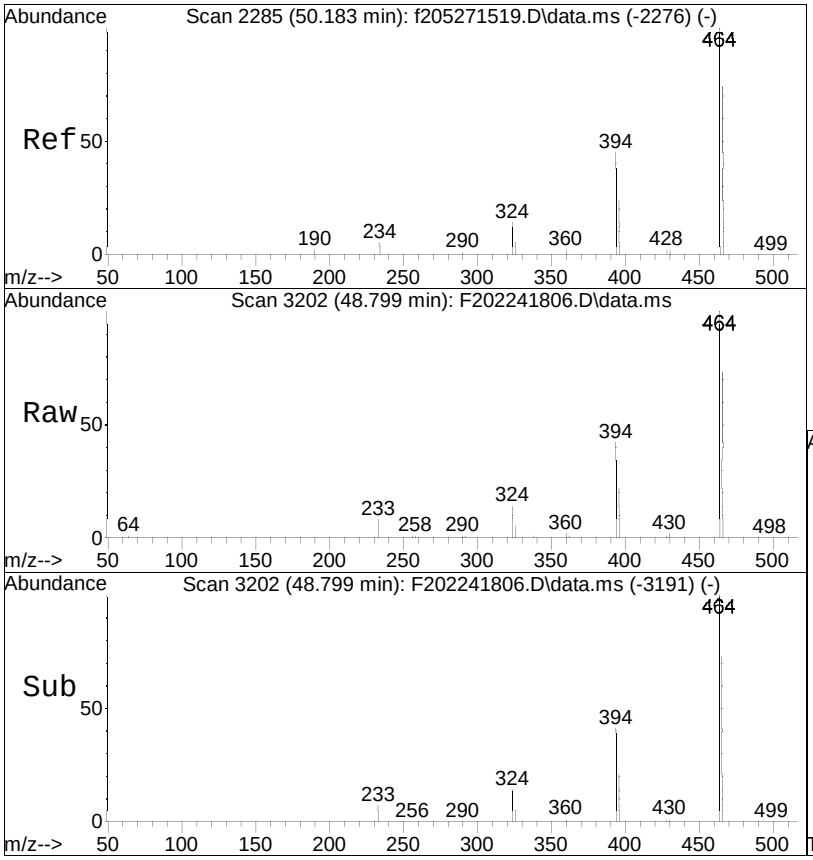


#200
Cl6-BZ#169-RTW
Concen: 42.13 ng/mL
RT: 47.657 min Scan# 3133
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:360 Resp: 103529

Ion	Ratio	Lower	Upper
360	100		
362	79.5	65.0	97.4

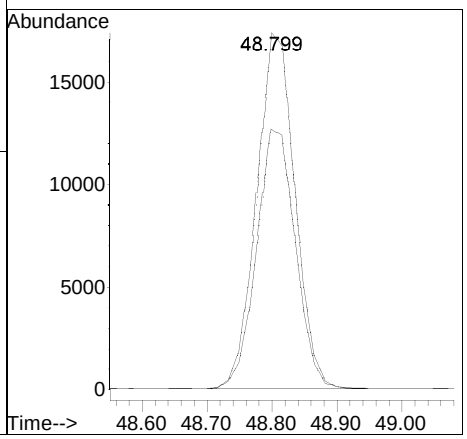


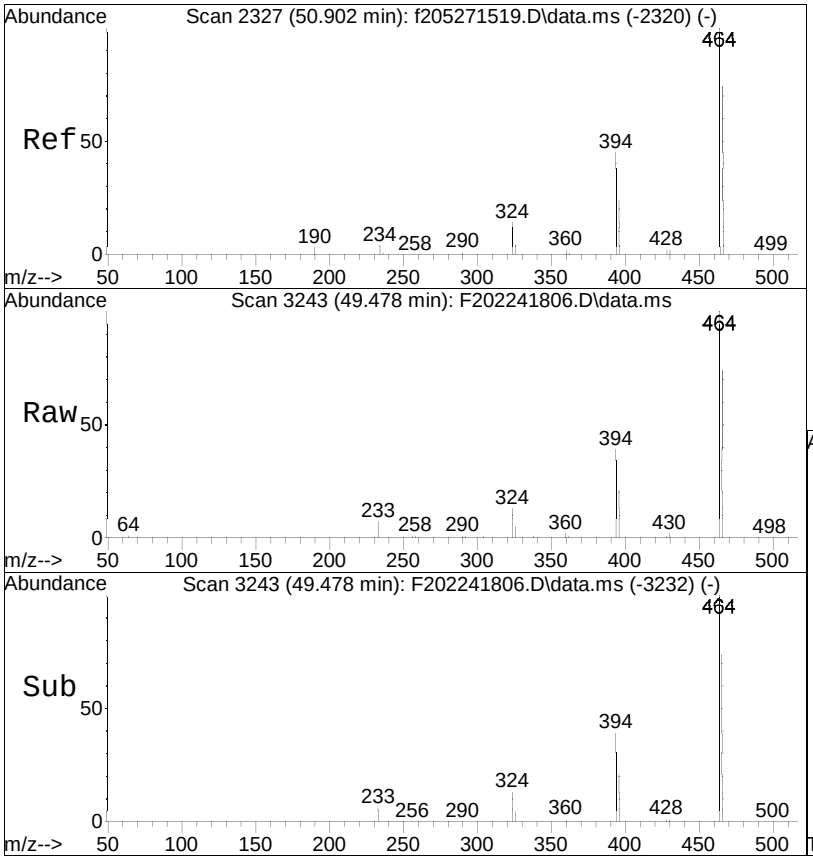


#201
Cl9-BZ#208-RTW
Concen: 38.56 ng/mL
RT: 48.799 min Scan# 3202
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:464 Resp: 70838

Ion	Ratio	Lower	Upper
464	100		
466	73.8	60.3	90.5

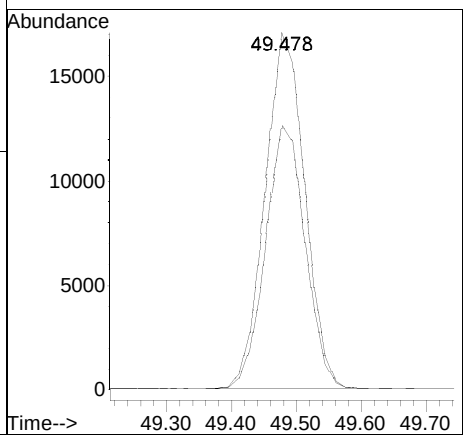


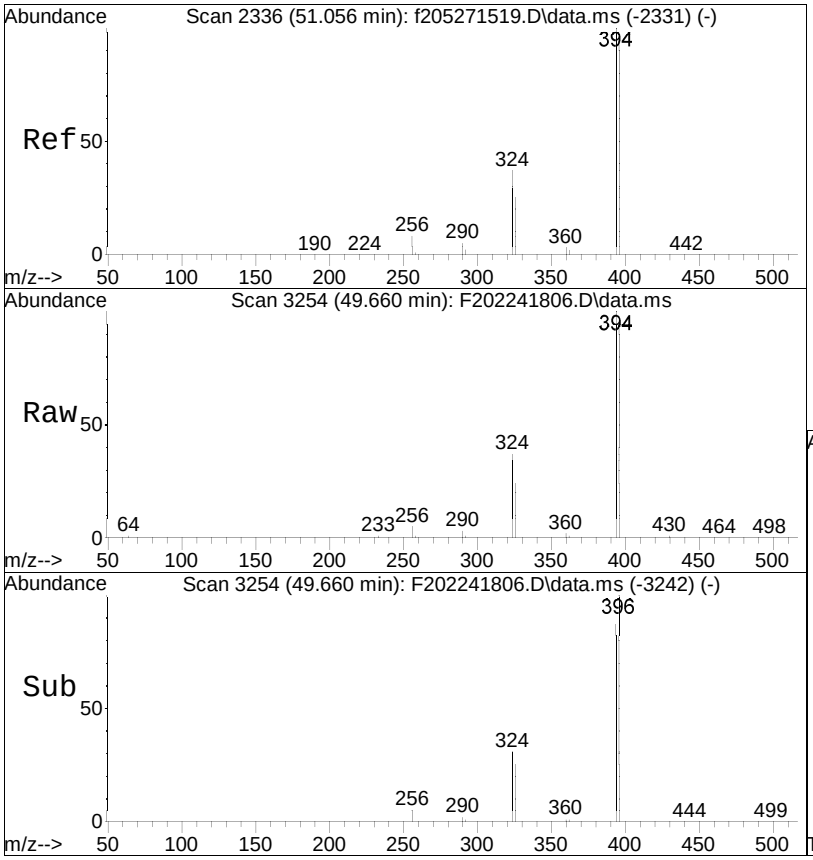


#202
Cl9-BZ#207
Concen: 38.40 ng/mL
RT: 49.478 min Scan# 3243
Delta R.T. -0.016 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:464 Resp: 72198

Ion	Ratio	Lower	Upper
464	100		
466	74.2	61.9	92.9

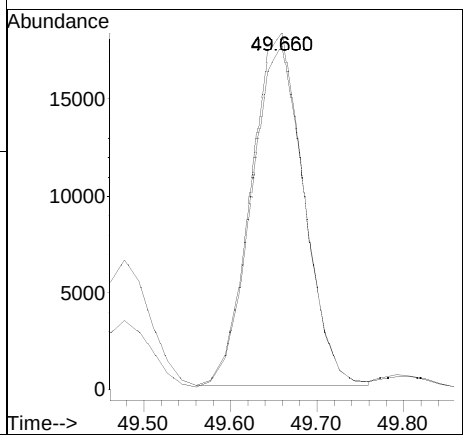


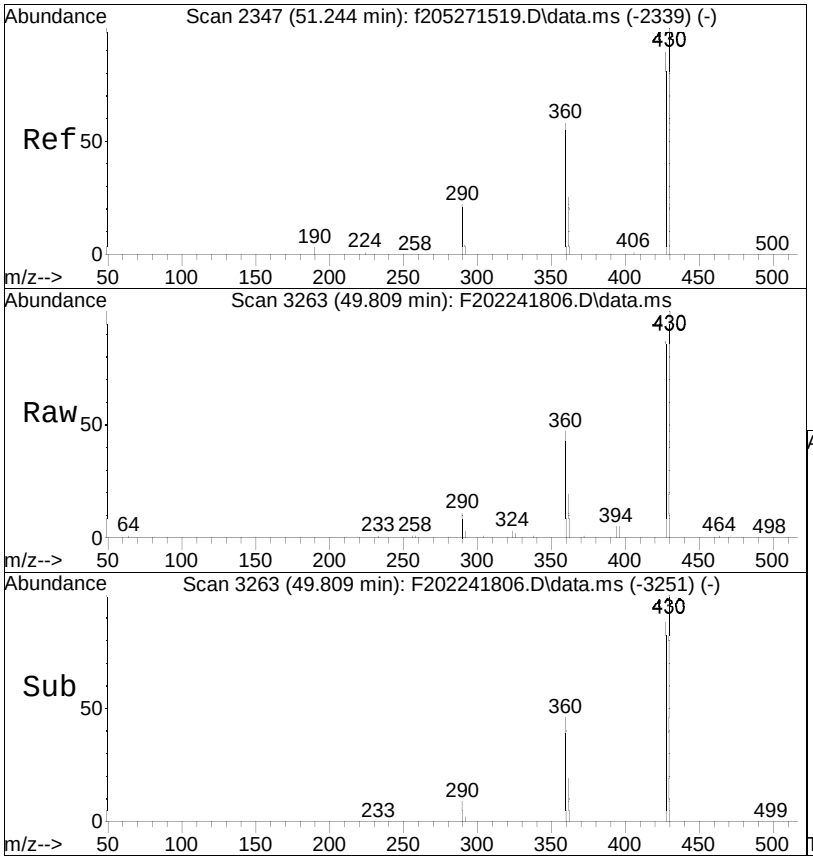


#203
Cl7-BZ#189-RTW
Concen: 41.65 ng/mL
RT: 49.660 min Scan# 3254
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:394 Resp: 76803

Ion	Ratio	Lower	Upper
394	100		
396	97.3	76.4	114.6

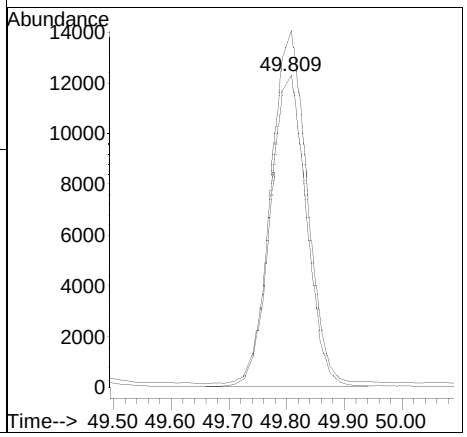


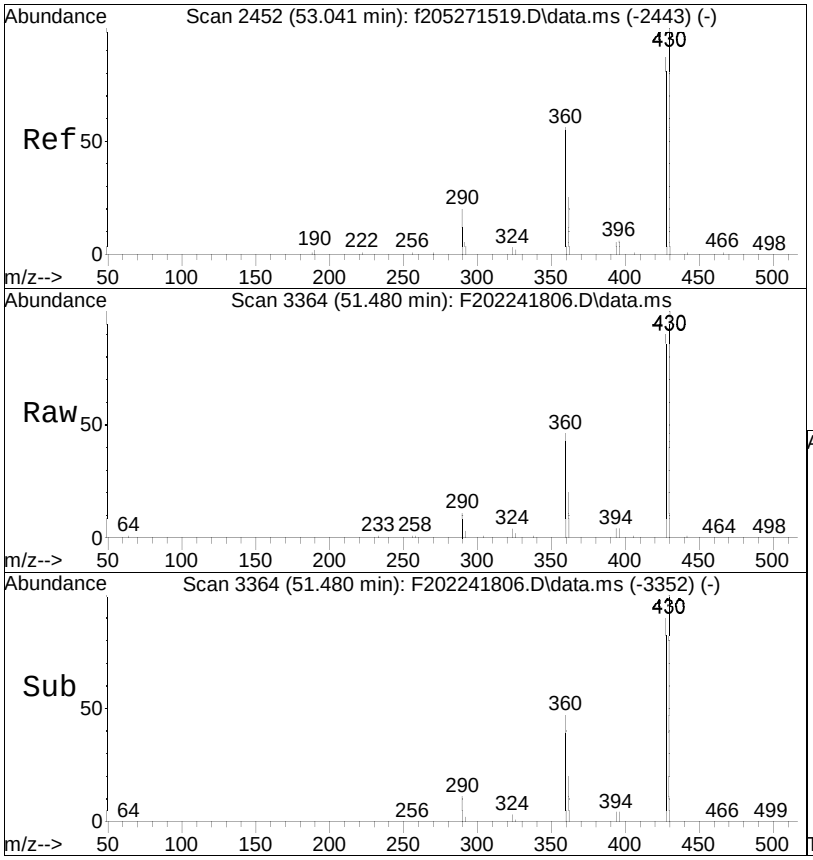


#204
Cl8-BZ#195
Concen: 39.42 ng/mL
RT: 49.809 min Scan# 3263
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 52914

Ion	Ratio	Lower	Upper
428	100		
430	113.2	93.8	140.8

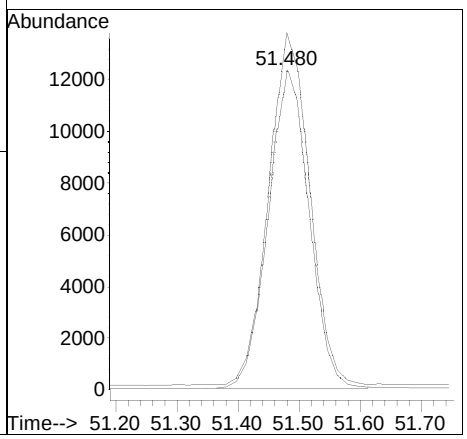


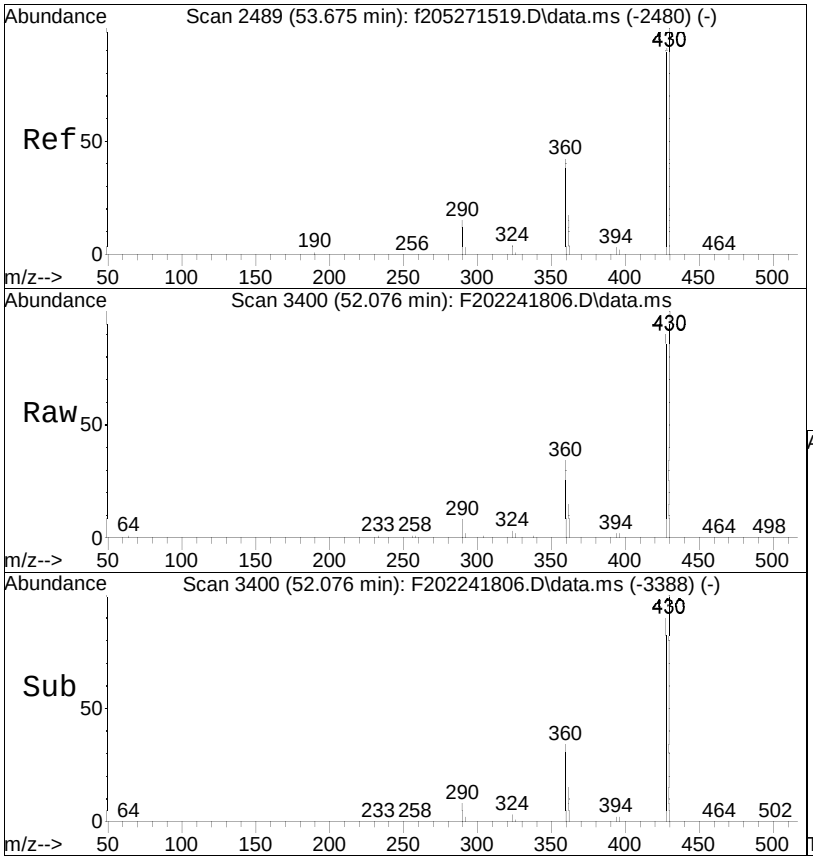


#205
Cl8-BZ#194
Concen: 41.05 ng/mL
RT: 51.480 min Scan# 3364
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 56726

Ion	Ratio	Lower	Upper
428	100		
430	111.1	92.2	138.2

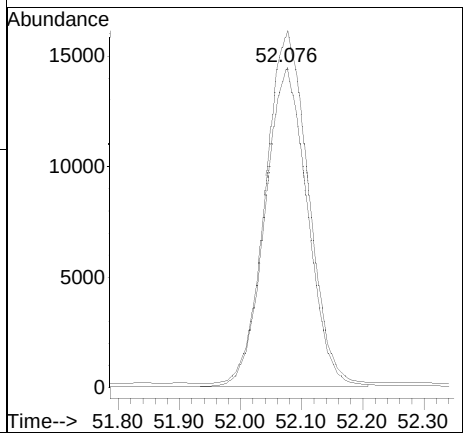


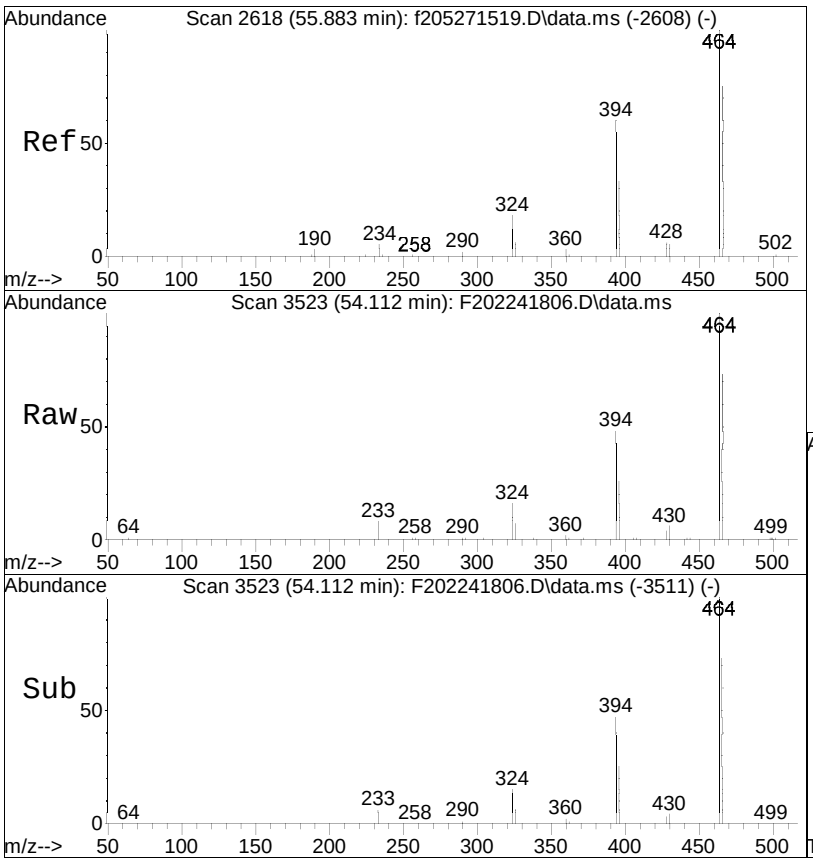


#206
Cl8-BZ#205-RTW
Concen: 42.89 ng/mL
RT: 52.076 min Scan# 3400
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:428 Resp: 68934

Ion	Ratio	Lower	Upper
428	100		
430	111.5	91.3	136.9

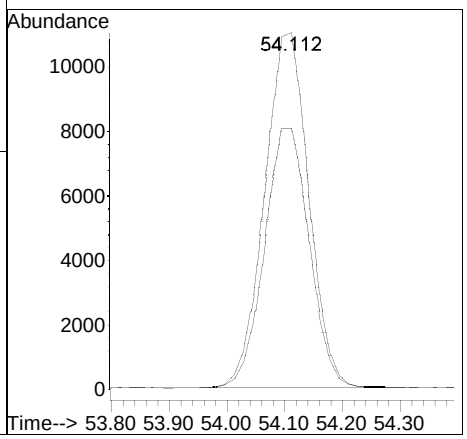


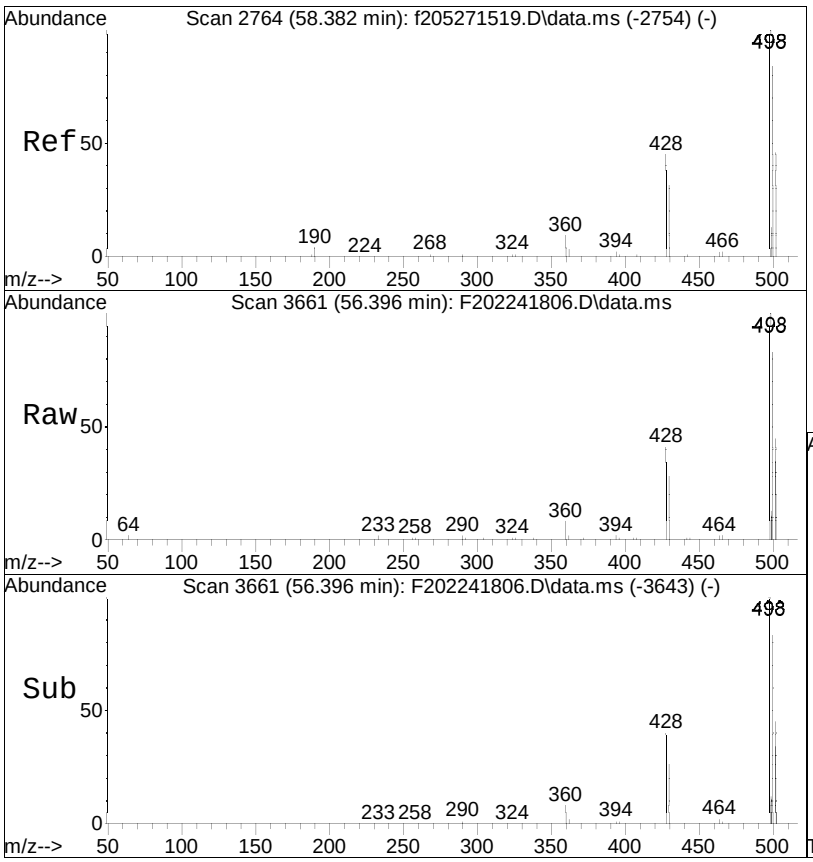


#207
Cl9-BZ#206-Cal/RTW
Concen: 41.40 ng/mL
RT: 54.112 min Scan# 3523
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:464 Resp: 58301

Ion	Ratio	Lower	Upper
464	100		
466	74.1	60.2	90.2

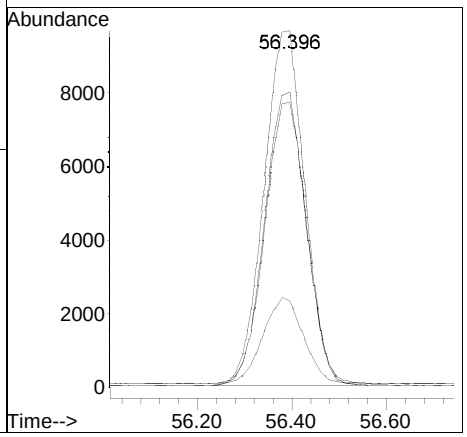




#210
Cl10-BZ#209-Cal/RTW
Concen: 39.35 ng/mL
RT: 56.396 min Scan# 3661
Delta R.T. 0.000 min
Lab File: F202241806.D
Acq: 24 Feb 2018 3:10 pm

Tgt Ion:498 Resp: 58050

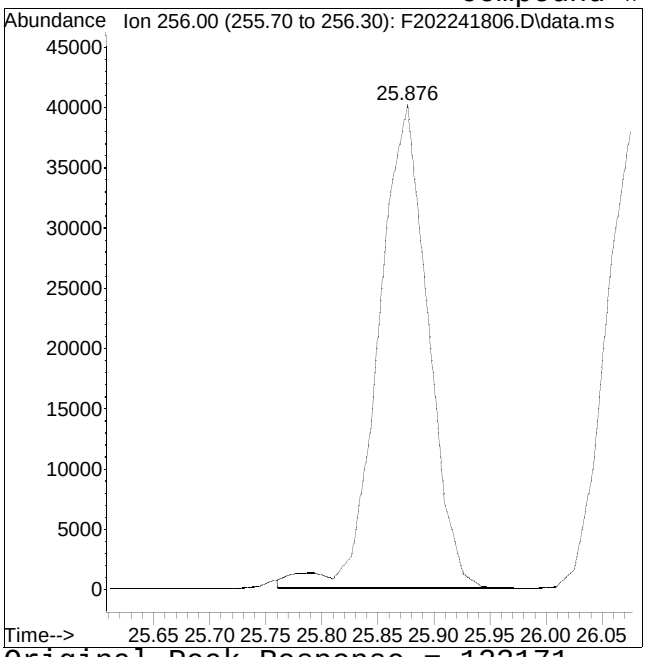
Ion	Ratio	Lower	Upper
498	100		
500	83.5	66.9	100.3
499	24.2	10.8	16.2#
502	80.7	38.5	57.7#



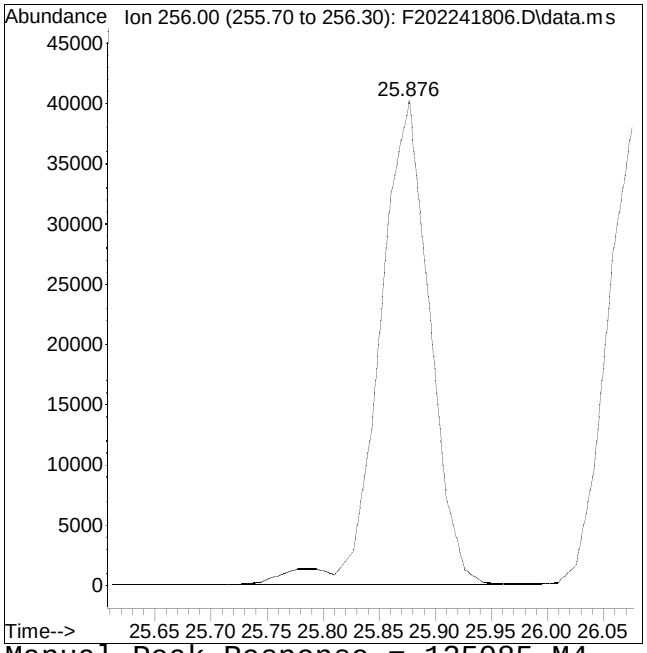
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #41: Cl3-BZ#-31



Original Peak Response = 123171



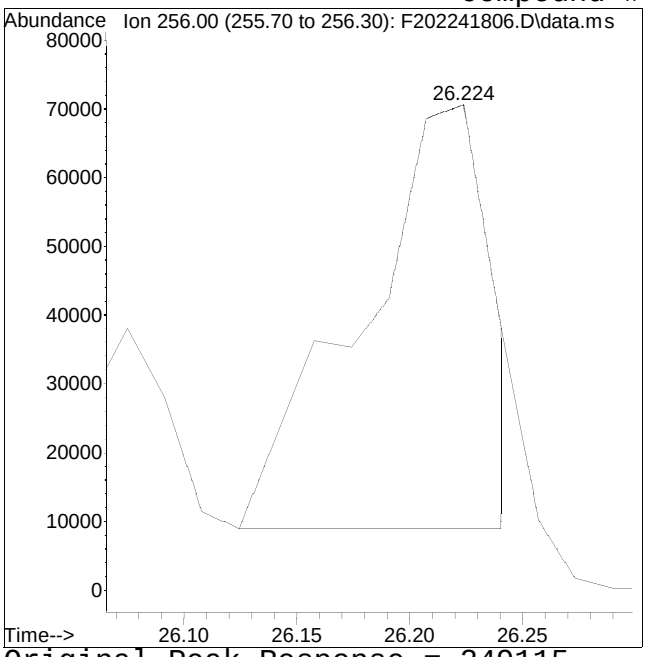
Manual Peak Response = 125085 M4

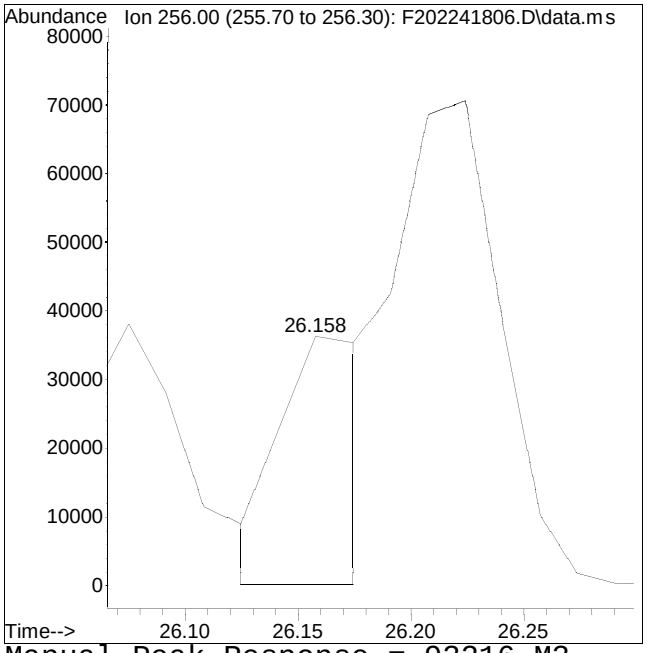
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #43: Cl3-BZ#33





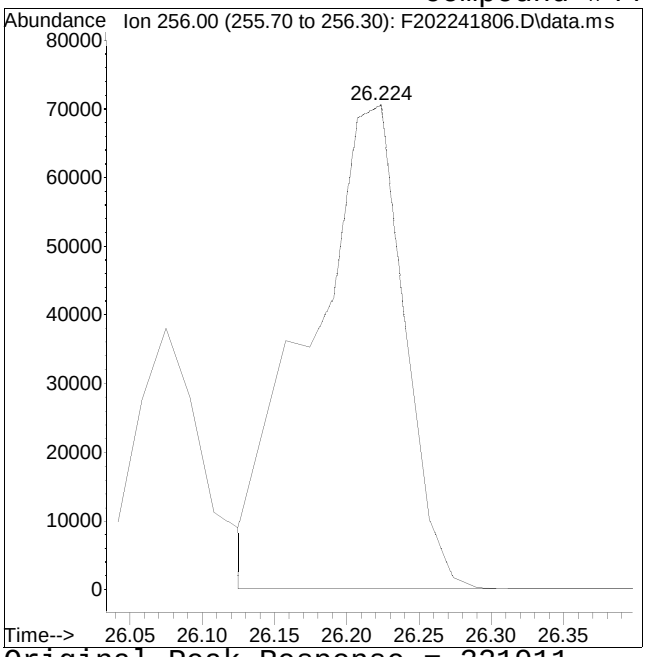
Original Peak Response = 249115 Manual Peak Response = 93216 M3

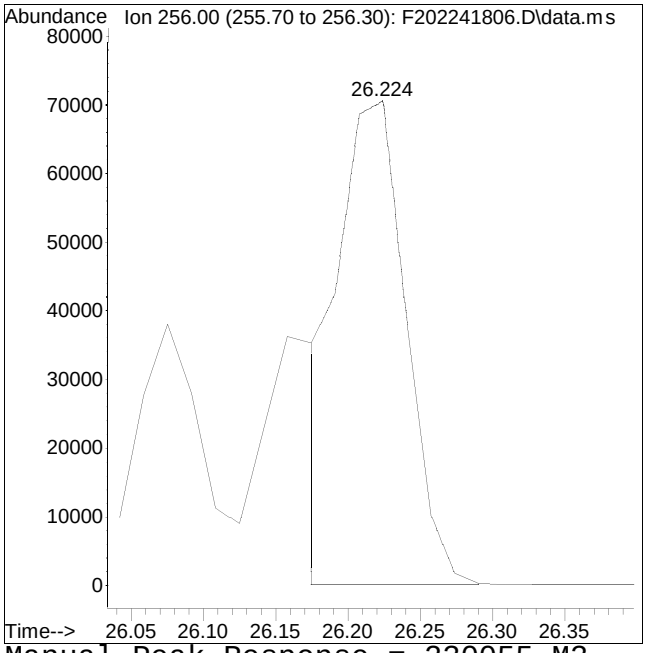
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #44: Cl3-BZ#21/#20





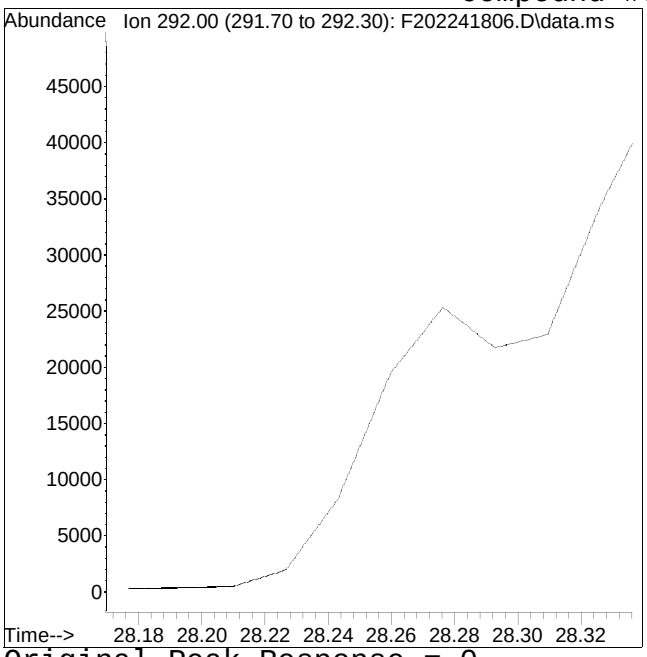
Original Peak Response = 321911 Manual Peak Response = 230055 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

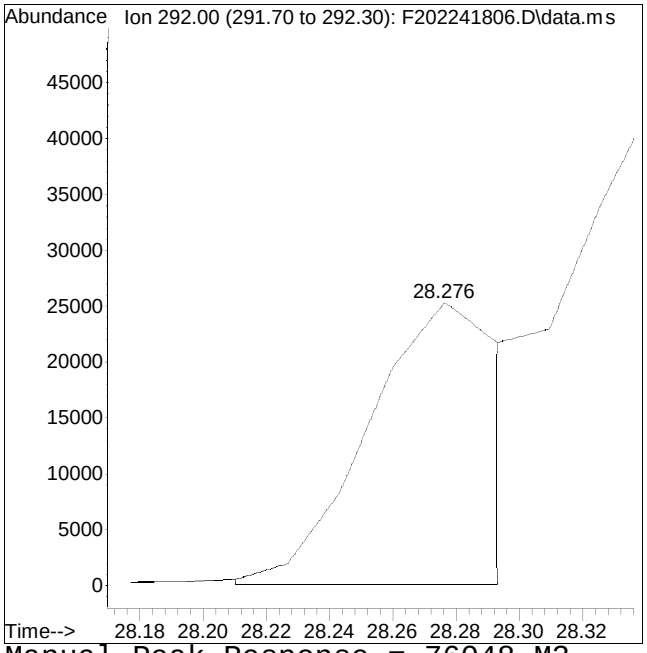
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #56: Cl4-BZ#47





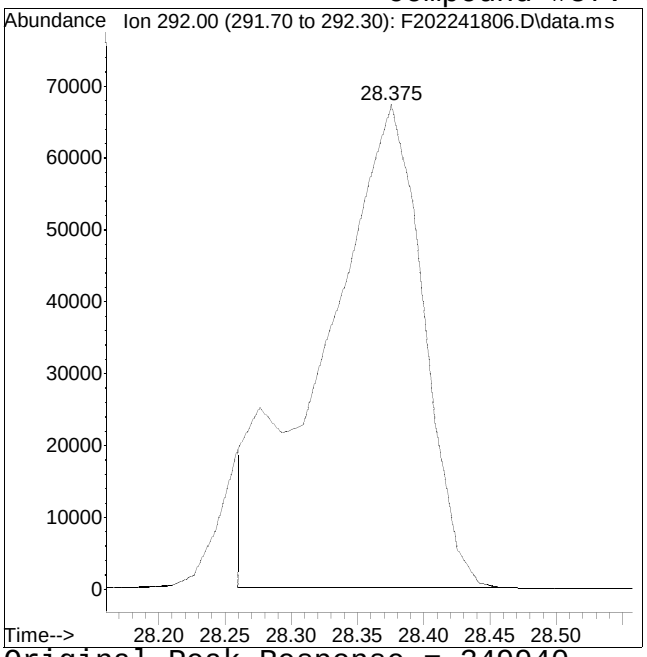
Original Peak Response = 0 Manual Peak Response = 76048 M3

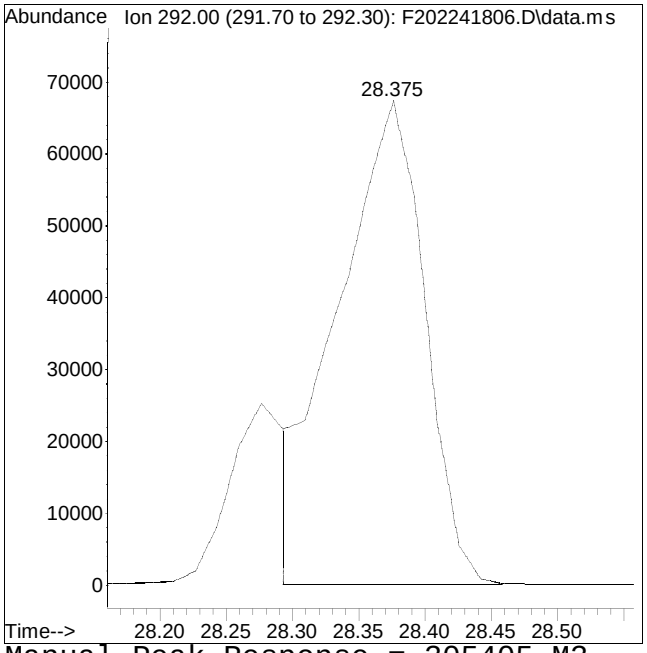
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #57: Cl4-BZ#65/#75/#62





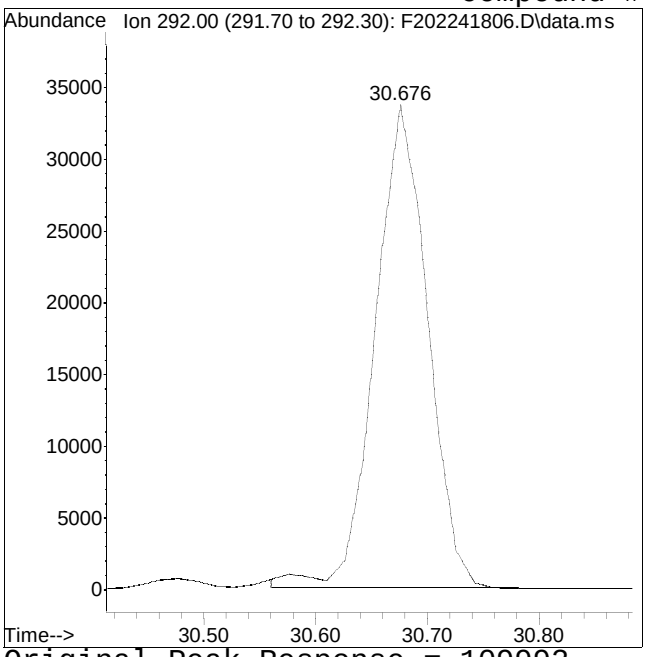
Original Peak Response = 349940 Manual Peak Response = 305405 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

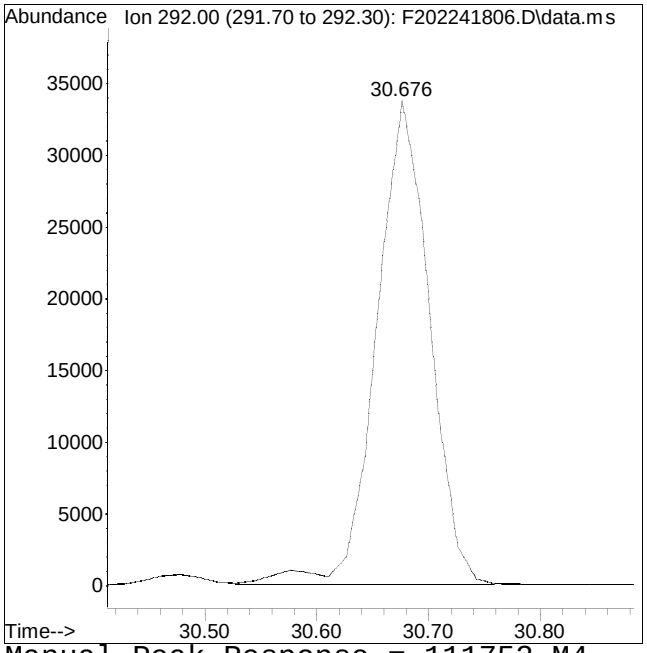
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #74: Cl4-BZ#57



Original Peak Response = 109992



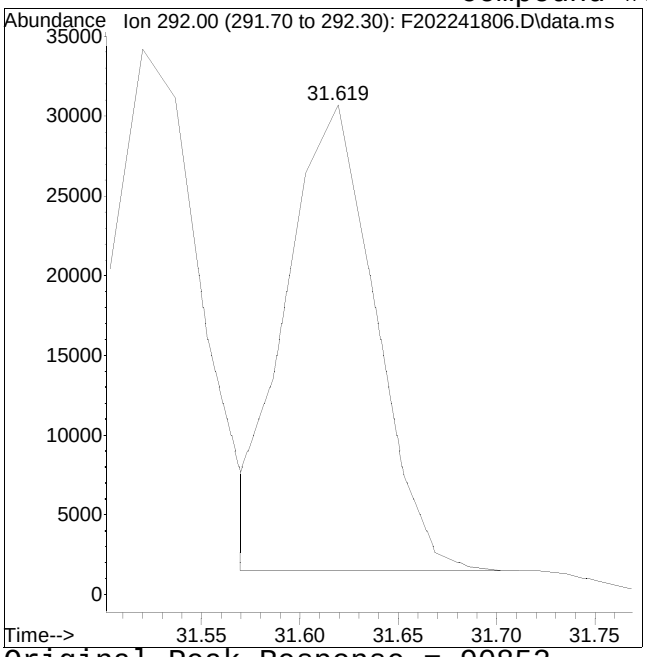
Manual Peak Response = 111752 M4

M4 = Poor automated baseline construction.

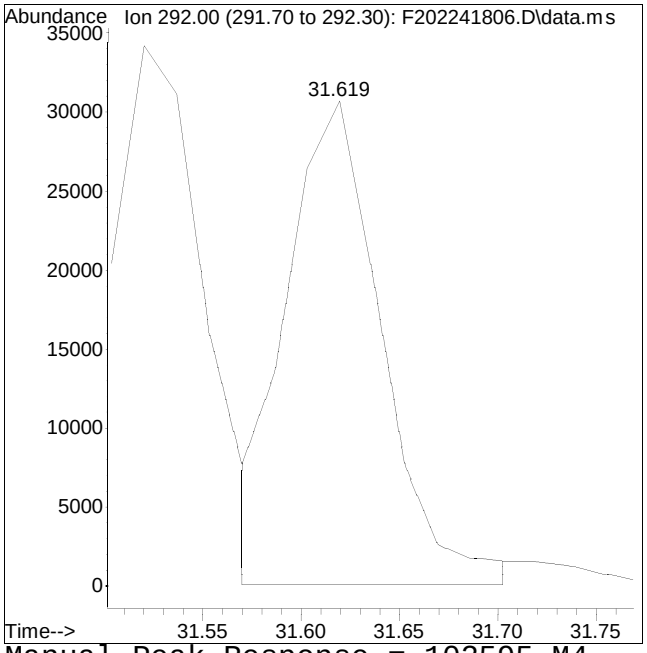
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #81: Cl4-BZ#63



Original Peak Response = 90852



Manual Peak Response = 102595 M4

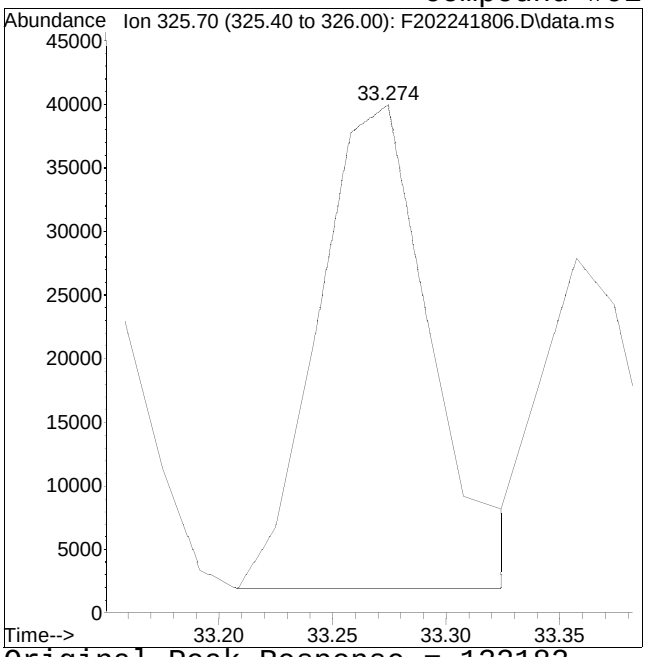
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

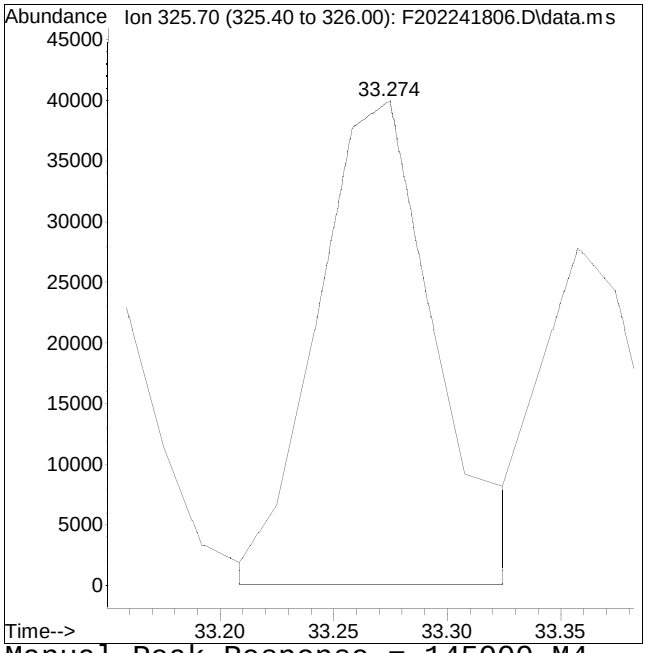
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 132182



Manual Peak Response = 145000 M4

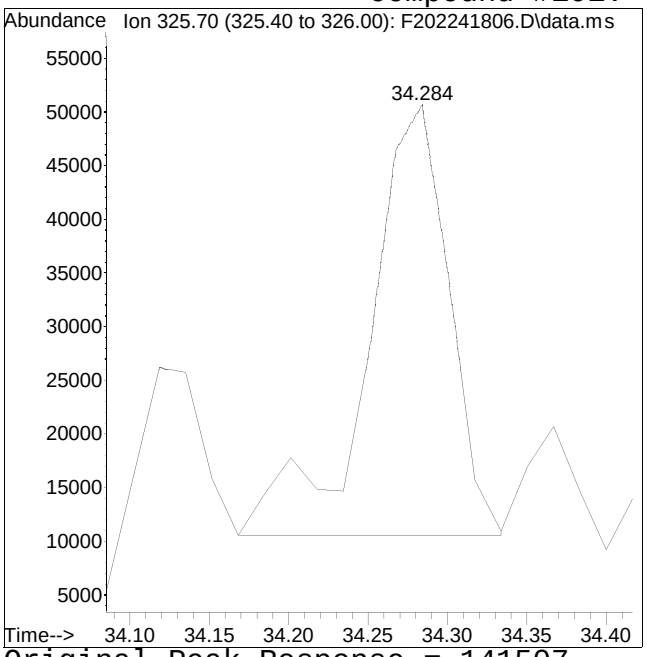
M4 = Poor automated baseline construction.

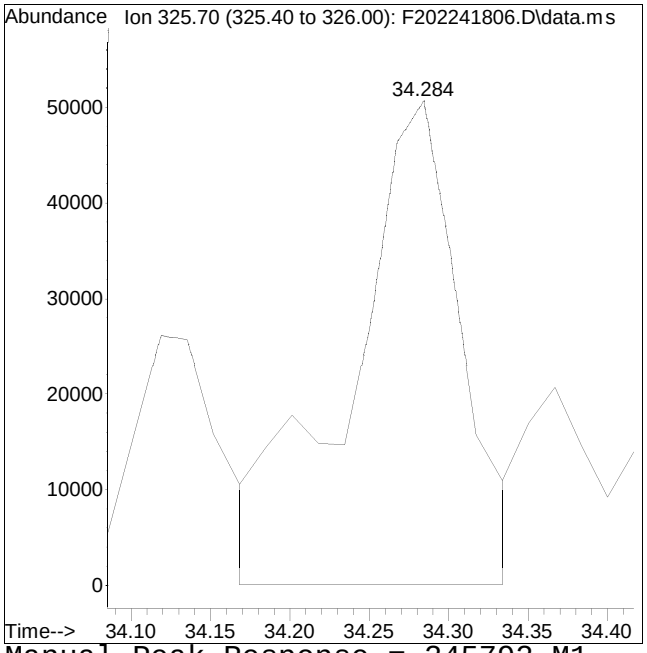
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #101: Cl5-BZ#83/#125/#112





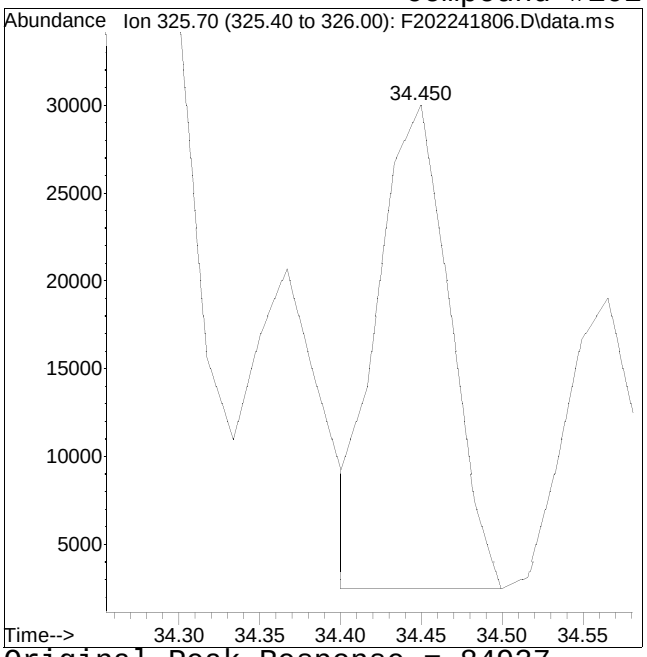
Original Peak Response = 141507 Manual Peak Response = 245792 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

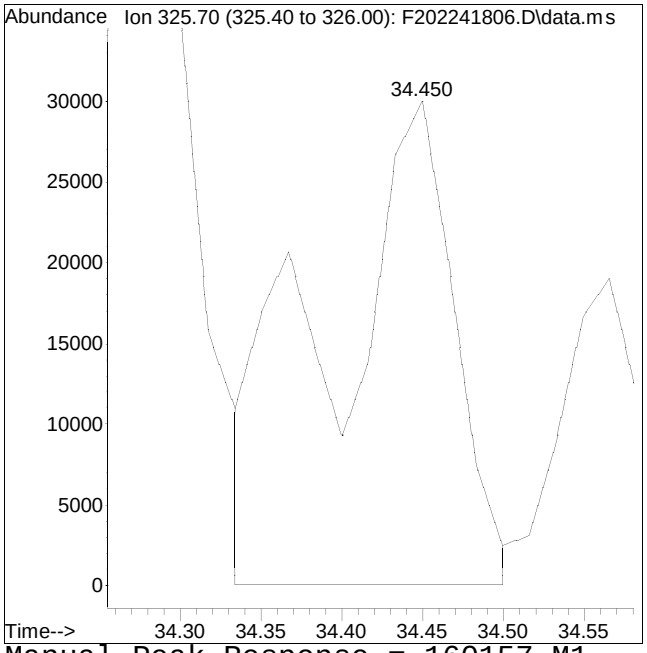
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #102: Cl5-BZ#86/#109





Original Peak Response = 84937 Manual Peak Response = 160157 M1

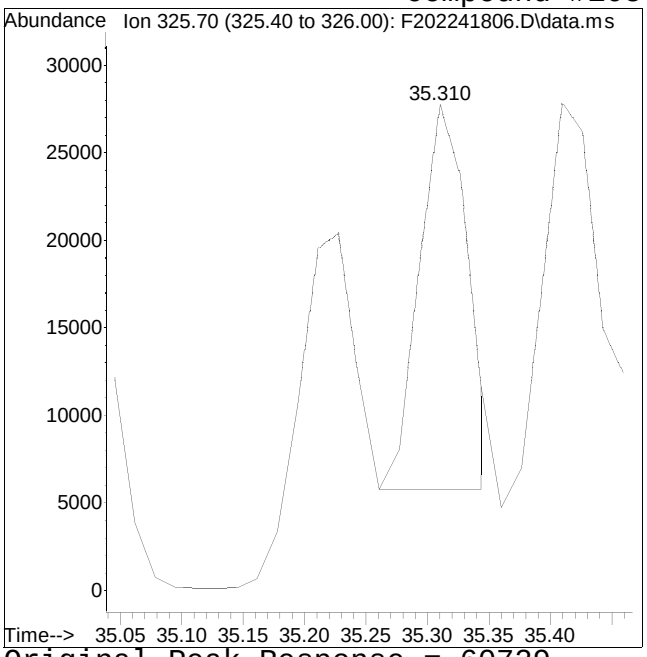
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

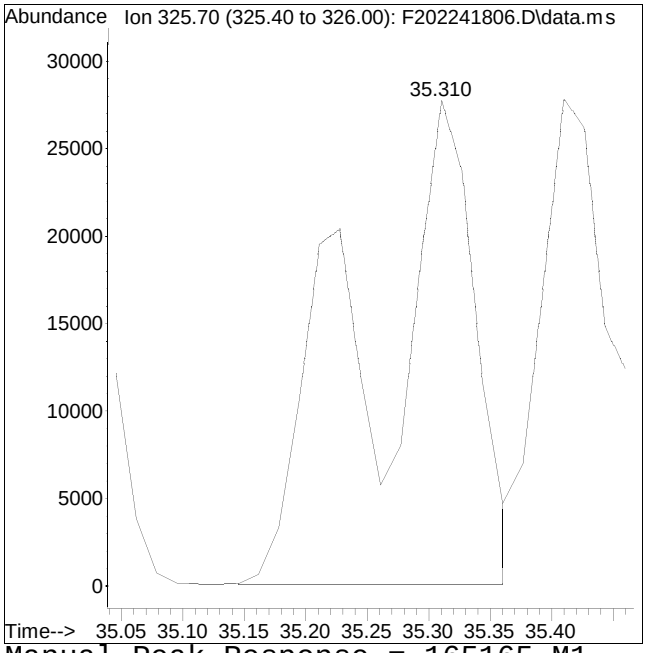
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 60729



Manual Peak Response = 165165 M1

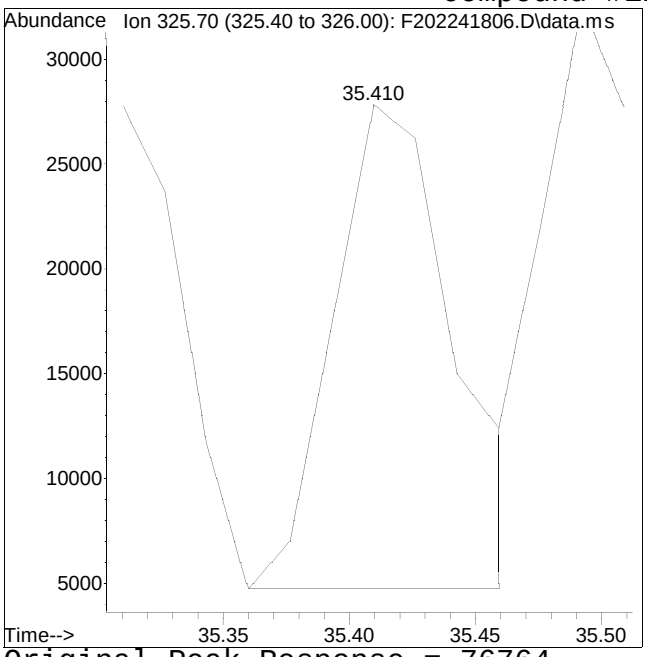
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

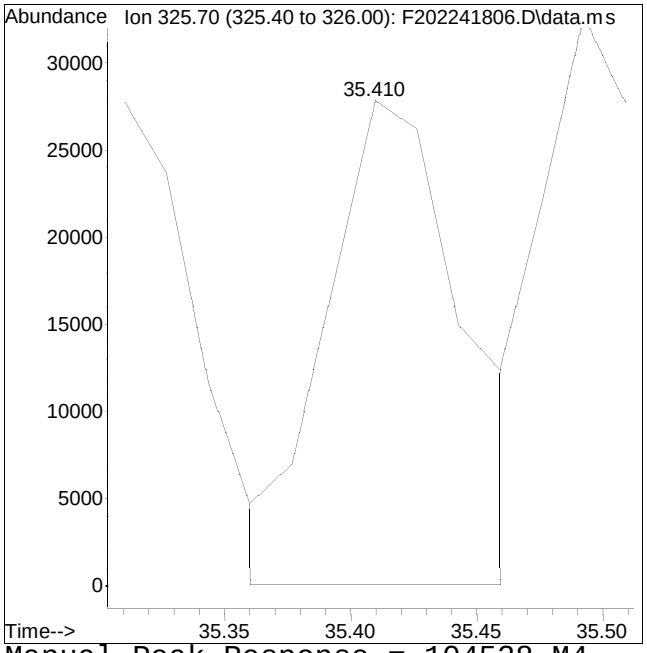
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #116: Cl5-BZ#117



Original Peak Response = 76764



Manual Peak Response = 104528 M4

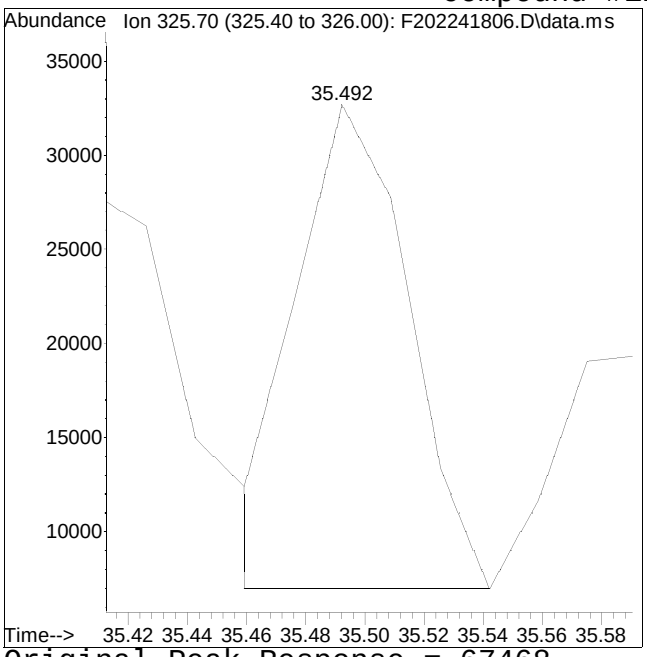
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

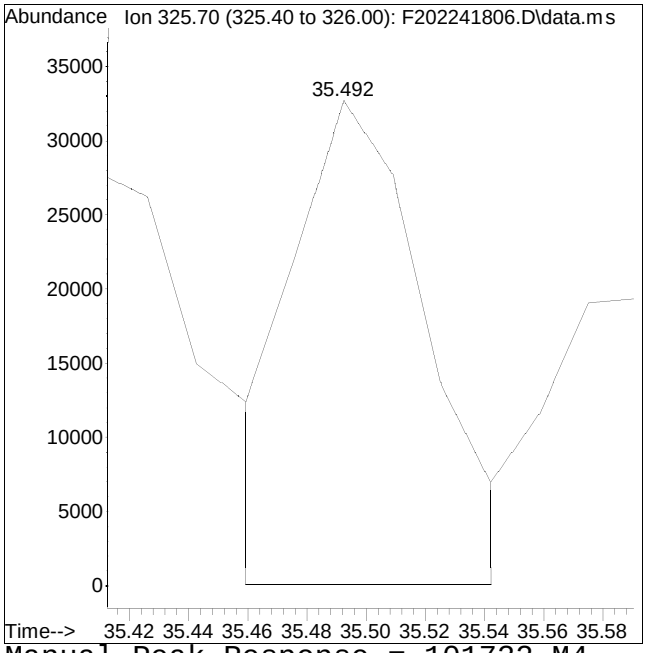
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #117: Cl5-BZ#115



Original Peak Response = 67468



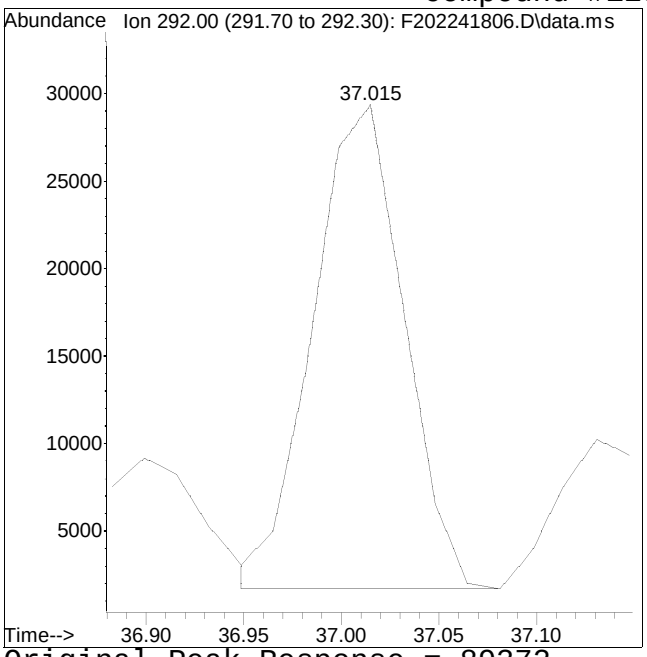
Manual Peak Response = 101732 M4

M4 = Poor automated baseline construction.

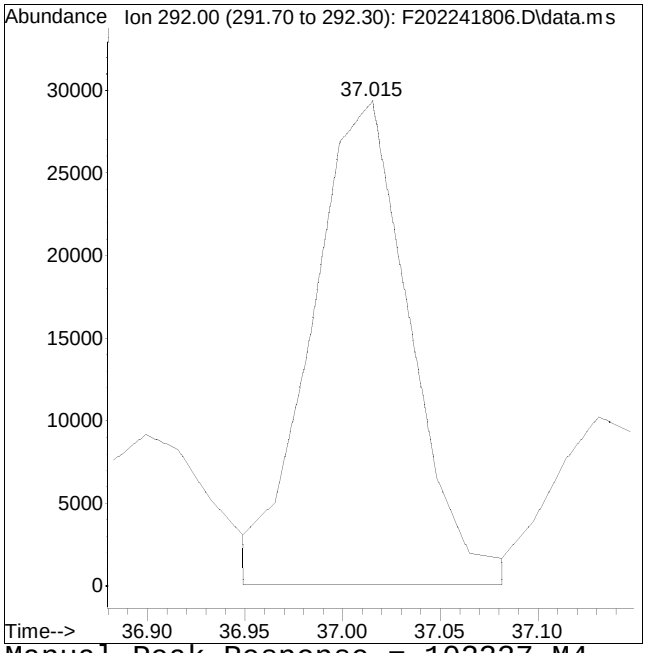
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 89372



Manual Peak Response = 102337 M4

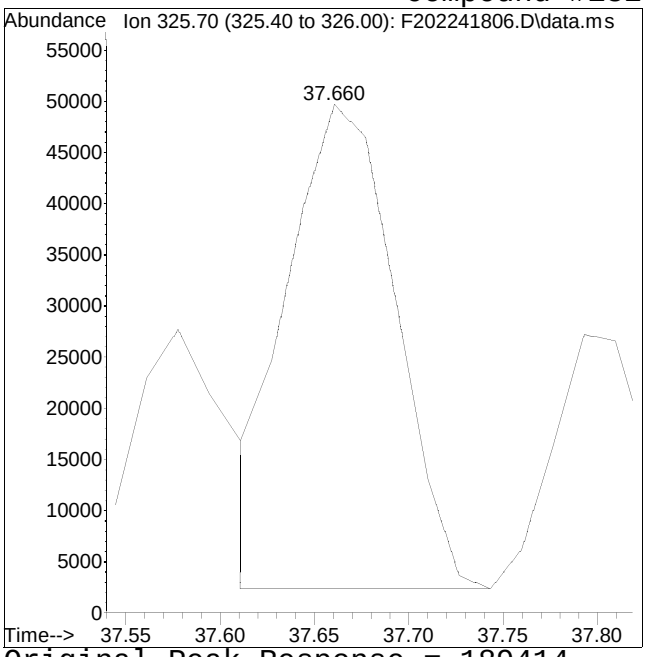
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

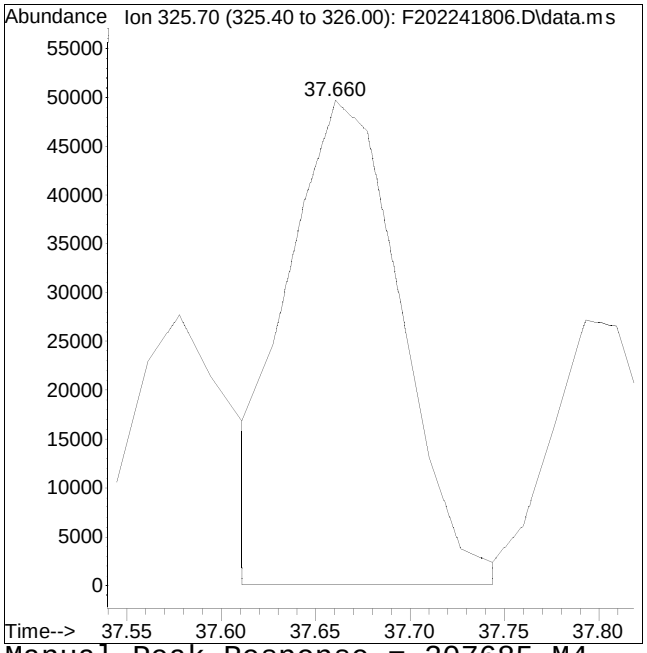
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 189414



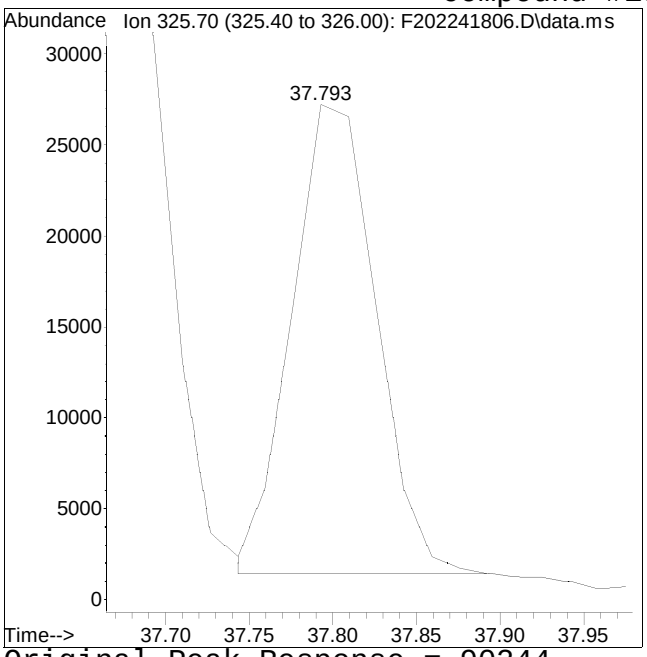
Manual Peak Response = 207685 M4

M4 = Poor automated baseline construction.

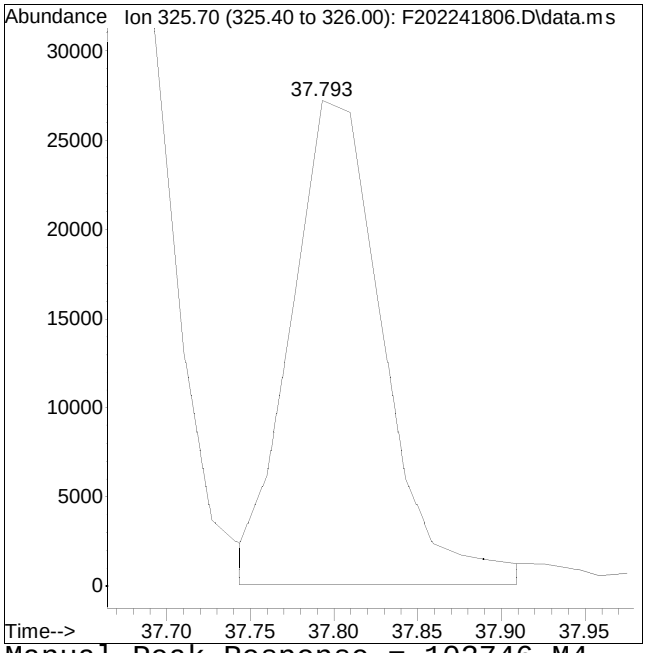
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #138: Cl5-BZ#106



Original Peak Response = 90244



Manual Peak Response = 103746 M4

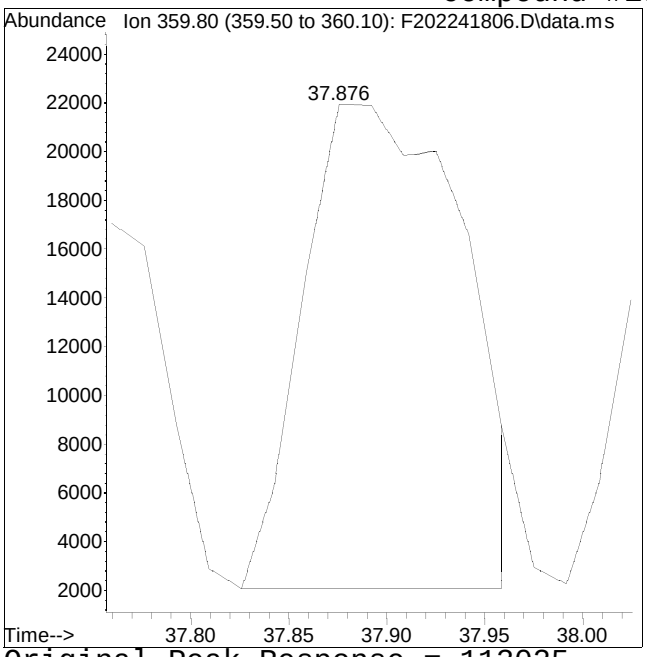
M4 = Poor automated baseline construction.

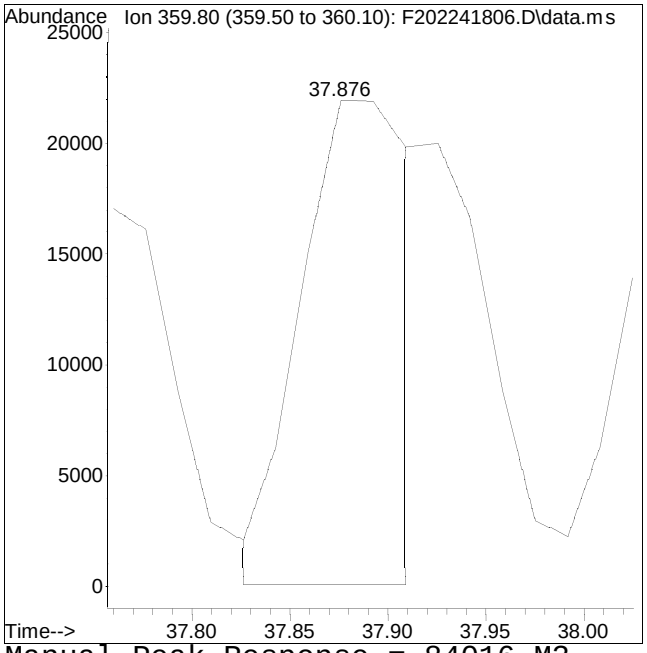
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #139: Cl6-BZ#133





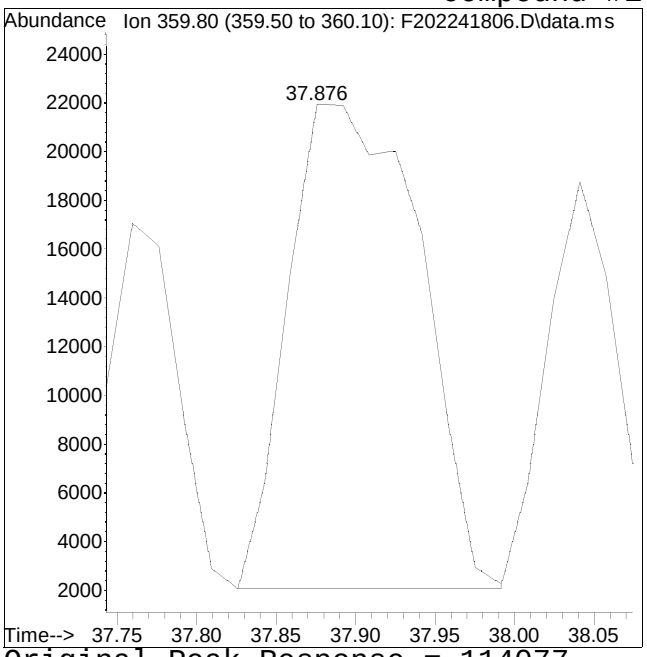
Original Peak Response = 113025 Manual Peak Response = 84016 M3

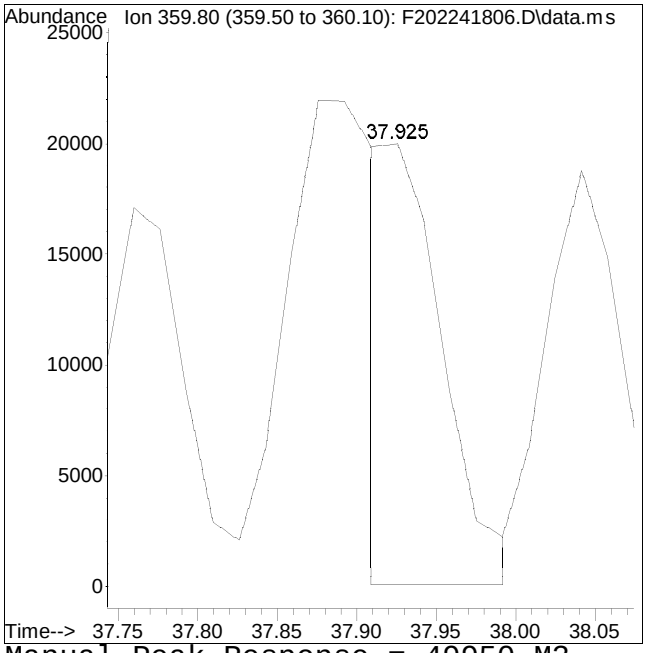
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #140: Cl6-BZ#142





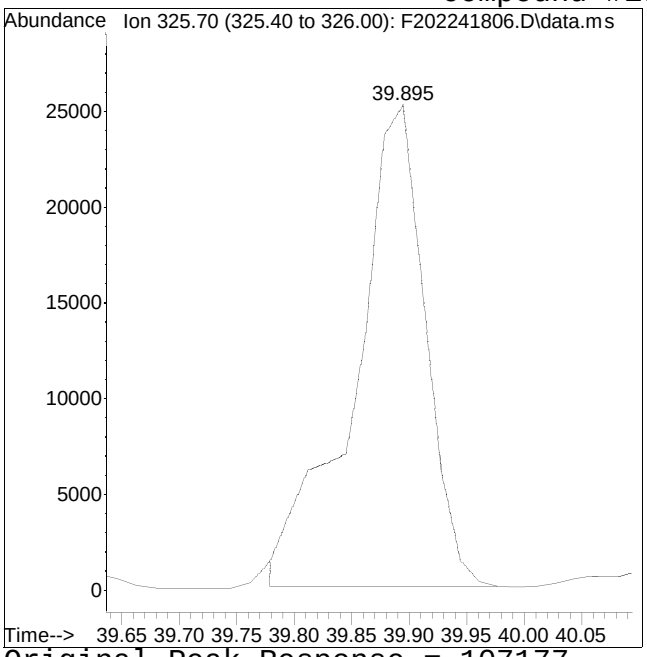
Original Peak Response = 114077 Manual Peak Response = 49950 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

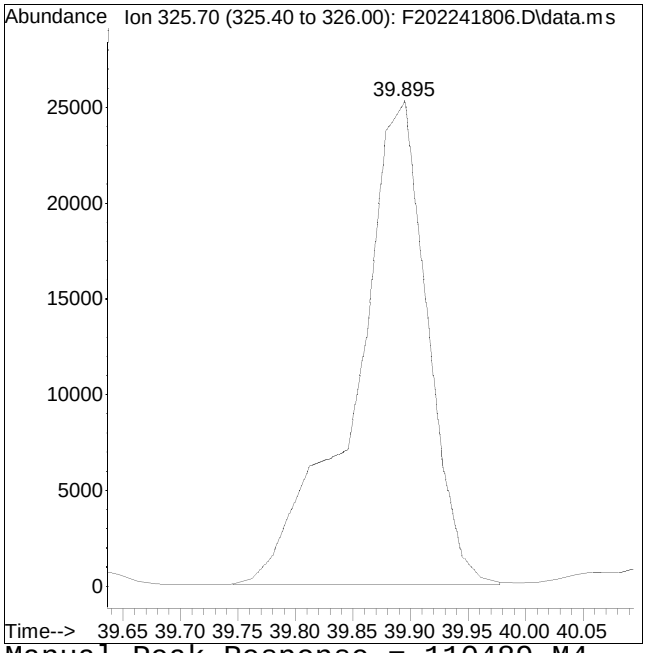
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #156: Cl5-BZ#105



Original Peak Response = 107177



Manual Peak Response = 110489 M4

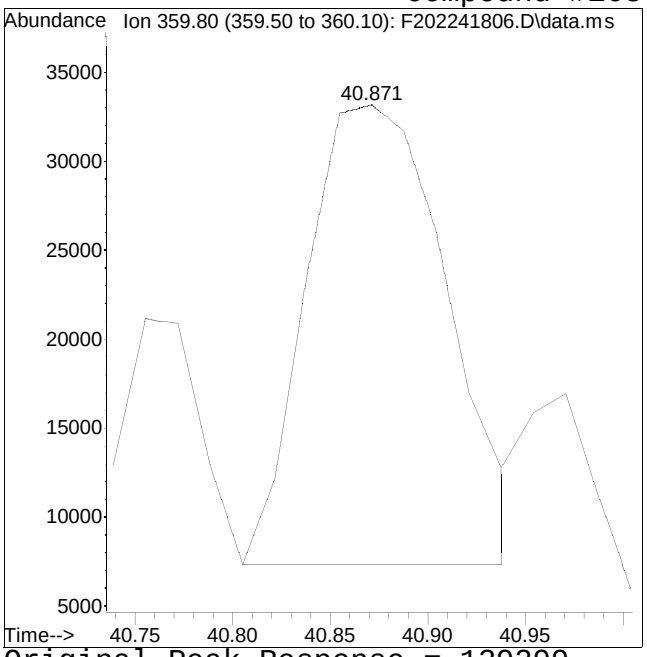
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

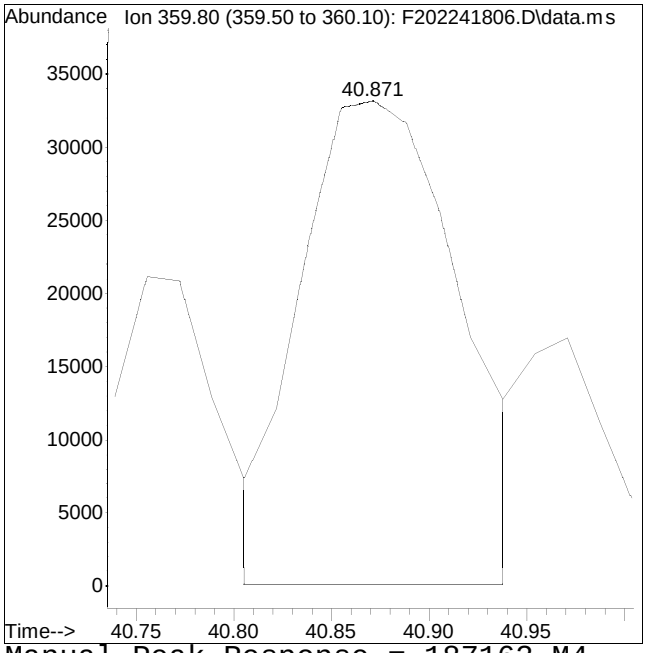
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241806.D
Date Inj'd : 2/24/2018 3:10 pm
Sample : I202241805

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 129299



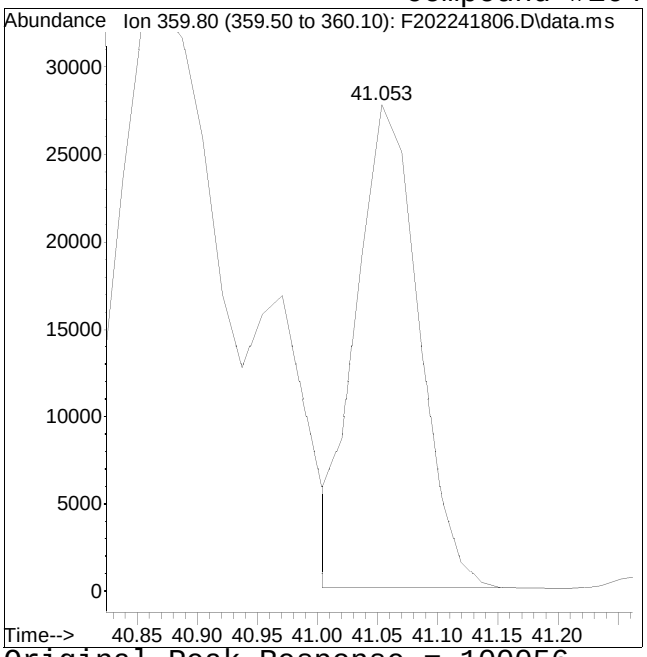
Manual Peak Response = 187163 M4

M4 = Poor automated baseline construction.

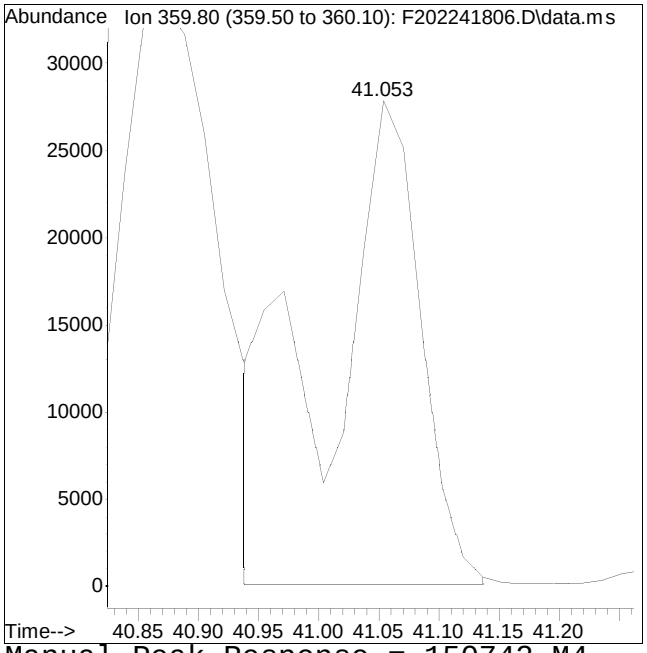
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 100056



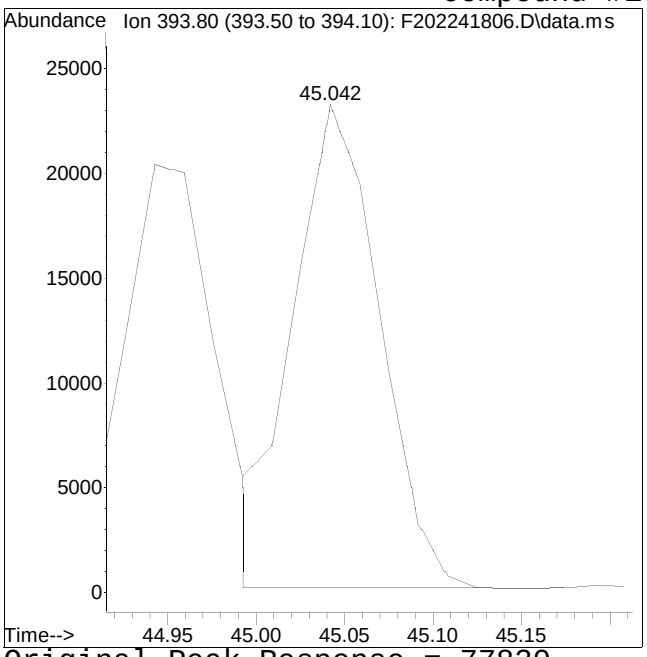
Manual Peak Response = 150742 M4

M4 = Poor automated baseline construction.

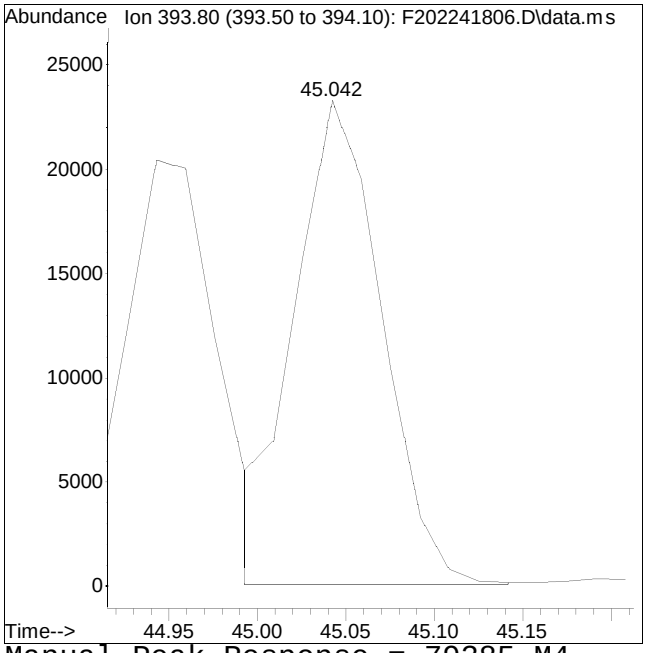
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241806.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 3:10 pm Instrument : BNA2
Sample : I202241805 Quant Date : 2/25/2018 10:50 am

Compound #190: Cl7-BZ#193



Original Peak Response = 77830



Manual Peak Response = 79385 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.912	234	581235	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.926	406	313129	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	205484	141.439	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 141.44%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	317687	148.757	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 148.76%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	301500	134.318	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 134.32%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	293903	149.988	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 149.99%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.575	188	536055	136.354	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.658	188	568894	148.338	ng/mL	100
7) Cl1-BZ#3-RTW	17.125	188	565731	148.244	ng/mL	98
8) Cl2-BZ#4/#10-RTW	17.543	222	660200	269.744	ng/mL	99
9) Cl2-BZ#9	19.111	222	429360	148.901	ng/mL	99
10) Cl2-BZ#7	19.207	222	420126	151.066	ng/mL	99
11) Cl2-BZ#6	19.634	222	456273	149.258	ng/mL	99
12) Cl2-BZ#5	20.076	222	410587	139.275	ng/mL	100
13) Cl2-BZ#8	20.229	222	476475	146.997	ng/mL	99
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.009	256	230875	135.793	ng/mL	100
17) Cl2-BZ#14	21.145	222	463122	155.688	ng/mL	97
18) Cl3-BZ#30	21.564	256	376197	144.426	ng/mL	100
19) Cl3-BZ#18	22.376	256	253841	141.287	ng/mL	97
20) Cl2-BZ#11	22.504	222	504141	154.455	ng/mL	99
21) Cl3-BZ#17	22.585	256	240486	141.633	ng/mL	100
22) Cl2-BZ#12	22.898	222	442755	155.663	ng/mL	98
23) Cl3-BZ#27	22.947	256	338609	144.500	ng/mL	98
24) Cl2-BZ#13	23.196	222	507807	155.211	ng/mL	99
25) Cl3-BZ#24	23.220	256	346476	149.950	ng/mL	98
26) Cl3-BZ#16	23.558	256	208494	140.971	ng/mL	96
27) Cl3-BZ#32	23.759	256	366527	144.955	ng/mL	97
28) Cl2-BZ#15-RTW	23.928	222	486571	143.997	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.153	256	347703	148.524	ng/mL	99
30) Cl3-BZ#23	24.338	256	346314	149.754	ng/mL	99
31) Cl4-BZ#54-RTW	24.346	292	315978	136.980	ng/mL	99
32) Cl3-BZ#29-Cal	24.563	256	346743	151.971	ng/mL	100
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	264407	141.354	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.094	256	386254	156.304	ng/mL	99
39) Cl3-BZ#25	25.303	256	377739	151.453	ng/mL	98
40) Cl4-BZ#53	25.793	292	290117	143.011	ng/mL	100
41) Cl3-BZ#-31	25.876	256	514498M4	163.048	ng/mL	
42) Cl3-BZ#28	26.075	256	509467	158.717	ng/mL	99
43) Cl3-BZ#33	26.174	256	375637M3	129.688	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	944361M3	328.085	ng/mL	
45) Cl4-BZ#51	26.207	292	327718	147.817	ng/mL	99
46) Cl4-BZ#45	26.770	292	253181	151.547	ng/mL	100
47) Cl3-BZ#22	27.018	256	455363	157.333	ng/mL	97
48) Cl4-BZ#73/#46	27.151	292	684715	300.587	ng/mL	100
49) Cl4-BZ#69	27.432	292	408392	154.090	ng/mL	98
50) Cl4-BZ#43	27.531	292	267410	142.347	ng/mL	98
51) Cl3-BZ#36	27.564	256	525594	157.651	ng/mL	99
52) Cl4-BZ#52	27.664	292	320934	142.954	ng/mL	99
53) Cl4-BZ#48	27.829	292	295350	156.885	ng/mL	97
54) Cl4-BZ#49	27.978	292	309561	150.829	ng/mL	100
55) Cl5-BZ#104-RTW	28.193	326	323103	145.151	ng/mL	98
56) Cl4-BZ#47	28.276	292	307421M3	139.952	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	1247849M3	465.413	ng/mL	
58) Cl3-BZ#39	28.425	256	471354	157.681	ng/mL	99
59) Cl3-BZ#38	28.541	256	465714	158.288	ng/mL	98
60) Cl4-BZ#44	28.938	292	272598	151.127	ng/mL	98
61) Cl4-BZ#59	29.170	292	390786	149.603	ng/mL	99
62) Cl4-BZ#42	29.253	292	268970	156.770	ng/mL	97
63) Cl4-BZ#71	29.484	292	420949	150.445	ng/mL	99
64) Cl3-BZ#35	29.600	256	480636	166.106	ng/mL	100
65) Cl4-BZ#41	29.716	292	260777	159.678	ng/mL	98
66) Cl4-BZ#72	29.832	292	460161	158.962	ng/mL	99
67) Cl5-BZ#96	29.865	326	356111	148.461	ng/mL	96
68) Cl5-BZ#103	29.981	326	275615	161.282	ng/mL	97
69) Cl4-BZ#68/#64	30.146	292	839032	312.843	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	201045	154.648	ng/mL	98
71) Cl3-BZ#37-RTW	30.477	256	635293	166.953	ng/mL	99
72) Cl5-BZ#100	30.477	326	293580	151.697	ng/mL	98
73) Cl5-BZ#94	30.577	326	225702	152.485	ng/mL	100
74) Cl4-BZ#57	30.676	292	460246M4	159.487	ng/mL	
75) Cl4-BZ#67/#58	31.007	292	921311	318.956	ng/mL	99
76) Cl5-BZ#102	31.057	326	316307	148.224	ng/mL	100
77) Cl4-BZ#61	31.371	292	442475	156.309	ng/mL	98
78) Cl5-BZ#98	31.388	326	290905	152.298	ng/mL	99
79) Cl4-BZ#76	31.520	292	476248	153.319	ng/mL	99
80) Cl5-BZ#93	31.520	326	236320	150.946	ng/mL	99
81) Cl4-BZ#63	31.619	292	416849M4	153.281	ng/mL	
82) Cl5-BZ#121/#95/#88	31.685	326	939226	457.914	ng/mL	100
83) Cl4-BZ#74	31.884	292	468498	159.146	ng/mL	99
84) Cl6-BZ#155-RTW	32.033	360	338168	148.520	ng/mL	100
85) Cl4-BZ#70	32.066	292	479131	139.260	ng/mL	97
86) Cl4-BZ#66	32.347	292	436609	157.934	ng/mL	100
87) Cl5-BZ#91	32.215	326	265891	147.558	ng/mL	100
88) Cl4-BZ#80	32.612	292	455380	164.237	ng/mL	99
89) Cl4-BZ#55	32.811	292	464481	162.168	ng/mL	99
90) Cl5-BZ#92	32.861	326	265036	153.004	ng/mL	100
91) Cl5-BZ#89/#84	33.142	326	504739	276.654	ng/mL	97
92) Cl5-BZ#101/#90	33.274	326	593118M4	317.088	ng/mL	
94) Cl4-BZ#56	33.258	292	461437	156.829	ng/mL	99
95) Cl5-BZ#113	33.357	326	345831	152.223	ng/mL	99
96) Cl5-BZ#99	33.638	326	327952	156.219	ng/mL	99
97) Cl6-BZ#150	33.688	360	361114	149.907	ng/mL	99
98) Cl4-BZ#60	33.705	292	489672	148.704	ng/mL	99
99) Cl6-BZ#152	34.052	360	390263	147.120	ng/mL	100
100) Cl5-BZ#119	34.135	326	409417	155.196	ng/mL	98
101) Cl5-BZ#83/#125/#112	34.284	326	1009428M4	468.264	ng/mL	
102) Cl5-BZ#86/#109	34.449	326	675091M1	318.668	ng/mL	
103) Cl5-BZ#97	34.565	326	245809	149.769	ng/mL	97
104) Cl5-BZ#116	35.029	326	342719	156.437	ng/mL	99
105) Cl5-BZ#87/#111	35.310	326	678543M4	311.835	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	397963	148.095	ng/mL	99
109) Cl6-BZ#148	34.698	360	273816	153.605	ng/mL	99
110) Cl4-BZ#79	34.814	292	455790	167.961	ng/mL	99
111) Cl6-BZ#154-Cal	35.227	360	319213	157.645	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d		
113) Cl6-Conf Ion	0.000		0	N.D.	d		
114) Cl4-BZ#78	35.277	292	570858	162.324	ng/mL	#	76
115) Cl6-BZ#136	35.360	360	352149	146.898	ng/mL		98
116) Cl5-BZ#117	35.426	326	423940M4	154.169	ng/mL		
117) Cl5-BZ#115	35.492	326	420865M4	164.182	ng/mL		
118) Cl5-BZ#85	35.591	326	256730	154.016	ng/mL		99
119) Cl5-BZ#120	35.724	326	411452	162.402	ng/mL		100
120) Cl5-BZ#110	35.873	326	388466	157.219	ng/mL		100
121) Cl4-BZ#81	36.253	292	450242	168.944	ng/mL		98
123) Cl6-BZ#151	36.253	360	273637	150.860	ng/mL		98
124) Cl6-BZ#135	36.386	360	295645	153.765	ng/mL		100
125) Cl5-BZ#82	36.568	326	256138	144.252	ng/mL		98
126) Cl6-BZ#144	36.601	360	288561	147.559	ng/mL		99
127) Cl6-BZ#147/#149	36.915	360	605637	301.222	ng/mL		97
128) Cl4-BZ#77-RTW	37.015	292	428054M4	162.814	ng/mL		
129) Cl6-BZ#143/#139	37.147	360	598735	292.556	ng/mL		99
130) Cl5-BZ#124	37.296	326	401361	152.740	ng/mL		99
131) Cl5-BZ#108	37.578	326	409236	155.000	ng/mL		100
132) Cl5-BZ#107/#123	37.677	326	877377M4	313.128	ng/mL		
133) Cl6-BZ#140	37.313	360	283402	146.027	ng/mL		99
134) Cl7-BZ#188-Cal/RTW	37.677	394	337260	141.685	ng/mL		99
135) Heptachlorobiphenyls	0.000		0	N.D.	d		
136) Cl7-Conf Ion	0.000		0	N.D.	d		
137) Cl6-BZ#134	37.776	360	250088	149.517	ng/mL		96
138) Cl5-BZ#106	37.809	326	374830	134.315	ng/mL		99
139) Cl6-BZ#133	37.875	360	329269M4	152.365	ng/mL		
140) Cl6-BZ#142	37.925	360	223039M3	142.296	ng/mL		
141) Cl5-BZ#118	38.041	326	381171	151.856	ng/mL		97
142) Cl6-BZ#131	38.041	360	255678	154.813	ng/mL		100
143) Cl7-BZ#184	38.173	394	326893	141.387	ng/mL		97
144) Cl6-BZ#165	38.240	360	363628	152.395	ng/mL		97
145) Cl6-BZ#146	38.339	360	313157	154.244	ng/mL		99
146) Cl6-BZ#161	38.521	360	408418	152.837	ng/mL		100
147) Cl5-BZ#122	38.504	326	354960	154.639	ng/mL		100
148) Cl6-BZ#168	38.736	360	385969	153.634	ng/mL		99
149) Cl5-BZ#114	38.786	326	390726	149.433	ng/mL		100
150) Cl6-BZ#153	38.802	360	338240	146.144	ng/mL		97
152) Cl6-BZ#132	39.067	360	267779	143.309	ng/mL		98
153) Cl7-BZ#179	39.332	394	331198	145.905	ng/mL		99
154) Cl6-BZ#141	39.630	360	270499	161.465	ng/mL		100

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.828	394	315422	146.609	ng/mL	99
156) Cl5-BZ#105	39.895	326	461848M4	158.139	ng/mL	
157) Cl6-BZ#137	40.060	360	285642	155.624	ng/mL	98
158) Cl5-BZ#127	40.209	326	511485	157.051	ng/mL#	75
159) Cl7-BZ#186	40.159	394	358679	144.152	ng/mL	100
160) Cl6-BZ#130/#164	40.391	360	658149	311.279	ng/mL	98
161) Cl7-BZ#178	40.706	394	243842	153.644	ng/mL	99
162) Cl6-BZ#138	40.772	360	327078	147.669	ng/mL	98
163) Cl6-BZ#163/#160	40.871	360	766429M4	314.844	ng/mL	
164) Cl6-BZ#129/#158	41.070	360	628398M1	292.055	ng/mL	
165) Cl7-BZ#182/#175	41.086	394	575713	297.461	ng/mL	100
166) Cl7-BZ#187	41.268	394	280089	146.827	ng/mL	95
167) Cl7-BZ#183	41.666	394	273447	167.128	ng/mL	99
168) Cl6-BZ#166	42.030	360	403726	156.773	ng/mL	98
169) Cl6-BZ#159	42.278	360	408182	163.996	ng/mL	99
170) Cl5-BZ#126-RTW	42.493	326	508085	163.104	ng/mL	89
171) Cl7-BZ#185	42.526	394	254859	154.293	ng/mL	99
172) Cl6-BZ#162	42.609	360	382272	159.195	ng/mL	98
173) Cl7-BZ#174	42.758	394	254628	148.510	ng/mL	100
174) Cl6-BZ#128	42.758	360	282592	149.388	ng/mL	99
175) Cl6-BZ#167	43.056	360	503809	159.145	ng/mL	93
176) Cl8-BZ#202-RTW	43.006	428	289215	151.917	ng/mL	100
178) Cl7-BZ#181	43.139	394	292607	156.646	ng/mL	98
179) Cl7-BZ#177	43.470	394	246979	154.903	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.569	428	565329	296.461	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	241320	167.195	ng/mL	98
184) Cl7-BZ#173	43.999	394	234631	153.103	ng/mL	99
185) Cl7-BZ#172	44.446	394	252000	154.472	ng/mL	98
186) Cl7-BZ#192	44.661	394	356157	159.207	ng/mL	100
187) Cl6-BZ#156	44.661	360	387836	157.758	ng/mL	99
188) Cl6-BZ#157	44.909	360	391103	153.672	ng/mL	98
189) Cl7-BZ#180	44.959	394	296288	137.072	ng/mL	97
190) Cl7-BZ#193	45.042	394	320144M4	129.634	ng/mL	
191) Cl8-BZ#197	44.098	428	284352	148.770	ng/mL	99
192) Cl7-BZ#191	45.373	394	331046	161.274	ng/mL	97
193) Cl8-BZ#199	45.207	428	278968	150.924	ng/mL	99
194) Cl8-BZ#198	46.747	428	244864	175.528	ng/mL	99
195) Cl8-BZ#201	46.829	428	198614	143.863	ng/mL	99
196) Cl7-BZ#170	46.962	394	235420	173.041	ng/mL	96

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	353106	158.176	ng/mL	97
198) Cl8-BZ#196	47.293	428	225342	154.745	ng/mL	98
199) Cl8-BZ#203	47.376	428	243552	160.526	ng/mL	100
200) Cl6-BZ#169-RTW	47.657	360	426234	172.438	ng/mL	99
201) Cl9-BZ#208-RTW	48.815	464	284472	153.914	ng/mL	99
202) Cl9-BZ#207	49.477	464	289647	153.155	ng/mL	97
203) Cl7-BZ#189-RTW	49.660	394	313983	169.259	ng/mL	99
204) Cl8-BZ#195	49.808	428	216549	160.366	ng/mL	95
205) Cl8-BZ#194	51.480	428	228651	164.474	ng/mL	97
206) Cl8-BZ#205-RTW	52.076	428	278071	171.979	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.112	464	235285	166.089	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.379	498	235063	158.399	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

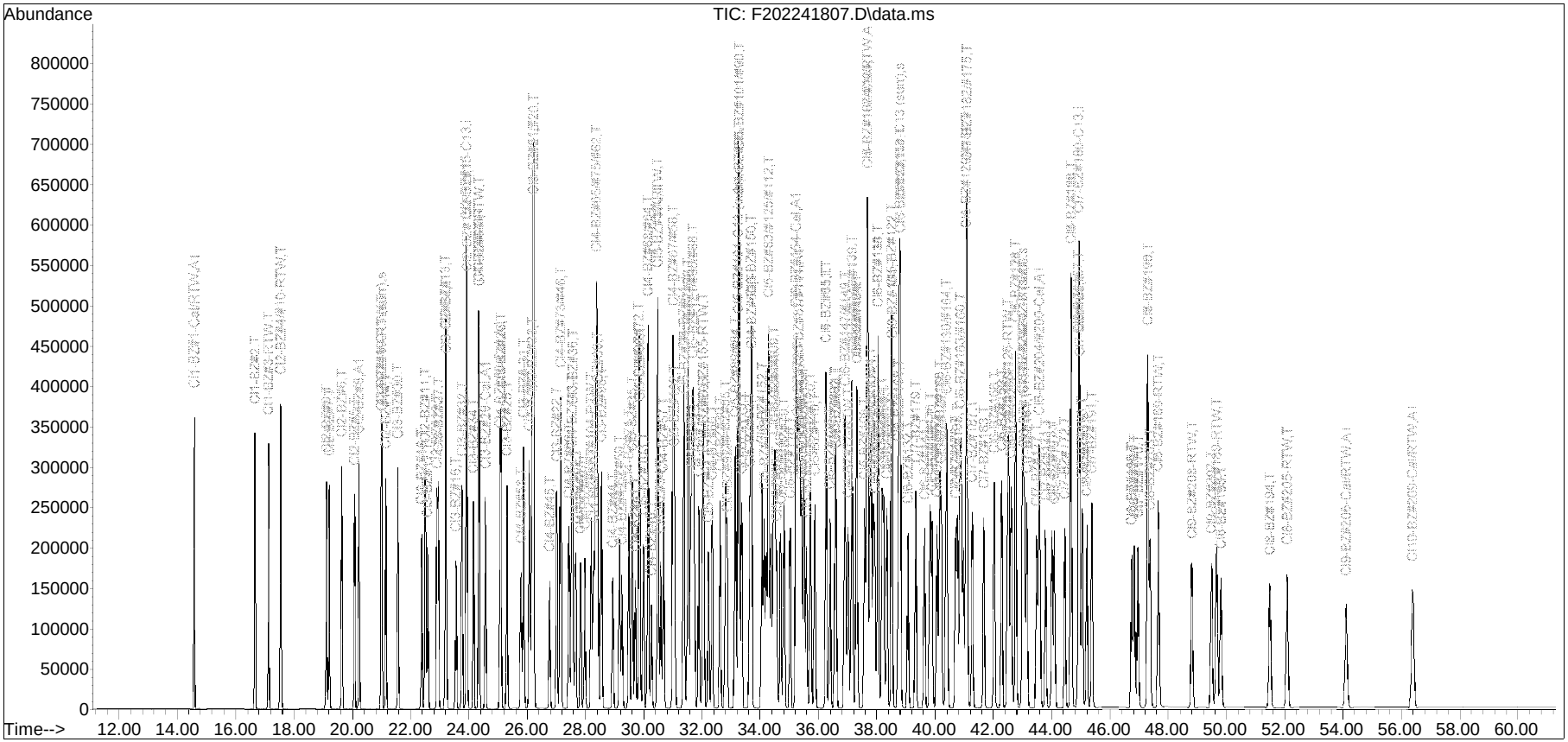
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241807.D
Acq On : 24 Feb 2018 4:25 pm
Operator : BNA2:JT
Sample : I202241806
Misc : wg1092764,MSAT56,200ug/l
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 26 16:05:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

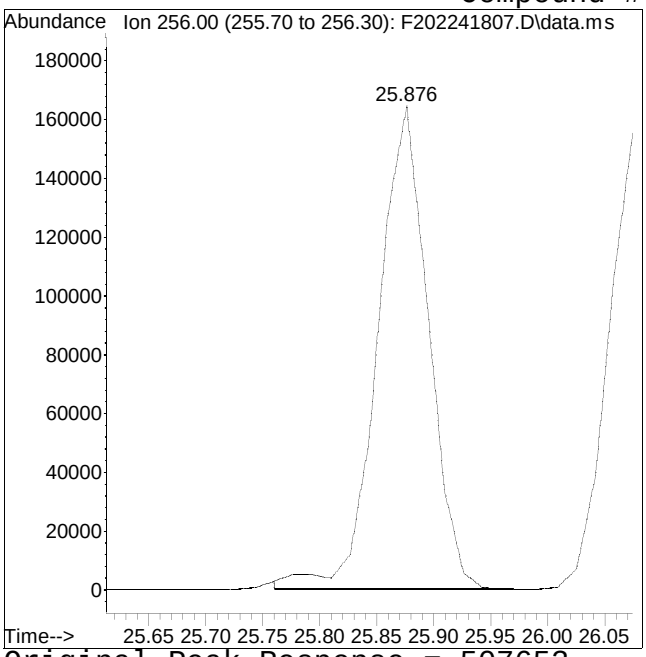
Sub List : Default - All compounds listed

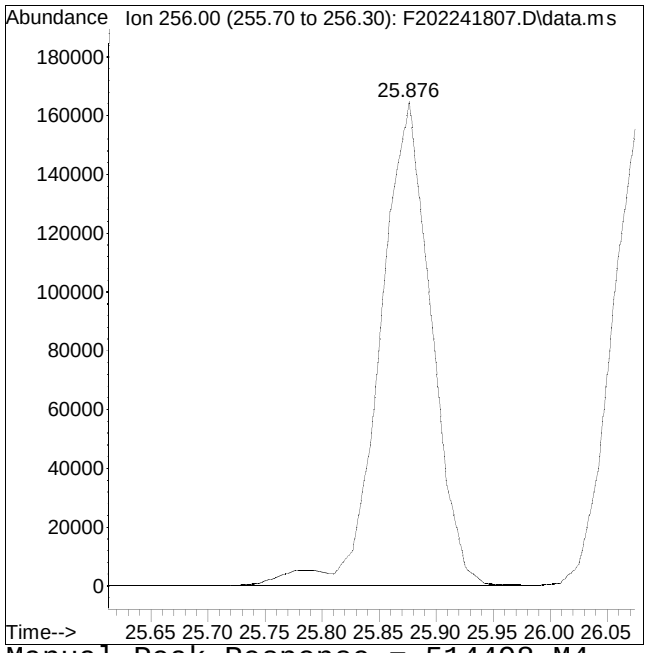


Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #41: Cl3-BZ#-31



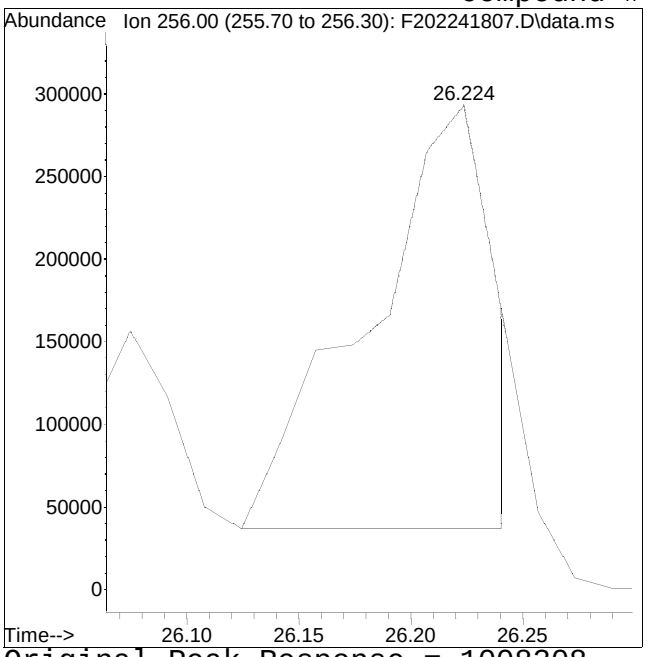


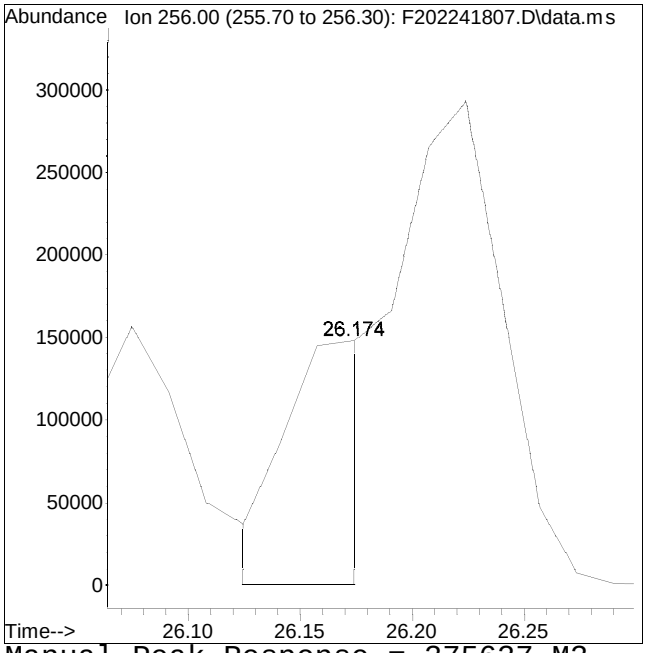
Original Peak Response = 507653 Manual Peak Response = 514498 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #43: Cl3-BZ#33





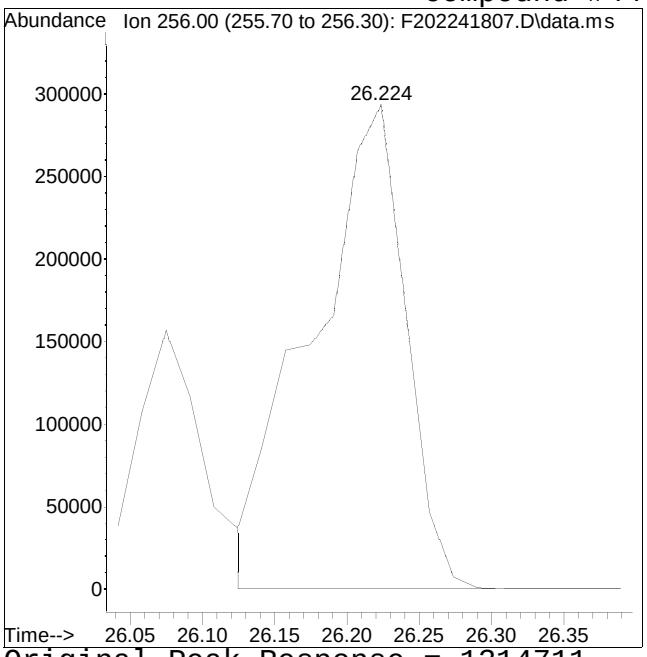
Original Peak Response = 1008308 Manual Peak Response = 375637 M3

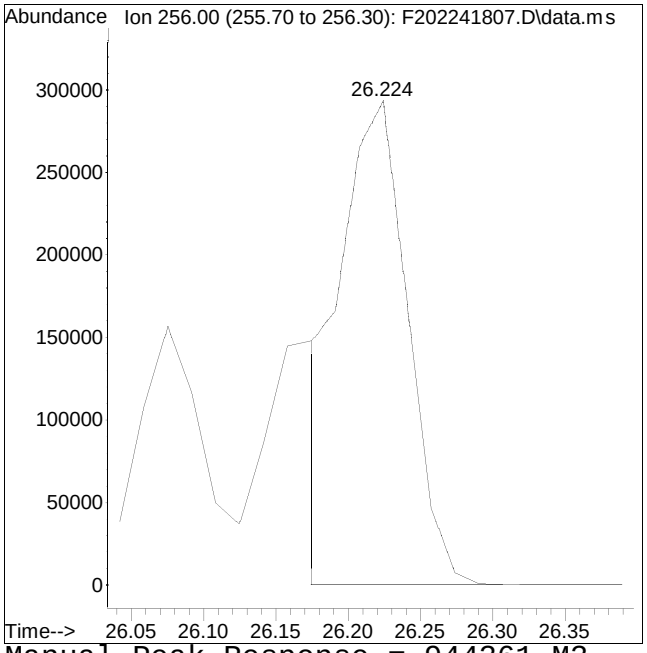
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #44: Cl3-BZ#21/#20





Original Peak Response = 1314711 Manual Peak Response = 944361 M3

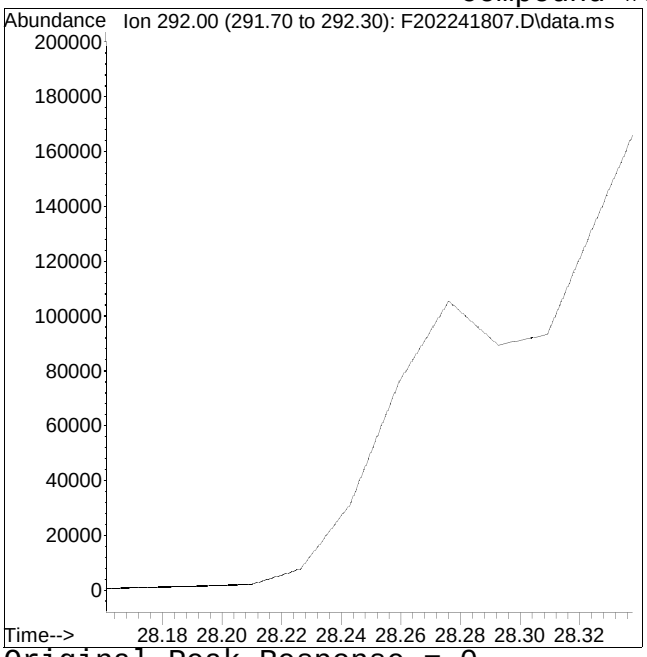
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

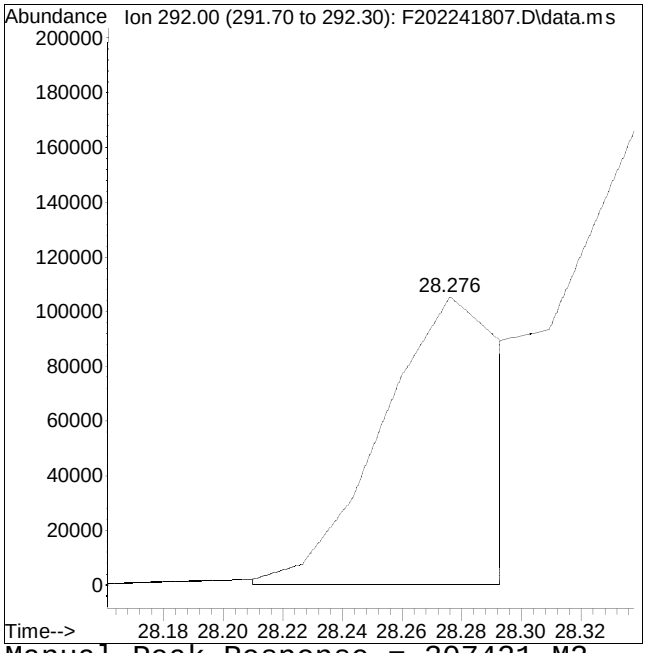
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #56: Cl4-BZ#47





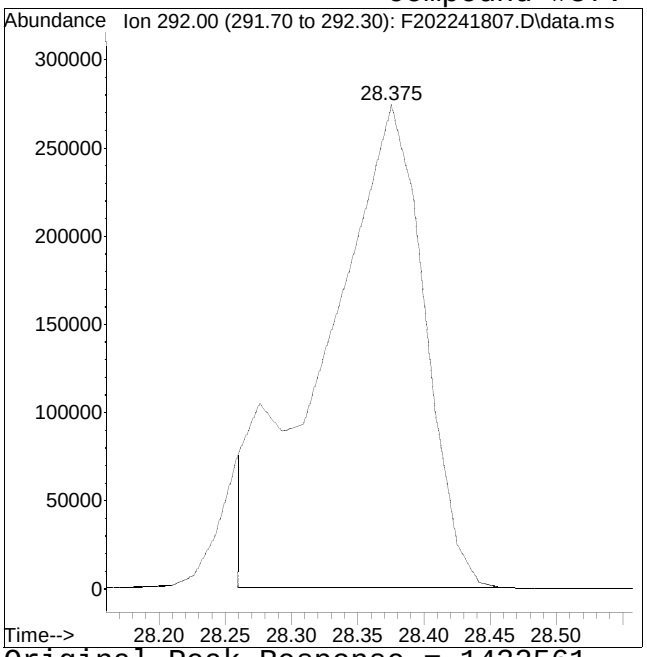
Original Peak Response = 0 Manual Peak Response = 307421 M3

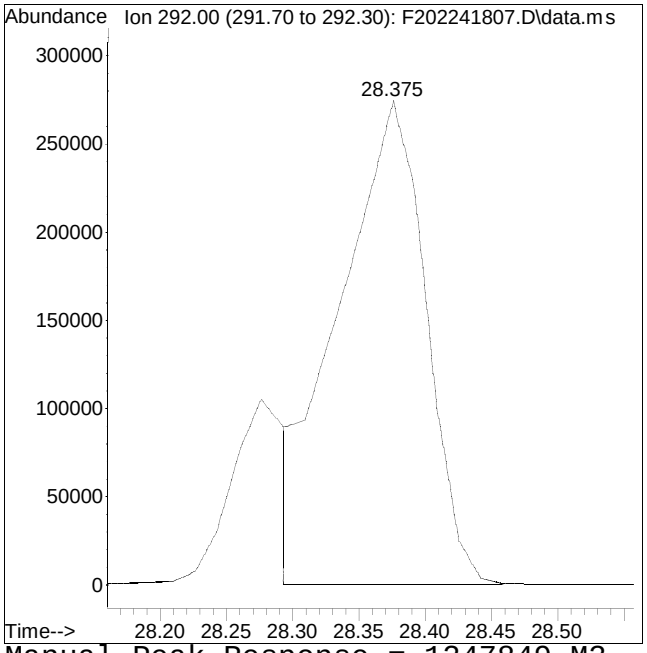
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #57: Cl4-BZ#65/#75/#62



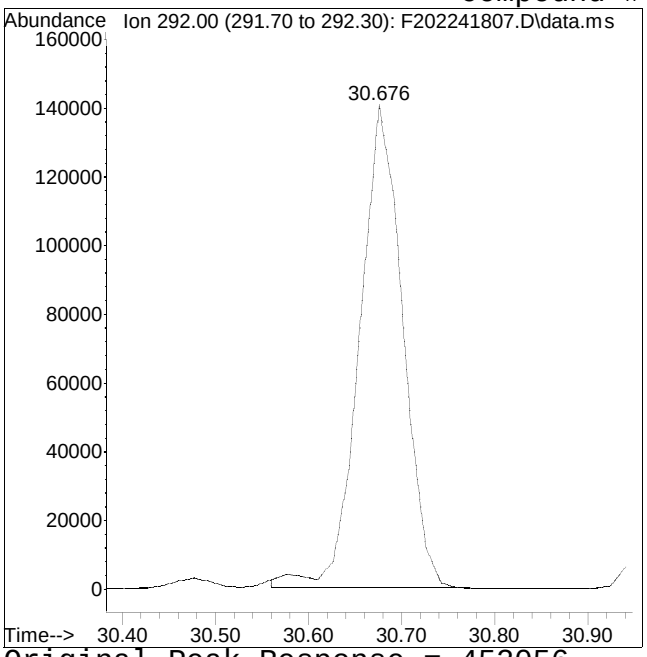


Original Peak Response = 1432561 Manual Peak Response = 1247849 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

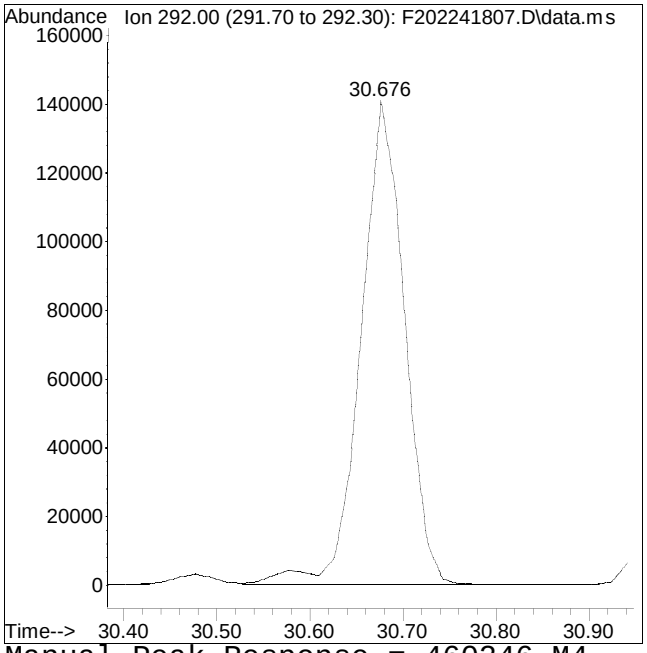
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #74: Cl4-BZ#57



Original Peak Response = 452056



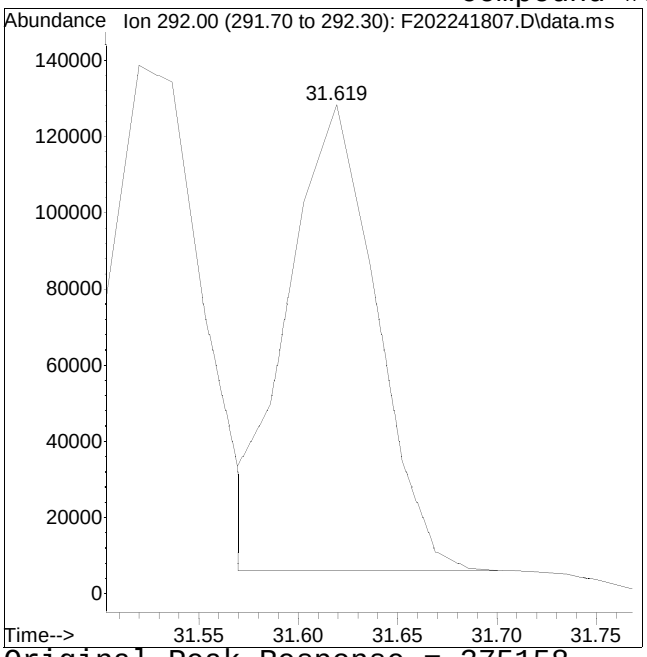
Manual Peak Response = 460246 M4

M4 = Poor automated baseline construction.

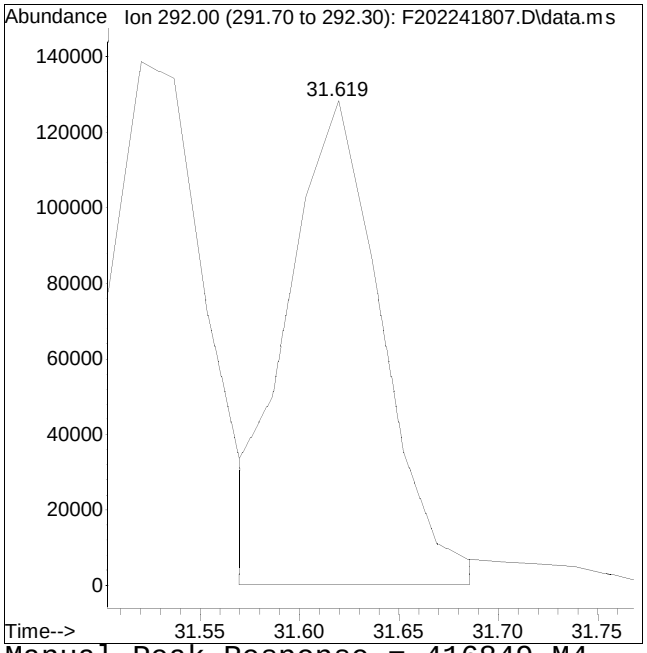
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #81: Cl4-BZ#63



Original Peak Response = 375158



Manual Peak Response = 416849 M4

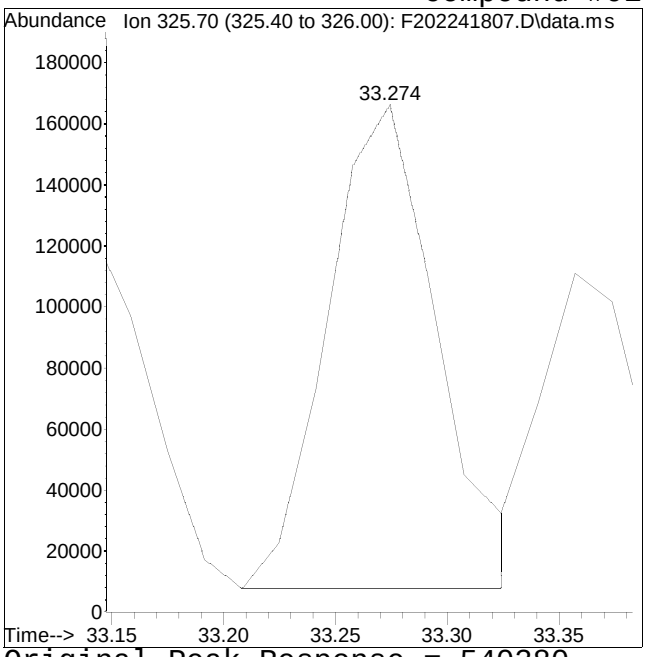
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

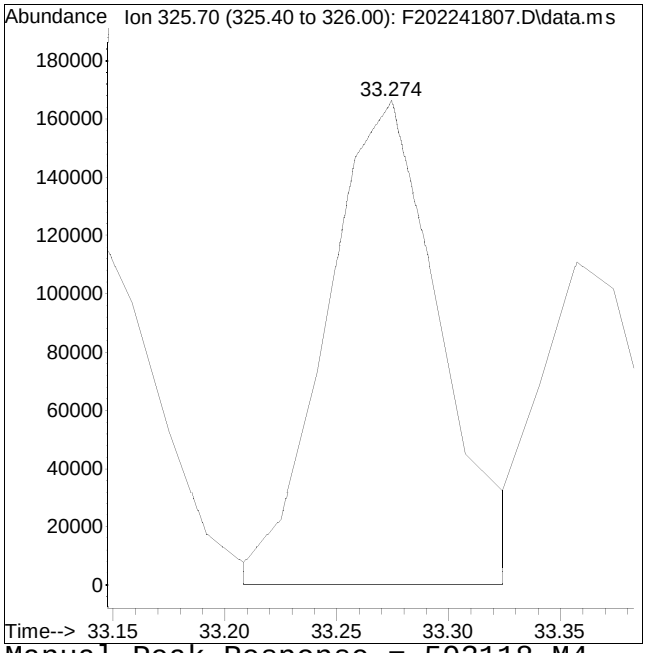
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 540380



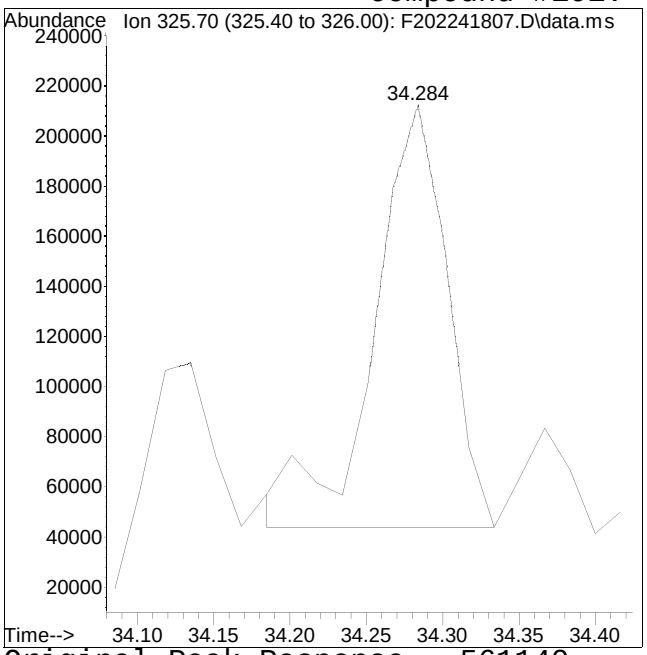
Manual Peak Response = 593118 M4

M4 = Poor automated baseline construction.

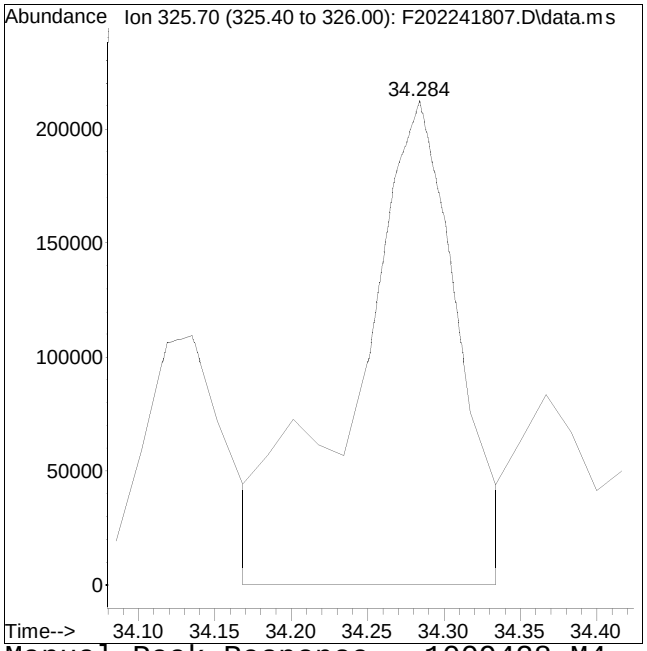
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 561140



Manual Peak Response = 1009428 M4

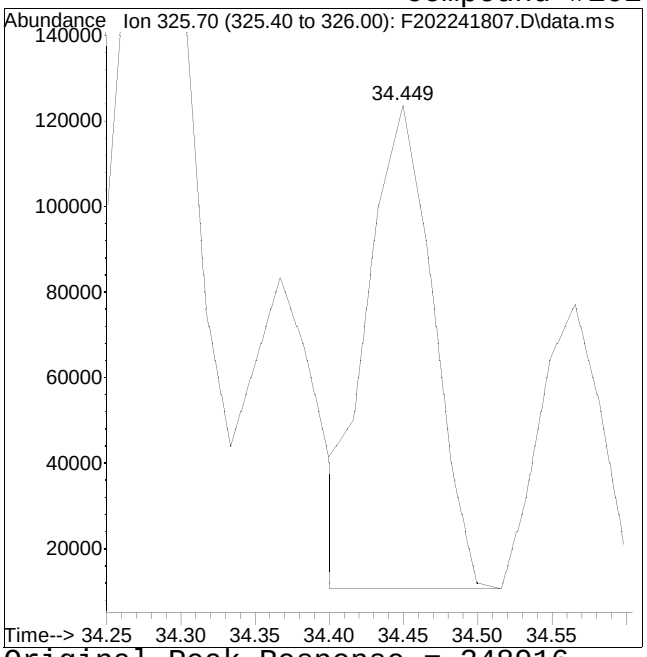
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

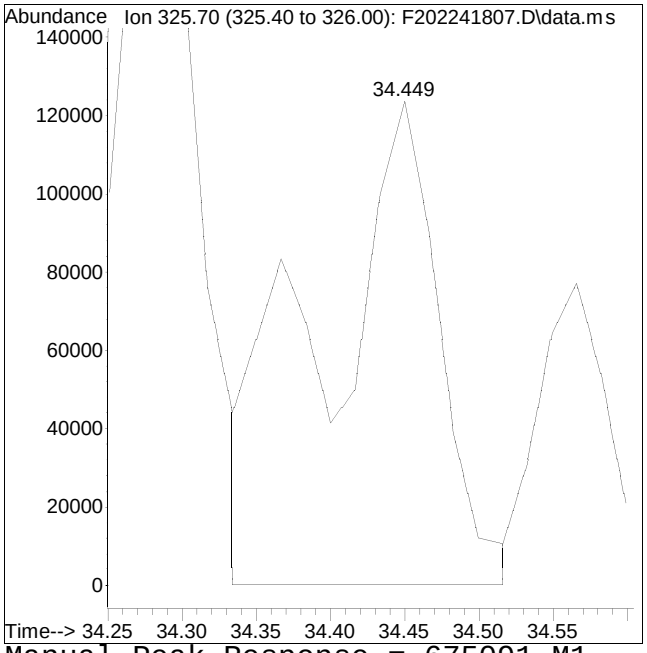
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 348916



Manual Peak Response = 675091 M1

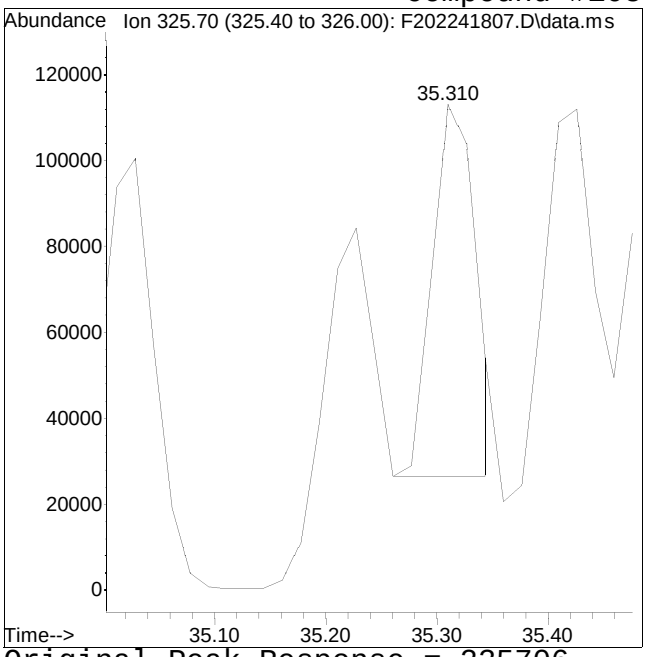
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

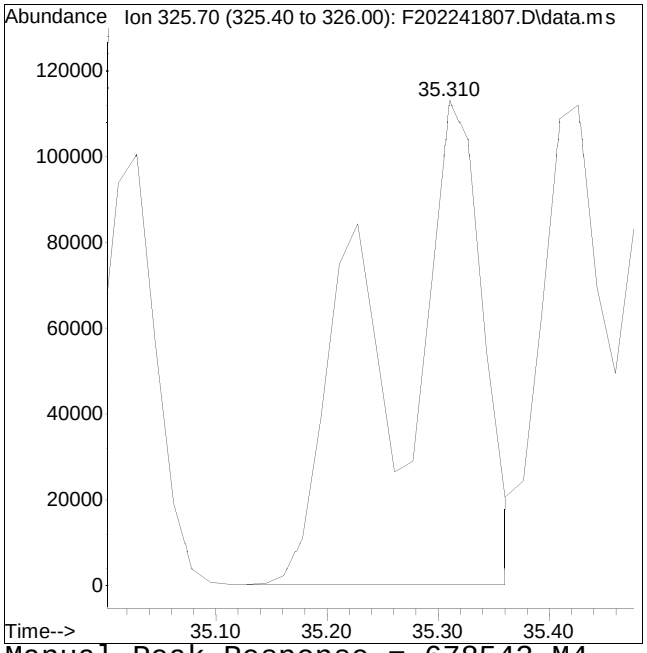
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 235706



Manual Peak Response = 678543 M4

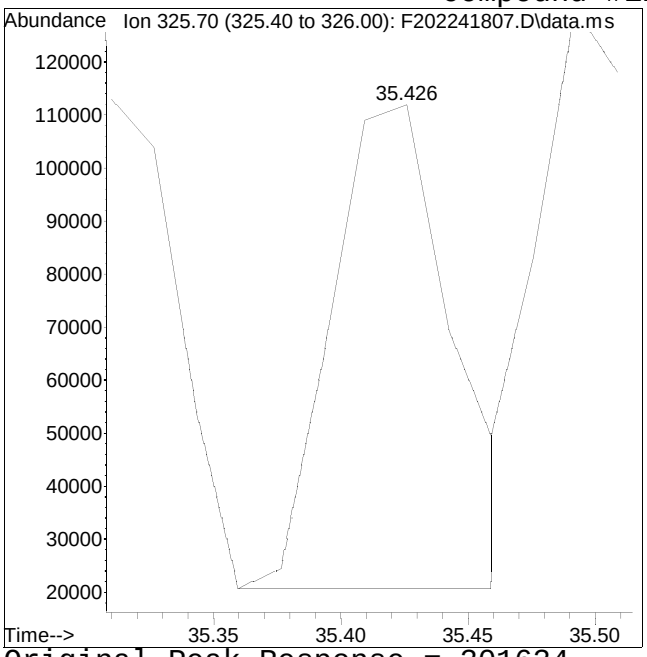
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

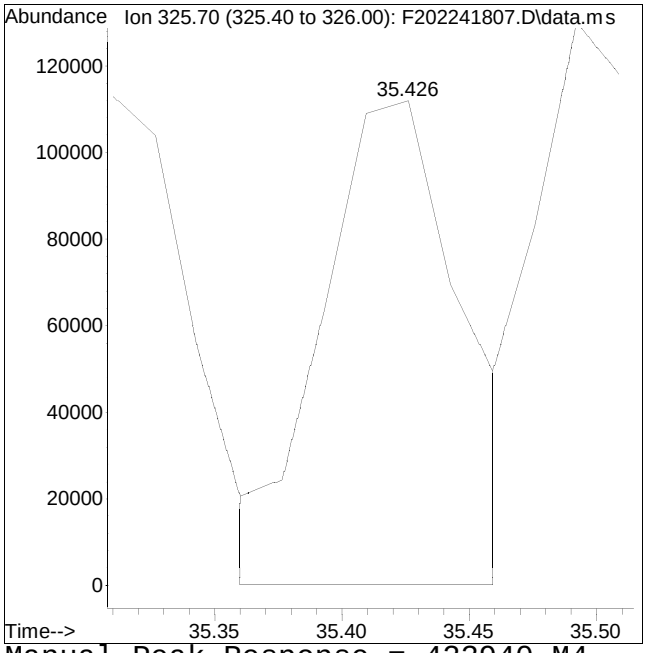
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #116: Cl5-BZ#117



Original Peak Response = 301634



Manual Peak Response = 423940 M4

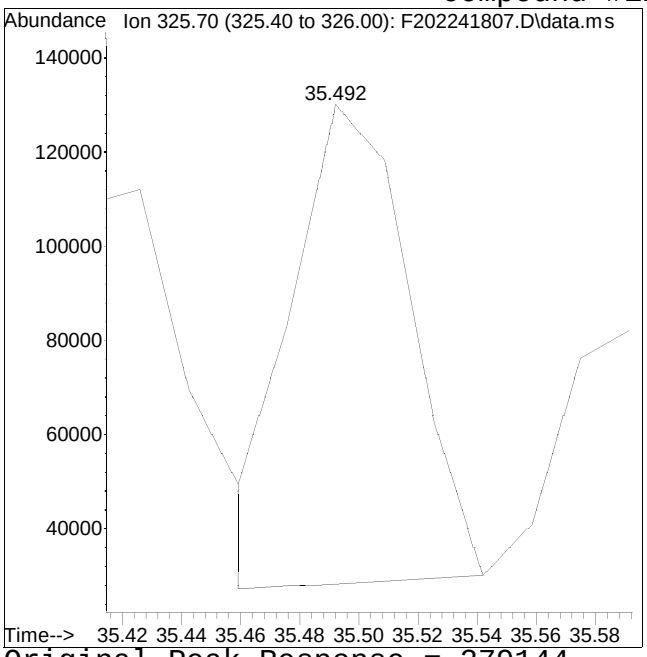
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

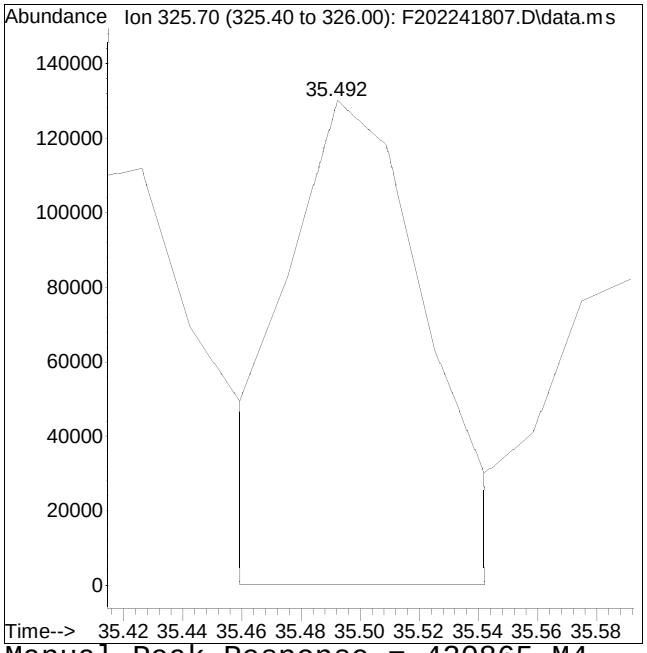
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #117: Cl5-BZ#115



Original Peak Response = 279144



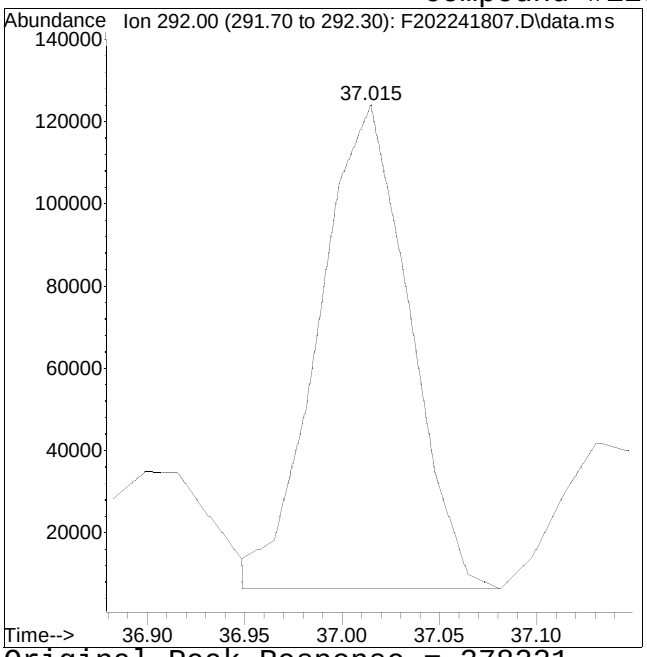
Manual Peak Response = 420865 M4

M4 = Poor automated baseline construction.

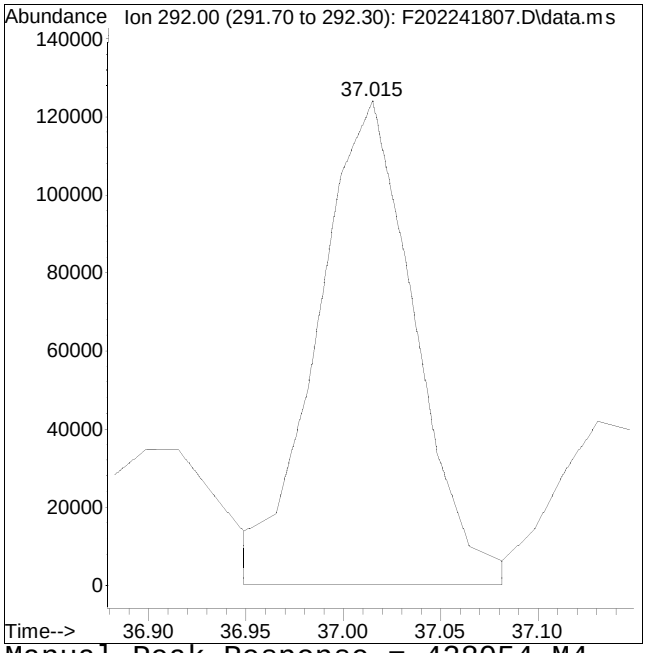
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 378221



Manual Peak Response = 428054 M4

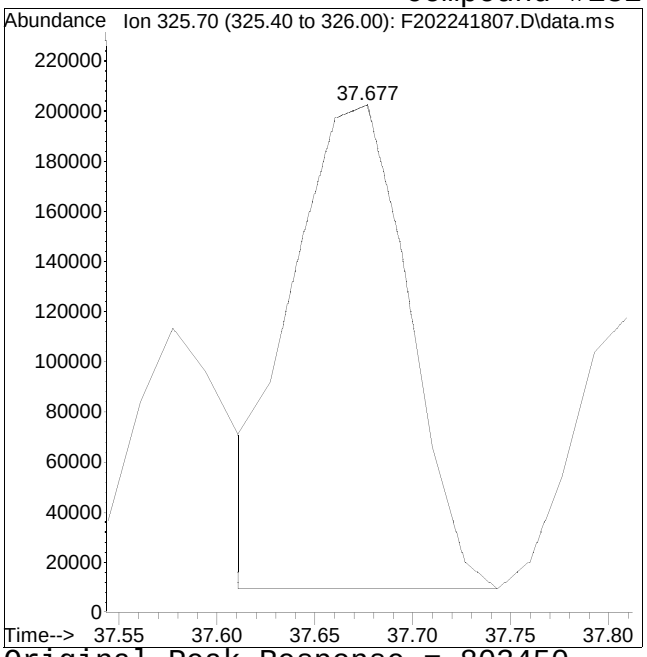
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

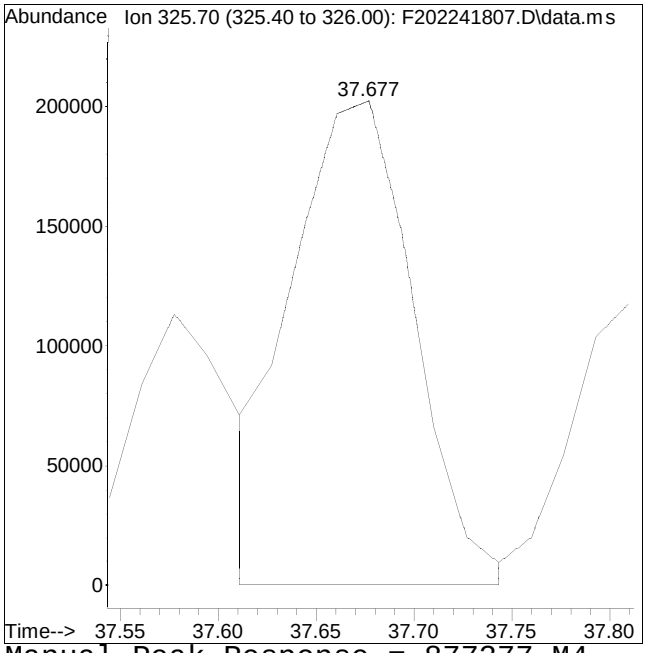
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 803450



Manual Peak Response = 877377 M4

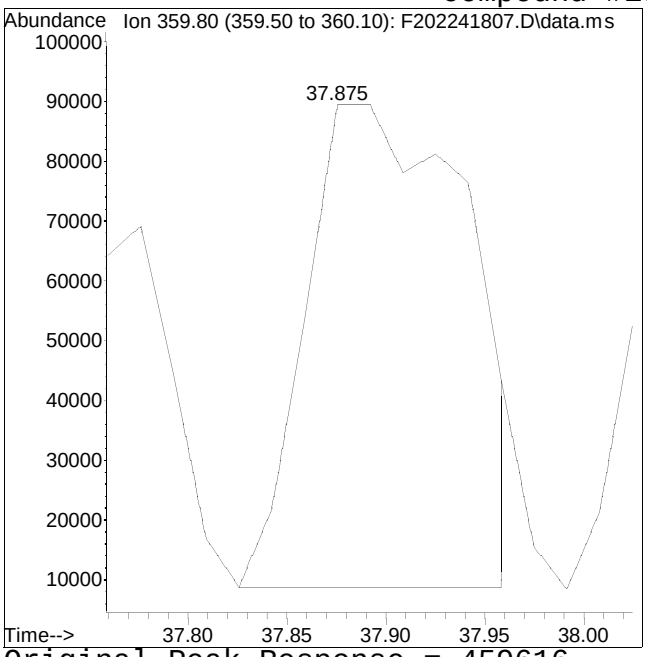
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

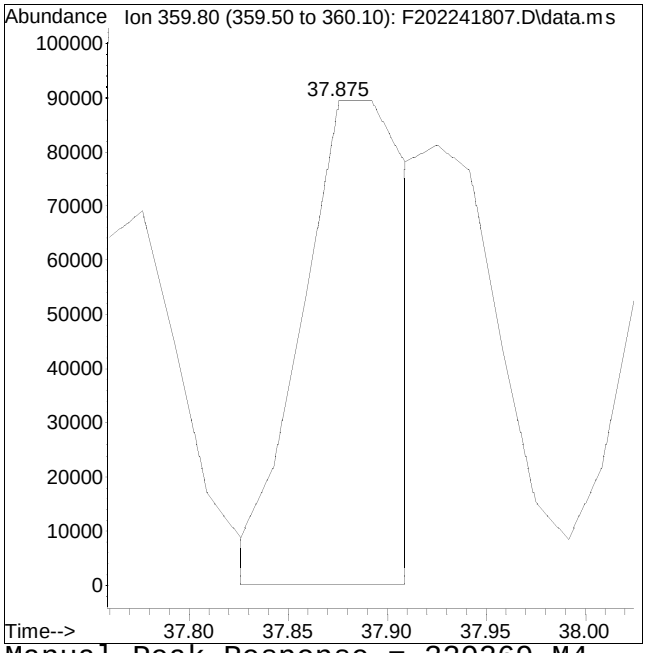
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #139: Cl6-BZ#133



Original Peak Response = 459616



Manual Peak Response = 329269 M4

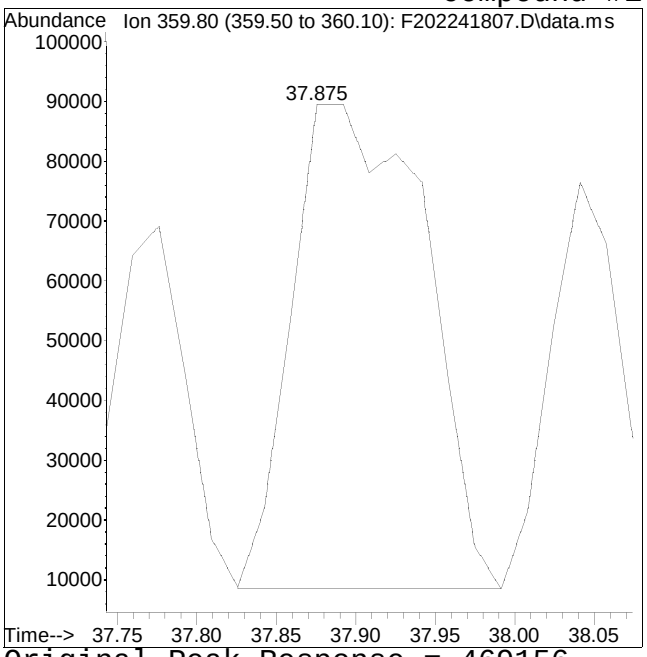
M4 = Poor automated baseline construction.

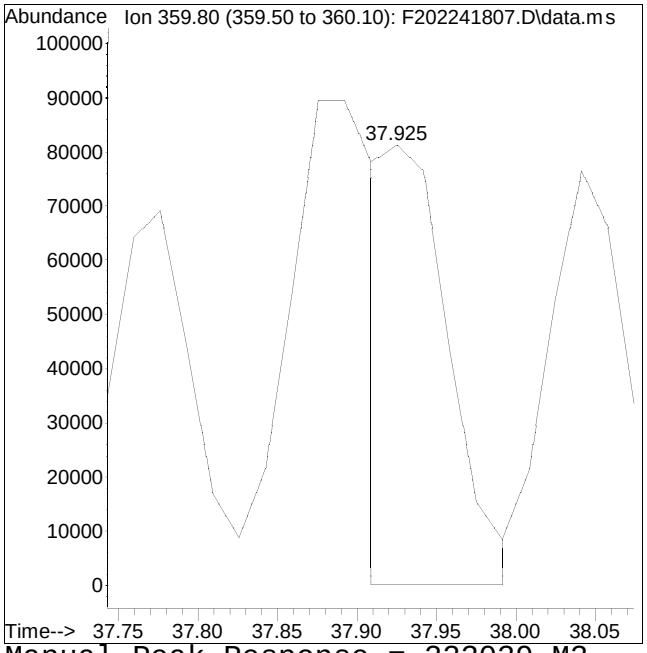
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #140: Cl6-BZ#142





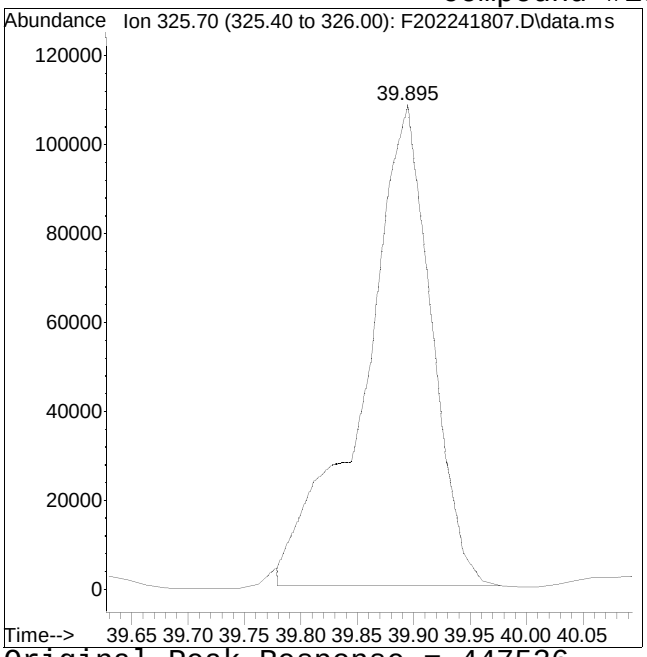
Original Peak Response = 469156 Manual Peak Response = 223039 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

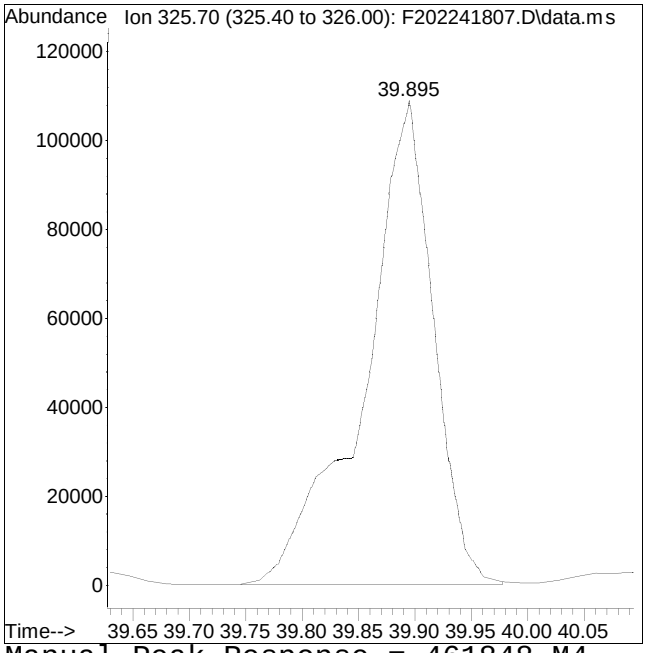
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #156: Cl5-BZ#105



Original Peak Response = 447536



Manual Peak Response = 461848 M4

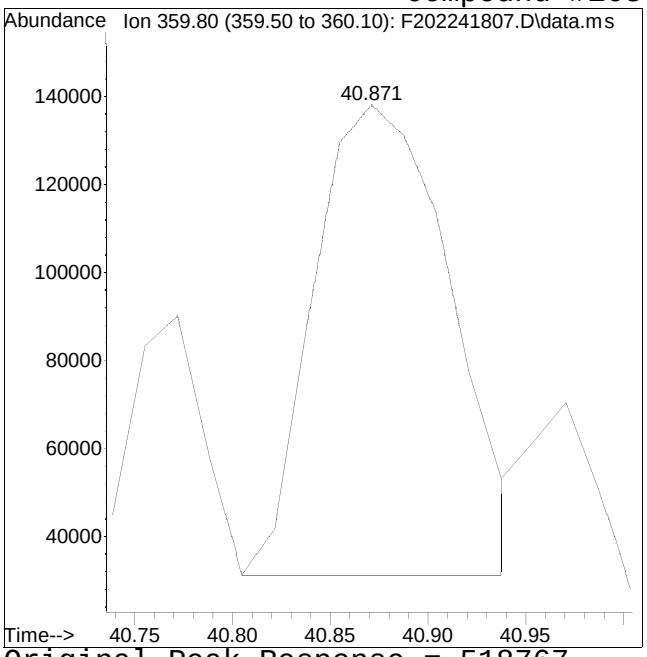
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

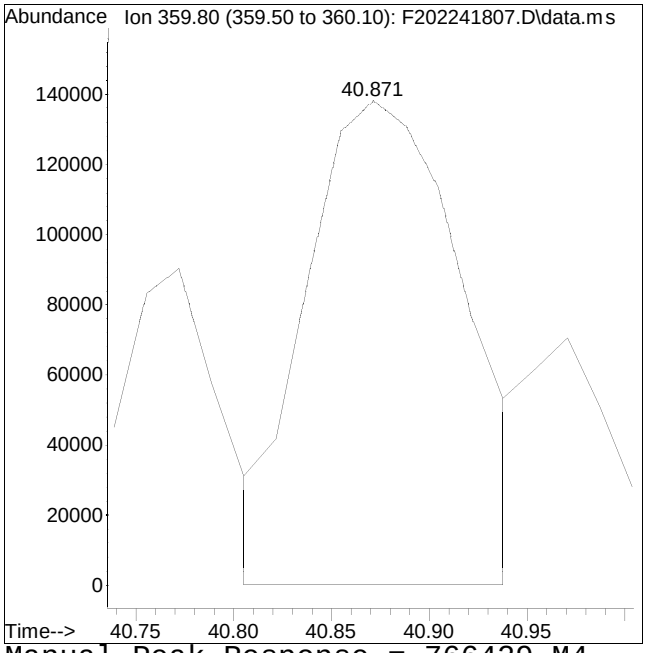
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241807.D
Date Inj'd : 2/24/2018 4:25 pm
Sample : I202241806

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:50 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 518767



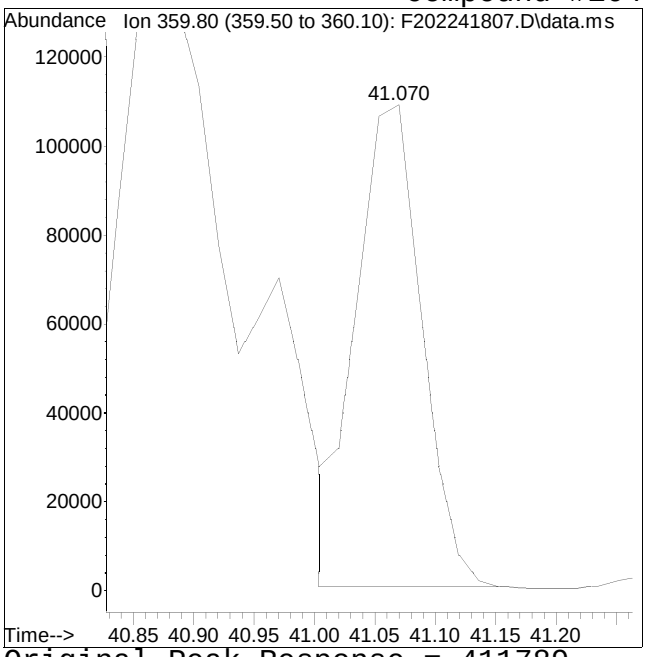
Manual Peak Response = 766429 M4

M4 = Poor automated baseline construction.

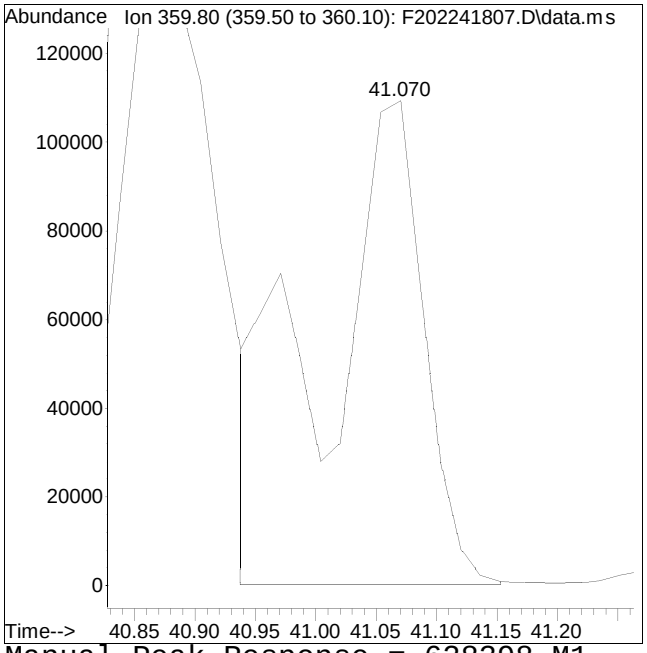
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 411789



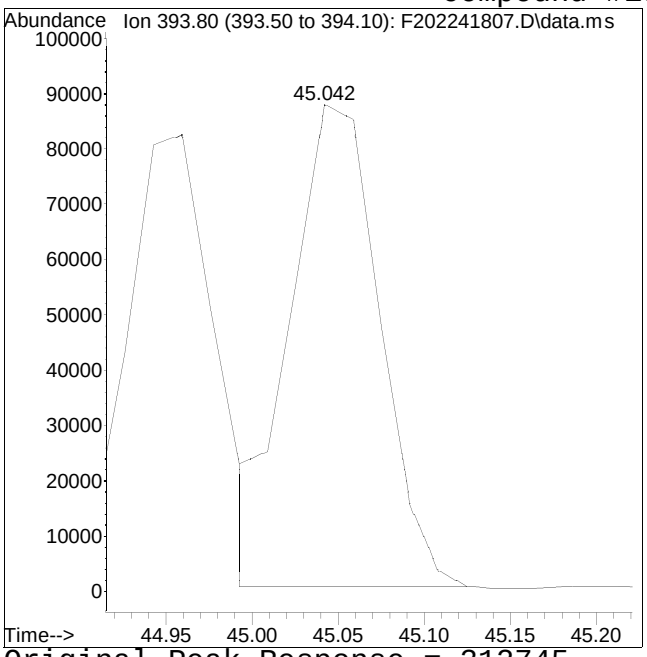
Manual Peak Response = 628398 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

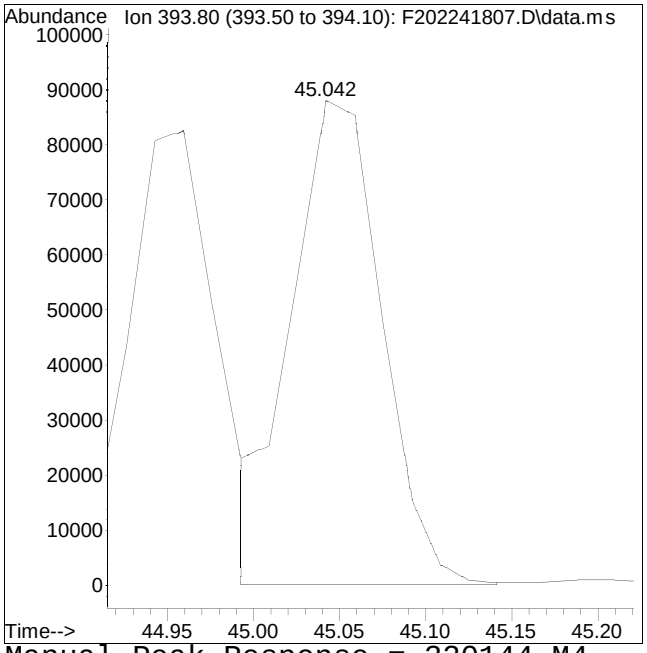
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241807.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 4:25 pm Instrument : BNA2
Sample : I202241806 Quant Date : 2/25/2018 10:50 am

Compound #190: Cl7-BZ#193



Original Peak Response = 312745



Manual Peak Response = 320144 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
Sample : I202241807
Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.904	234	562289	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.926	406	310371M4	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.985	268	514037	365.745	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 365.75%#			
93) Cl5-BZ#101-C13 (surr)	33.241	338	791316	383.018	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 383.02%#			
151) Cl6-BZ#153-C13 (surr)	38.786	372	761719	342.361	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 342.36%#			
177) Cl8-BZ#202-C13 (surr)	42.990	442	748009	385.124	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 385.12%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.559	188	1324625	348.292	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.642	188	1417350	382.024	ng/mL	100
7) Cl1-BZ#3-RTW	17.109	188	1406521	380.984	ng/mL	98
8) Cl2-BZ#4/#10-RTW	17.535	222	1633453	689.884	ng/mL	99
9) Cl2-BZ#9	19.095	222	1078210	386.520	ng/mL	99
10) Cl2-BZ#7	19.191	222	1036876	385.394	ng/mL	98
11) Cl2-BZ#6	19.626	222	1140988	385.821	ng/mL	99
12) Cl2-BZ#5	20.068	222	1031845	361.806	ng/mL	100
13) Cl2-BZ#8	20.221	222	1184139	377.628	ng/mL	99
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.001	256	571966	347.748	ng/mL	100
17) Cl2-BZ#14	21.138	222	1159545	402.939	ng/mL	97
18) Cl3-BZ#30	21.556	256	935799	371.368	ng/mL	100
19) Cl3-BZ#18	22.376	256	635906	365.869	ng/mL	97
20) Cl2-BZ#11	22.497	222	1232946	390.468	ng/mL	96
21) Cl3-BZ#17	22.577	256	597789	363.928	ng/mL	100
22) Cl2-BZ#12	22.899	222	1112384	404.268	ng/mL	98
23) Cl3-BZ#27	22.939	256	836450	368.979	ng/mL	98
24) Cl2-BZ#13	23.196	222	1268961	400.927	ng/mL	99
25) Cl3-BZ#24	23.212	256	860443	384.934	ng/mL	98
26) Cl3-BZ#16	23.558	256	518984	362.729	ng/mL	96
27) Cl3-BZ#32	23.759	256	912706	373.122	ng/mL	97
28) Cl2-BZ#15-RTW	23.920	222	1197253	366.256	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
Sample : I202241807
Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.153	256	866632	382.663	ng/mL	99
30) Cl3-BZ#23	24.338	256	859978	384.403	ng/mL	100
31) Cl4-BZ#54-RTW	24.338	292	780924	349.945	ng/mL	98
32) Cl3-BZ#29-Cal	24.563	256	867952	393.226	ng/mL	98
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.062	292	660313	364.904	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.094	256	959146	401.213	ng/mL	100
39) Cl3-BZ#25	25.303	256	948070	392.933	ng/mL	99
40) Cl4-BZ#53	25.777	292	721744	367.766	ng/mL	100
41) Cl3-BZ#-31	25.876	256	1271177	416.419	ng/mL	97
42) Cl3-BZ#28	26.075	256	1299415	418.453	ng/mL	100
43) Cl3-BZ#33	26.174	256	973752M3	347.513	ng/mL	
44) Cl3-BZ#21/#20	26.224	256	2272438M3	816.080	ng/mL	
45) Cl4-BZ#51	26.207	292	801824	373.847	ng/mL	98
46) Cl4-BZ#45	26.754	292	628798	389.062	ng/mL	100
47) Cl3-BZ#22	27.002	256	1149642	410.599	ng/mL	99
48) Cl4-BZ#73/#46	27.134	292	1698000	770.532	ng/mL	100
49) Cl4-BZ#69	27.432	292	1040471	405.808	ng/mL	99
50) Cl4-BZ#43	27.515	292	642090	353.311	ng/mL	97
51) Cl3-BZ#36	27.565	256	1300745	403.301	ng/mL	99
52) Cl4-BZ#52	27.664	292	790370	363.917	ng/mL	98
53) Cl4-BZ#48	27.829	292	738247	405.357	ng/mL	99
54) Cl4-BZ#49	27.978	292	764137	384.859	ng/mL	100
55) Cl5-BZ#104-RTW	28.193	326	795892	369.594	ng/mL	98
56) Cl4-BZ#47	28.276	292	784432M3	369.142	ng/mL	
57) Cl4-BZ#65/#75/#62	28.376	292	3072285M3	1184.486	ng/mL	
58) Cl3-BZ#39	28.425	256	1192282	412.290	ng/mL	100
59) Cl3-BZ#38	28.541	256	1155715	406.042	ng/mL	99
60) Cl4-BZ#44	28.938	292	685718	392.968	ng/mL	98
61) Cl4-BZ#59	29.153	292	992212	392.644	ng/mL	98
62) Cl4-BZ#42	29.253	292	660439	397.910	ng/mL	97
63) Cl4-BZ#71	29.484	292	1046016	386.436	ng/mL	100
64) Cl3-BZ#35	29.600	256	1204604	430.334	ng/mL	100
65) Cl4-BZ#41	29.716	292	651918	412.630	ng/mL	99
66) Cl4-BZ#72	29.832	292	1115956	398.495	ng/mL	99
67) Cl5-BZ#96	29.865	326	865712	373.071	ng/mL	96
68) Cl5-BZ#103	29.981	326	698560M4	422.552	ng/mL	
69) Cl4-BZ#68/#64	30.146	292	2101519	809.979	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
Sample : I202241807
Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	492449	391.566	ng/mL	99
71) Cl3-BZ#37-RTW	30.477	256	1610764	437.566	ng/mL	100
72) Cl5-BZ#100	30.477	326	740272	395.397	ng/mL	98
73) Cl5-BZ#94	30.577	326	561795M4	392.339	ng/mL	
74) Cl4-BZ#57	30.676	292	1119523	401.014	ng/mL	98
75) Cl4-BZ#67/#58	31.007	292	2300693	823.334	ng/mL	99
76) Cl5-BZ#102	31.057	326	779348	377.514	ng/mL	100
77) Cl4-BZ#61	31.371	292	1121238	409.436	ng/mL	98
78) Cl5-BZ#98	31.388	326	720355	389.835	ng/mL	99
79) Cl4-BZ#76	31.537	292	1196308	398.106	ng/mL	99
80) Cl5-BZ#93	31.520	326	584844	386.148	ng/mL	100
81) Cl4-BZ#63	31.619	292	1053235M4	400.338	ng/mL	
82) Cl5-BZ#121/#95/#88	31.686	326	2329836	1174.172	ng/mL	99
83) Cl4-BZ#74	31.901	292	1181328	414.813	ng/mL	97
84) Cl6-BZ#155-RTW	32.033	360	835824	379.455	ng/mL	100
85) Cl4-BZ#70	32.066	292	1186334	356.429	ng/mL	97
86) Cl4-BZ#66	32.348	292	1103906	412.769	ng/mL	99
87) Cl5-BZ#91	32.215	326	665819	381.951	ng/mL	99
88) Cl4-BZ#80	32.612	292	1153774	430.140	ng/mL	99
89) Cl4-BZ#55	32.811	292	1181807	426.517	ng/mL	98
90) Cl5-BZ#92	32.861	326	663004	395.645	ng/mL	99
91) Cl5-BZ#89/#84	33.142	326	1255106	711.119	ng/mL	97
92) Cl5-BZ#101/#90	33.275	326	1460393M4	807.050	ng/mL	
94) Cl4-BZ#56	33.258	292	1161701	408.132	ng/mL	100
95) Cl5-BZ#113	33.357	326	882008M4	401.311	ng/mL	
96) Cl5-BZ#99	33.639	326	824978	406.216	ng/mL	99
97) Cl6-BZ#150	33.688	360	905543	388.578	ng/mL	98
98) Cl4-BZ#60	33.705	292	1239057	388.957	ng/mL	98
99) Cl6-BZ#152	34.052	360	978938	381.472	ng/mL	100
100) Cl5-BZ#119	34.135	326	1015096	397.754	ng/mL	98
101) Cl5-BZ#83/#125/#112	34.284	326	2514589M1	1205.798	ng/mL	
102) Cl5-BZ#86/#109	34.450	326	1703382M1	831.152	ng/mL	
103) Cl5-BZ#97	34.565	326	618815	389.741	ng/mL	98
104) Cl5-BZ#116	35.029	326	861809	406.635	ng/mL	99
105) Cl5-BZ#87/#111	35.310	326	1701013M1	808.067	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	995844	383.073	ng/mL	99
109) Cl6-BZ#148	34.698	360	689080	399.585	ng/mL	99
110) Cl4-BZ#79	34.814	292	1140550	434.459	ng/mL	99
111) Cl6-BZ#154-Cal	35.227	360	805420	411.164	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
Sample : I202241807
Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.294	292	1460430	429.267	ng/mL	84
115) Cl6-BZ#136	35.360	360	887301M4	382.608	ng/mL	
116) Cl5-BZ#117	35.426	326	1048725M4	394.227	ng/mL	
117) Cl5-BZ#115	35.492	326	1066344M4	430.003	ng/mL	
118) Cl5-BZ#85	35.592	326	656650	407.206	ng/mL	100
119) Cl5-BZ#120	35.724	326	1053666	429.901	ng/mL	100
120) Cl5-BZ#110	35.873	326	944392	395.089	ng/mL	99
121) Cl4-BZ#81	36.254	292	1157997	449.156	ng/mL	99
123) Cl6-BZ#151	36.254	360	688343	382.865	ng/mL	98
124) Cl6-BZ#135	36.403	360	744083	390.436	ng/mL	100
125) Cl5-BZ#82	36.568	326	646567	367.370	ng/mL	98
126) Cl6-BZ#144	36.601	360	726710	374.913	ng/mL	99
127) Cl6-BZ#147/#149	36.916	360	1529125	767.291	ng/mL	98
128) Cl4-BZ#77-RTW	37.015	292	1099292M4	421.841	ng/mL	
129) Cl6-BZ#143/#139	37.147	360	1501624	740.248	ng/mL	99
130) Cl5-BZ#124	37.296	326	1024632	393.393	ng/mL	99
131) Cl5-BZ#108	37.578	326	999505	381.931	ng/mL	100
132) Cl5-BZ#107/#123	37.677	326	2229349M4	802.704	ng/mL	
133) Cl6-BZ#140	37.313	360	708841	368.486	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.694	394	842937	357.271	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.776	360	625947	377.553	ng/mL	96
138) Cl5-BZ#106	37.809	326	1090318M4	394.172	ng/mL	
139) Cl6-BZ#133	37.892	360	794919M3	371.108	ng/mL	
140) Cl6-BZ#142	37.942	360	585927M3	377.135	ng/mL	
141) Cl5-BZ#118	38.041	326	969354	389.617	ng/mL	98
142) Cl6-BZ#131	38.041	360	645799	394.505	ng/mL	100
143) Cl7-BZ#184	38.174	394	823153	359.193	ng/mL	98
144) Cl6-BZ#165	38.240	360	907771	383.823	ng/mL	97
145) Cl6-BZ#146	38.339	360	794790	394.949	ng/mL	99
146) Cl6-BZ#161	38.521	360	1024529	386.804	ng/mL	100
147) Cl5-BZ#122	38.505	326	897155	394.320	ng/mL	99
148) Cl6-BZ#168	38.736	360	942647	378.553	ng/mL	99
149) Cl5-BZ#114	38.786	326	994547	383.743	ng/mL	100
150) Cl6-BZ#153	38.802	360	885428	385.968	ng/mL	97
152) Cl6-BZ#132	39.067	360	675263	364.596	ng/mL	99
153) Cl7-BZ#179	39.332	394	836326	371.706	ng/mL	100
154) Cl6-BZ#141	39.630	360	687371	413.949	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
Sample : I202241807
Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.829	394	799274	374.806	ng/mL	99
156) Cl5-BZ#105	39.895	326	1170382M4	404.307	ng/mL	
157) Cl6-BZ#137	40.060	360	720932	396.270	ng/mL	98
158) Cl5-BZ#127	40.209	326	1298948	402.384	ng/mL#	75
159) Cl7-BZ#186	40.160	394	905415	367.118	ng/mL	100
160) Cl6-BZ#130/#164	40.408	360	1671098	797.389	ng/mL	98
161) Cl7-BZ#178	40.706	394	615602	391.335	ng/mL	99
162) Cl6-BZ#138	40.772	360	842849M4	383.911	ng/mL	
163) Cl6-BZ#163/#160	40.871	360	1922496M4	796.767	ng/mL	
164) Cl6-BZ#129/#158	41.070	360	1629987M1	764.287	ng/mL	
165) Cl7-BZ#182/#175	41.103	394	1436648	748.886	ng/mL	100
166) Cl7-BZ#187	41.269	394	713389	377.293	ng/mL	96
167) Cl7-BZ#183	41.666	394	694404	428.183	ng/mL	99
168) Cl6-BZ#166	42.030	360	1032634	404.550	ng/mL	98
169) Cl6-BZ#159	42.278	360	1047993	424.796	ng/mL	99
170) Cl5-BZ#126-RTW	42.493	326	1304272	422.414	ng/mL	89
171) Cl7-BZ#185	42.526	394	648194	395.908	ng/mL	99
172) Cl6-BZ#162	42.609	360	983383	413.164	ng/mL	98
173) Cl7-BZ#174	42.758	394	642361	377.983	ng/mL	99
174) Cl6-BZ#128	42.775	360	718426	383.159	ng/mL	100
175) Cl6-BZ#167	43.056	360	1295716	412.932	ng/mL	93
176) Cl8-BZ#202-RTW	43.006	428	731003	387.387	ng/mL	100
178) Cl7-BZ#181	43.155	394	744275	401.986	ng/mL	98
179) Cl7-BZ#177	43.486	394	624358	395.071	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.569	428	1429585	756.342	ng/mL	99
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	615943	430.540	ng/mL	98
184) Cl7-BZ#173	43.999	394	598105	393.748	ng/mL	100
185) Cl7-BZ#172	44.446	394	643608	398.028	ng/mL	98
186) Cl7-BZ#192	44.661	394	905956	408.574	ng/mL	100
187) Cl6-BZ#156	44.678	360	997332	409.284	ng/mL	99
188) Cl6-BZ#157	44.926	360	992049	393.260	ng/mL	98
189) Cl7-BZ#180	44.959	394	794921	371.022	ng/mL	97
190) Cl7-BZ#193	45.059	394	762957M4	311.685	ng/mL	
191) Cl8-BZ#197	44.099	428	724992	382.678	ng/mL	99
192) Cl7-BZ#191	45.373	394	842845	414.252	ng/mL	97
193) Cl8-BZ#199	45.208	428	704518	384.537	ng/mL	99
194) Cl8-BZ#198	46.747	428	612151	442.712	ng/mL	99
195) Cl8-BZ#201	46.830	428	513801	375.471	ng/mL	98
196) Cl7-BZ#170	46.962	394	603766	447.730	ng/mL	96

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Misc : wg1092764,MSAT55,500ug/l
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 26 16:05:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	900869	407.136	ng/mL	97
198) Cl8-BZ#196	47.293	428	566766	392.663	ng/mL	98
199) Cl8-BZ#203	47.376	428	627992	417.590	ng/mL	100
200) Cl6-BZ#169-RTW	47.657	360	1106606	451.670	ng/mL	99
201) Cl9-BZ#208-RTW	48.816	464	726454	396.543	ng/mL	99
202) Cl9-BZ#207	49.494	464	737349	393.348	ng/mL	96
203) Cl7-BZ#189-RTW	49.660	394	813022	442.172	ng/mL	99
204) Cl8-BZ#195	49.809	428	551290	411.888	ng/mL	95
205) Cl8-BZ#194	51.480	428	585072	424.596	ng/mL	97
206) Cl8-BZ#205-RTW	52.076	428	713138	444.975	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.112	464	603568	429.849	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.379	498	604716	411.113	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

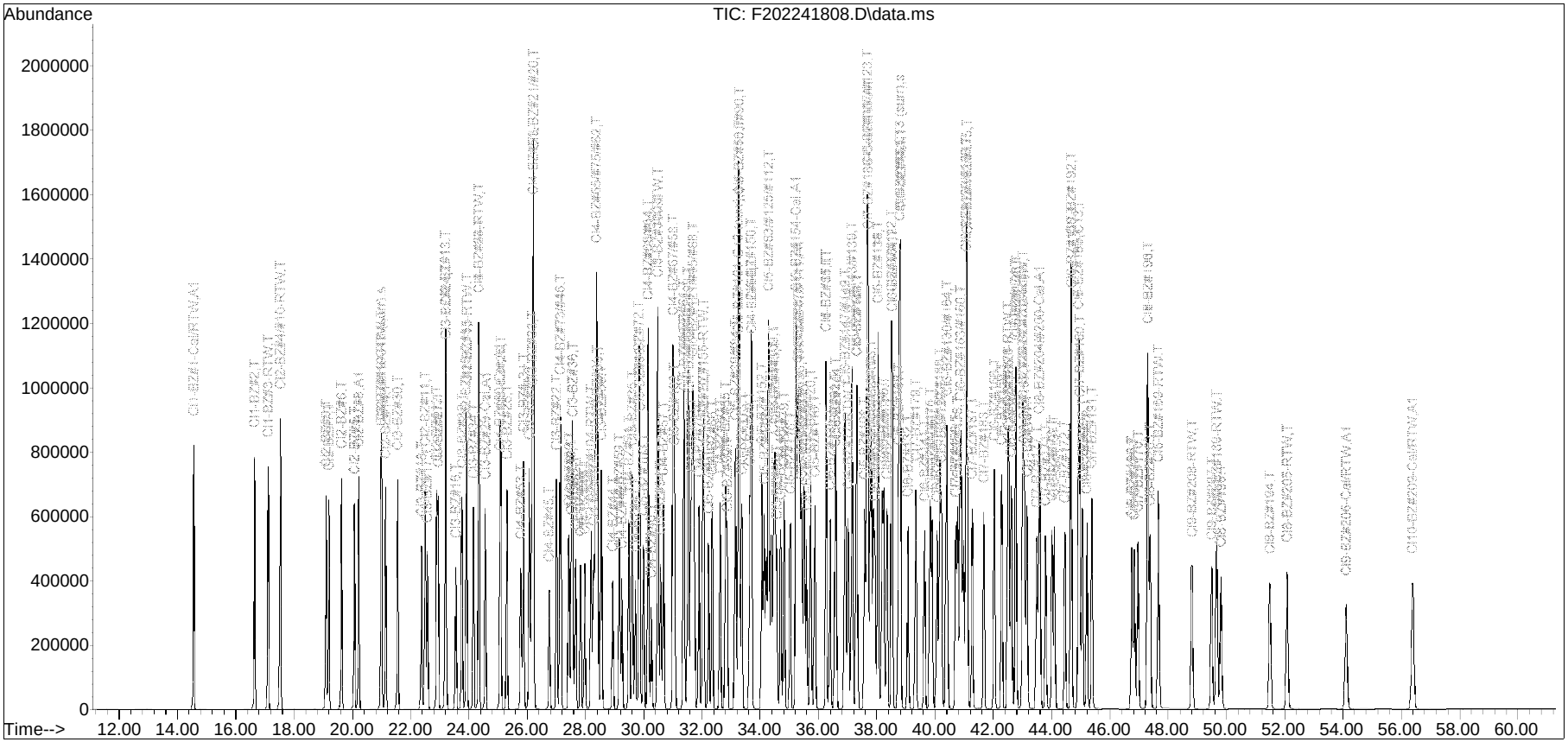
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241808.D
Acq On : 24 Feb 2018 5:39 pm
Operator : BNA2:JT
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Quant Time: Feb 26 16:05:40 2018
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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Sun Feb 25 10:49:08 2018
Response via : Initial Calibration

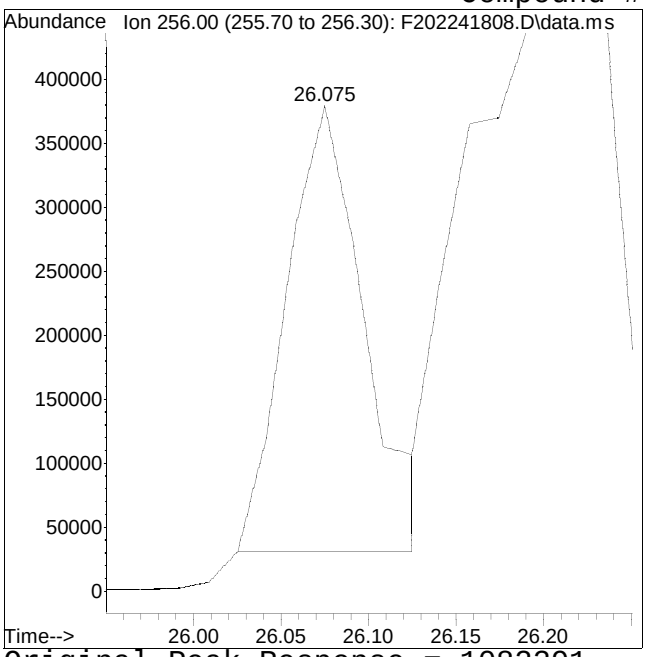
Sub List : Default - All compounds listed

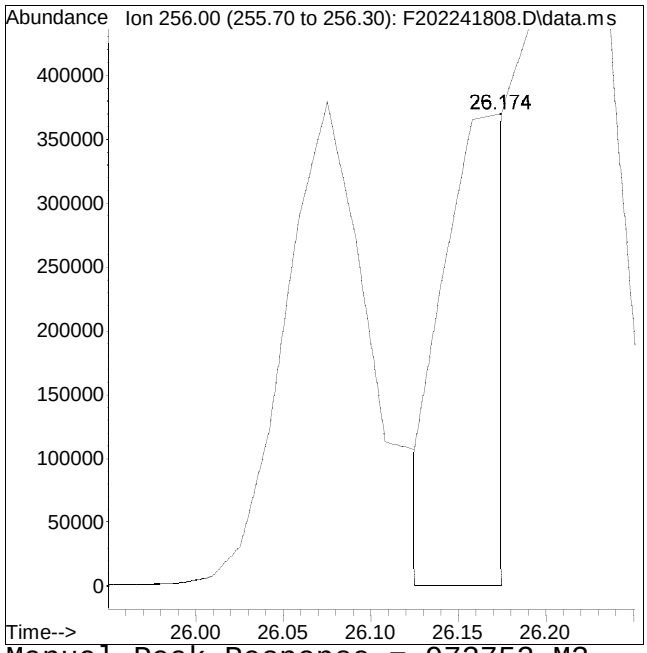


Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #43: Cl3-BZ#33





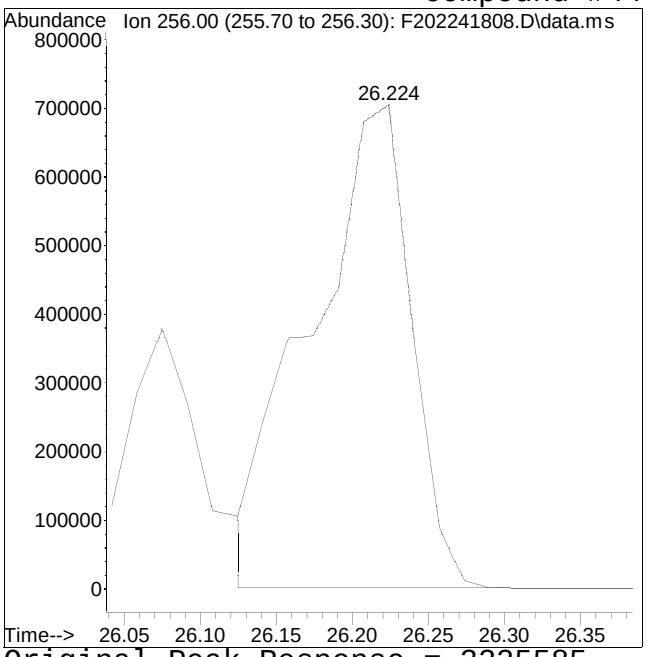
Original Peak Response = 1082291 Manual Peak Response = 973752 M3

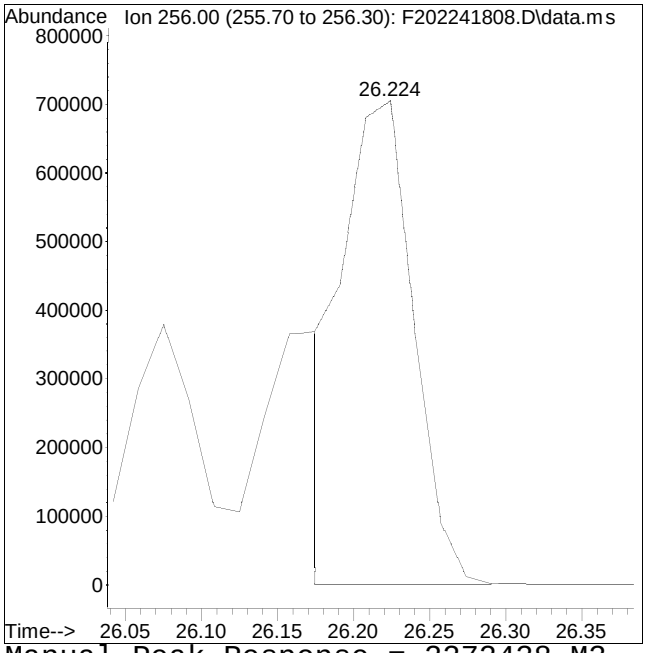
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #44: Cl3-BZ#21/#20





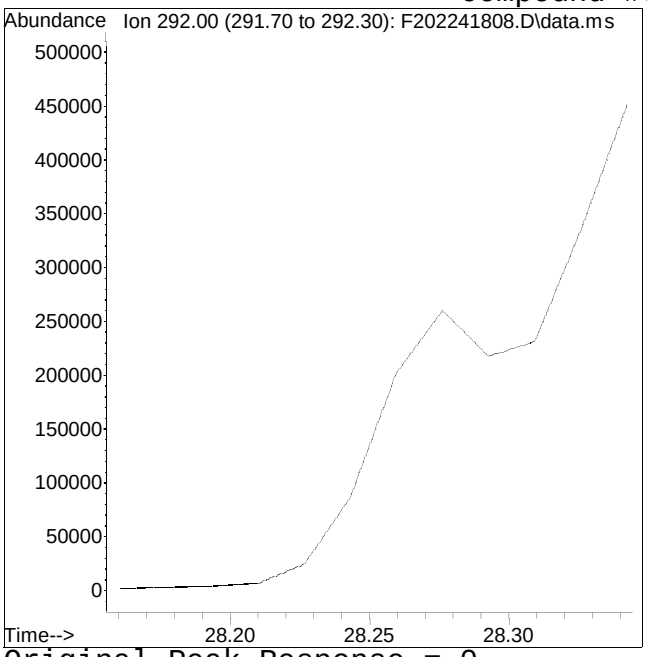
Original Peak Response = 3225585 Manual Peak Response = 2272438 M3

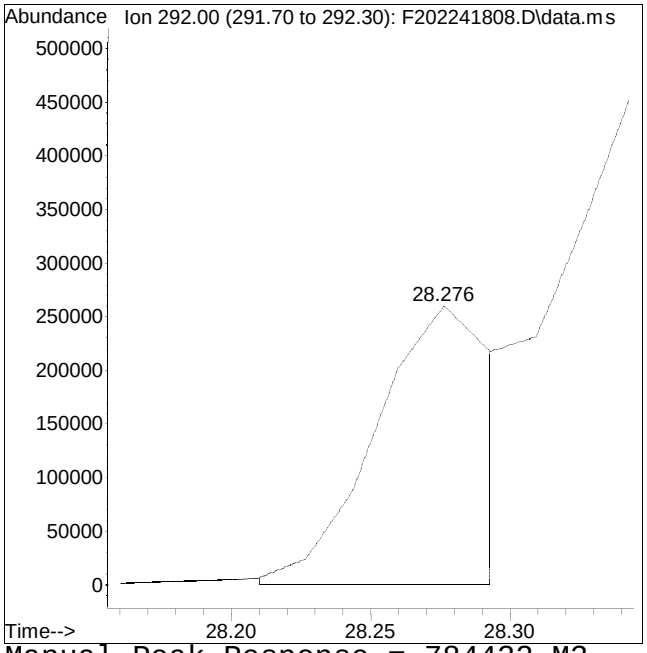
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #56: Cl4-BZ#47



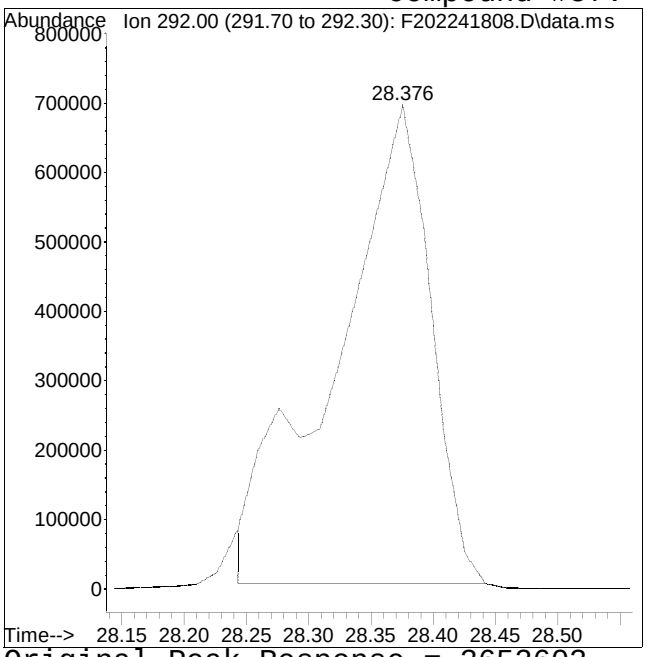


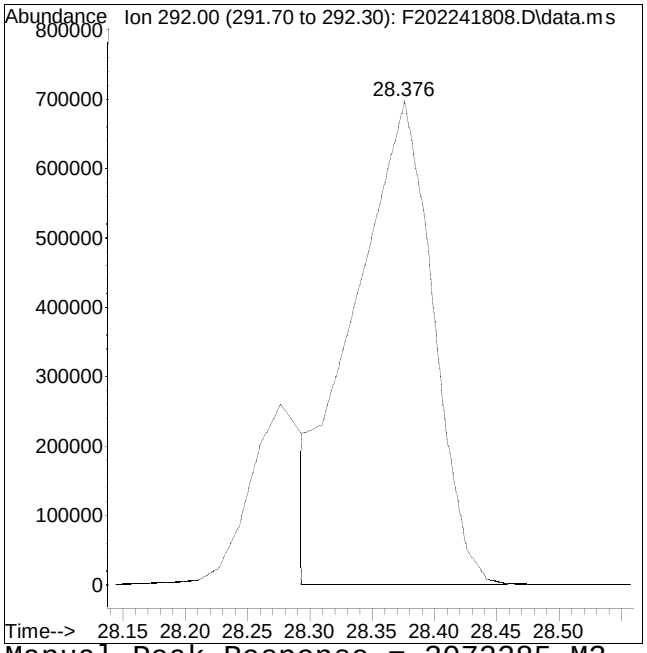
Original Peak Response = 0 Manual Peak Response = 784432 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #57: Cl4-BZ#65/#75/#62



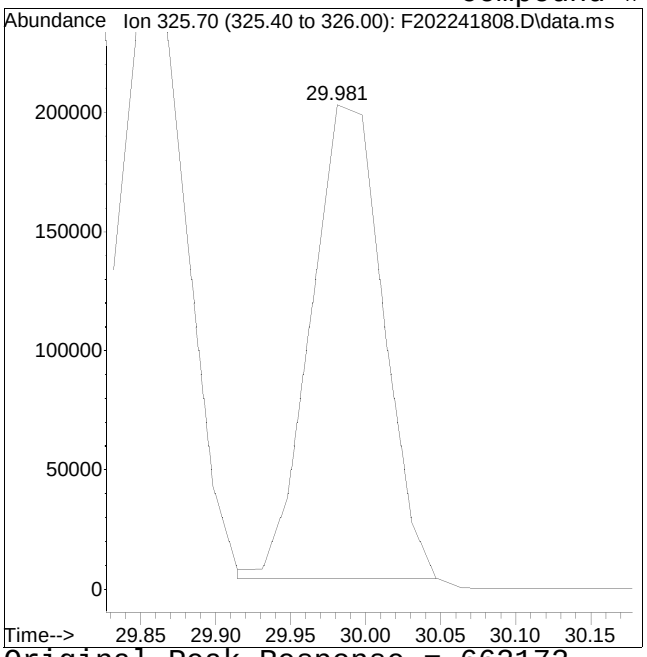


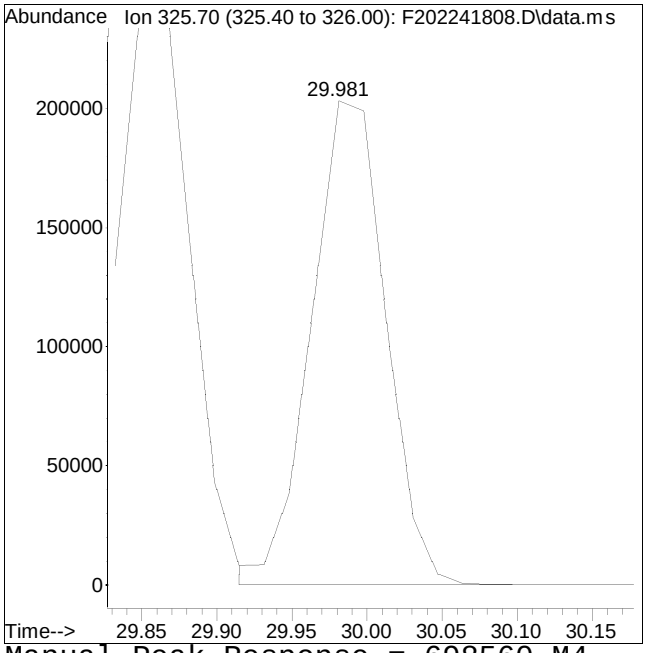
Original Peak Response = 3652603 Manual Peak Response = 3072285 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #68: Cl5-BZ#103



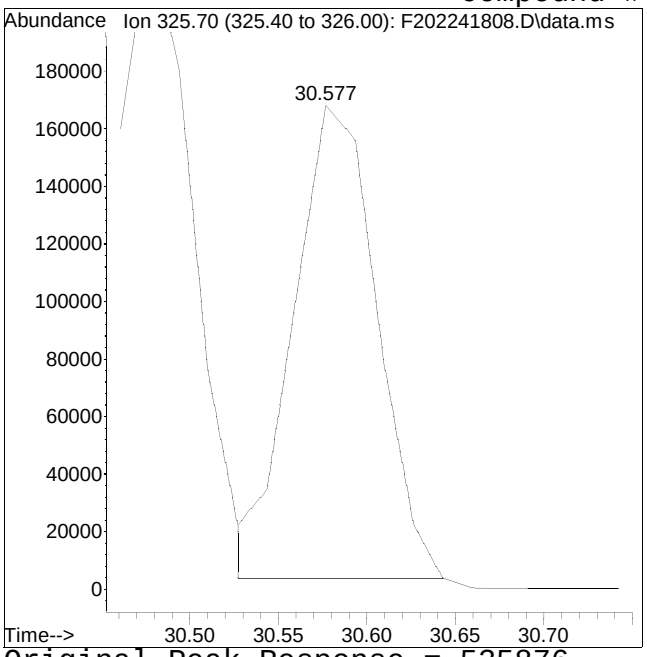


Original Peak Response = 662172 Manual Peak Response = 698560 M4
M4 = Poor automated baseline construction.

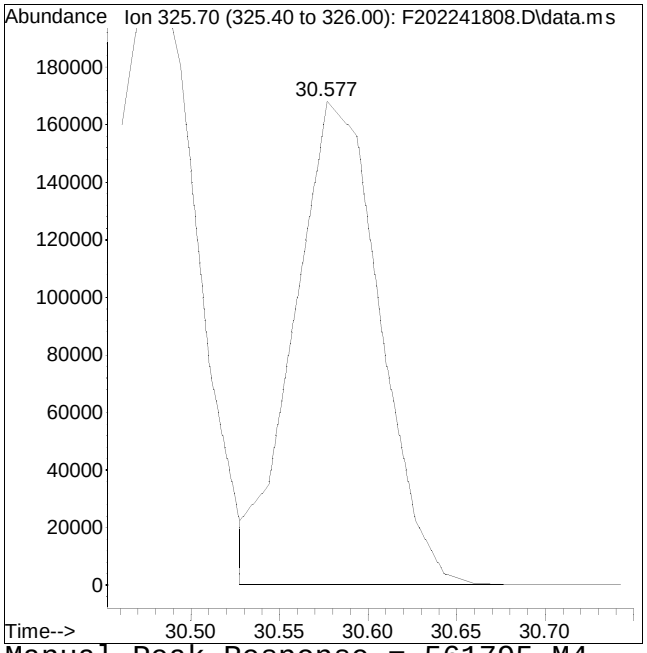
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #73: Cl5-BZ#94



Original Peak Response = 535876



Manual Peak Response = 561795 M4

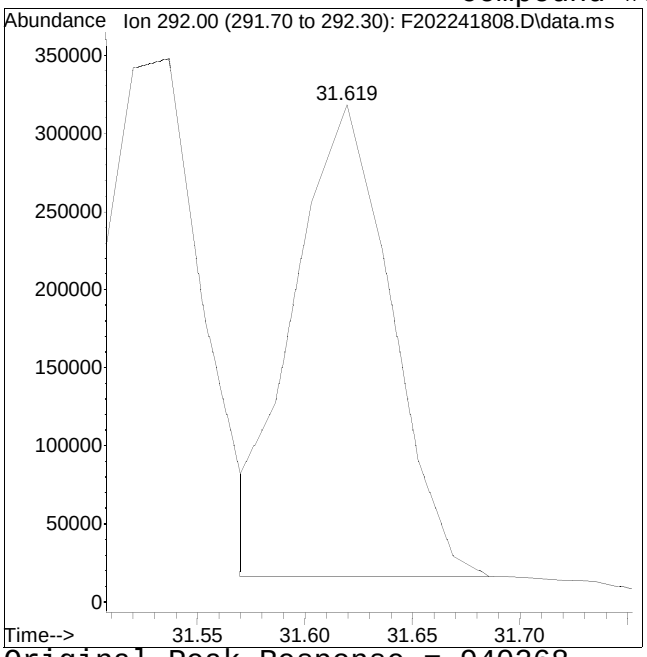
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

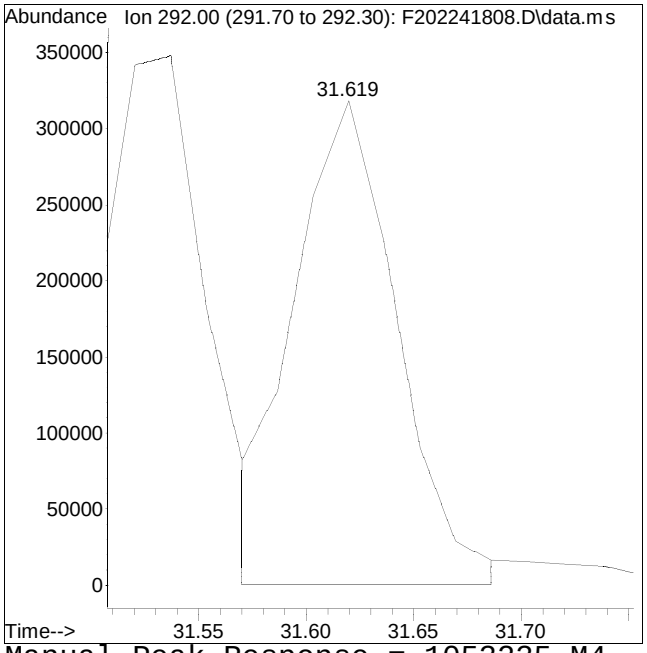
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #81: Cl4-BZ#63



Original Peak Response = 940268



Manual Peak Response = 1053235 M4

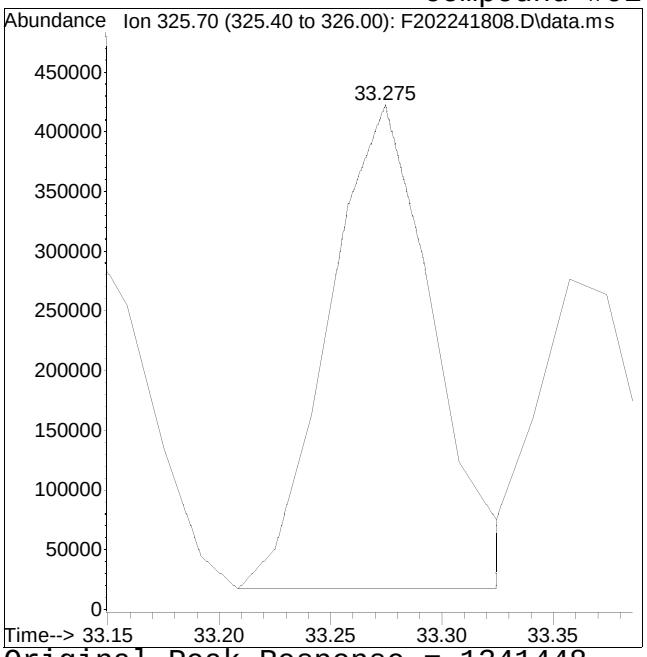
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

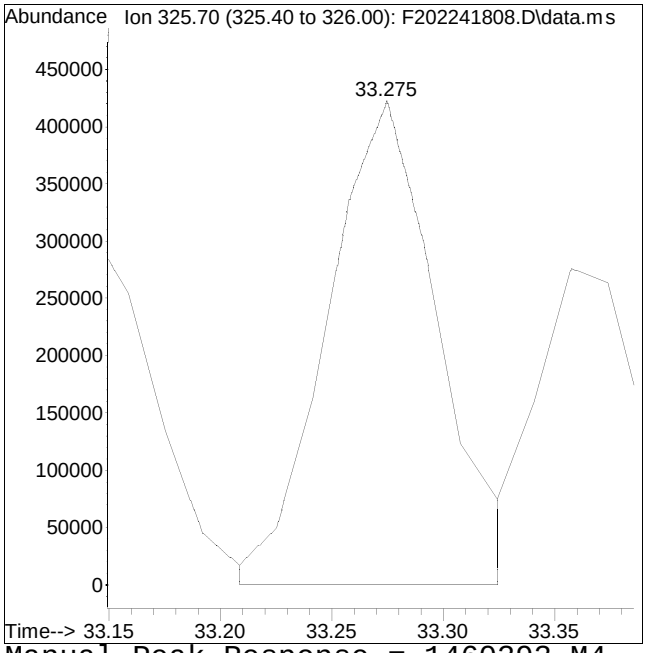
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #92: Cl5-BZ#101/#90



Original Peak Response = 1341448



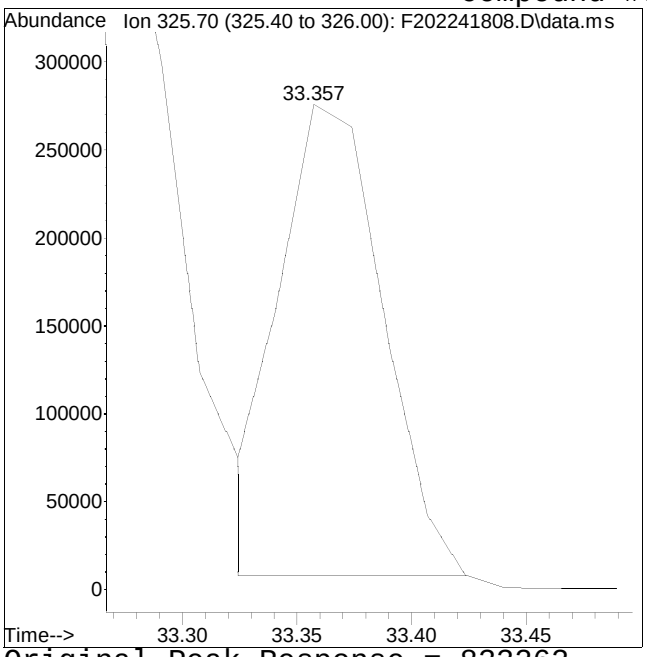
Manual Peak Response = 1460393 M4

M4 = Poor automated baseline construction.

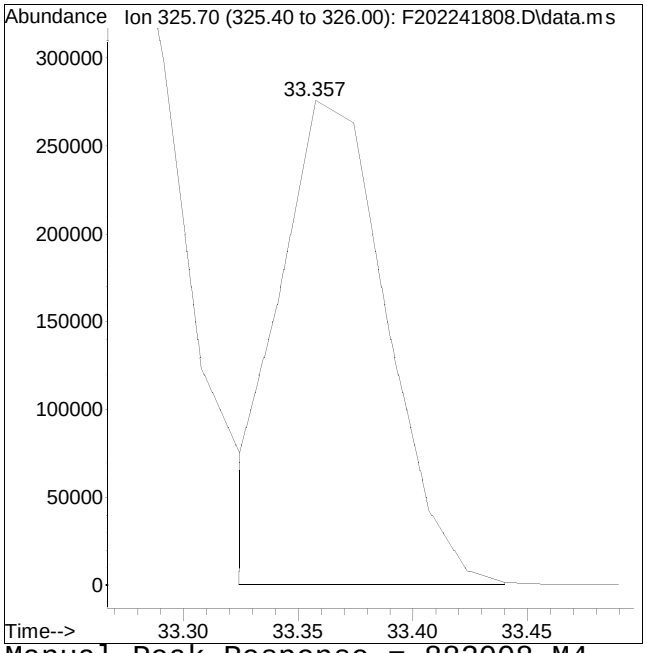
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #95: Cl5-BZ#113



Original Peak Response = 833262



Manual Peak Response = 882008 M4

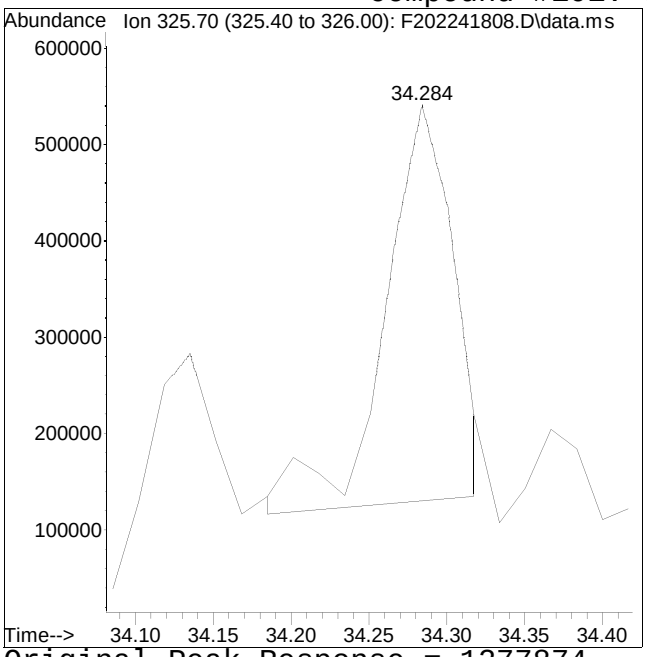
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

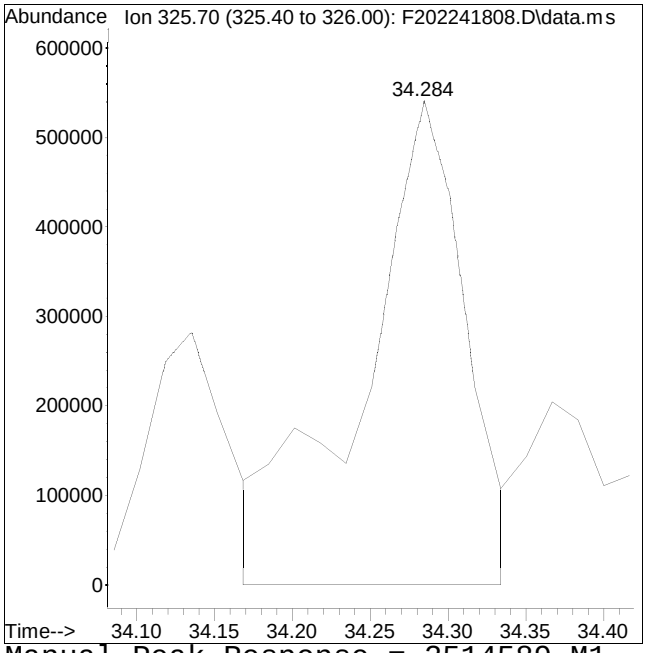
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #101: Cl5-BZ#83/#125/#112



Original Peak Response = 1277874



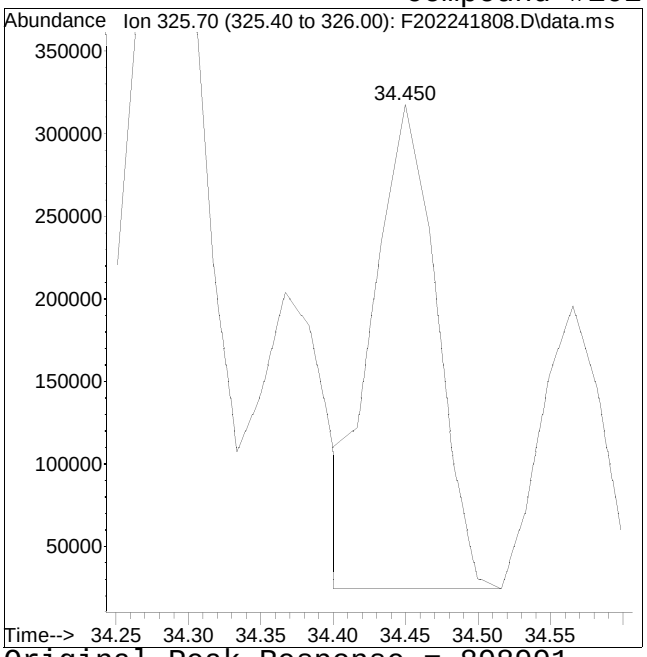
Manual Peak Response = 2514589 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

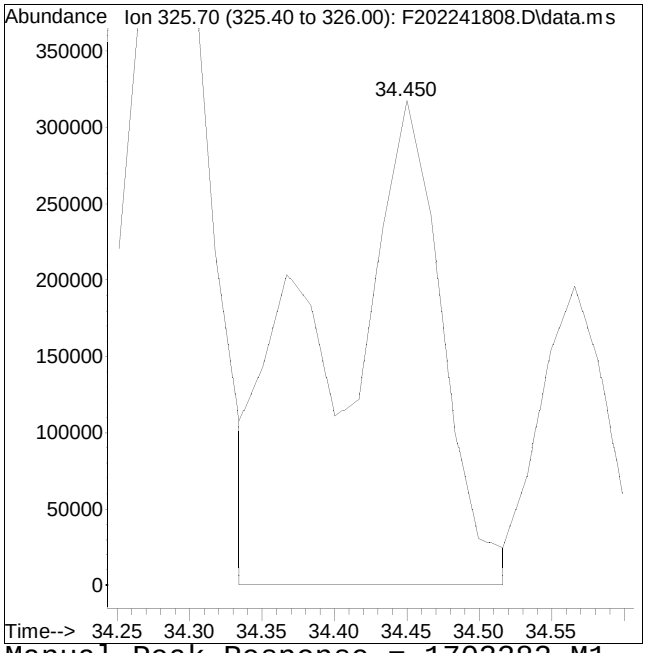
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #102: Cl5-BZ#86/#109



Original Peak Response = 898991



Manual Peak Response = 1703382 M1

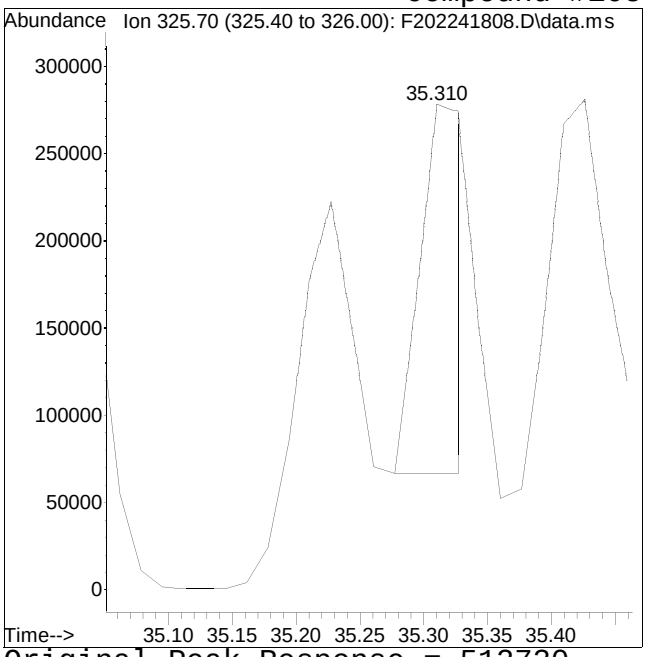
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

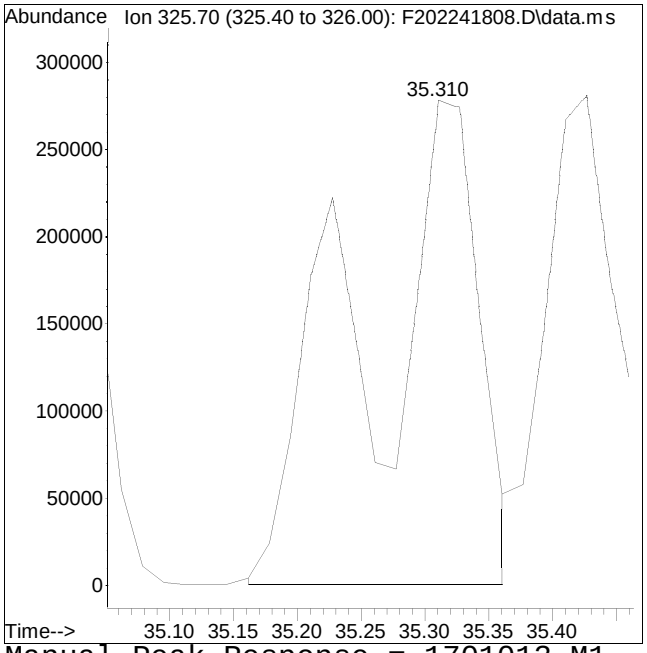
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 512730



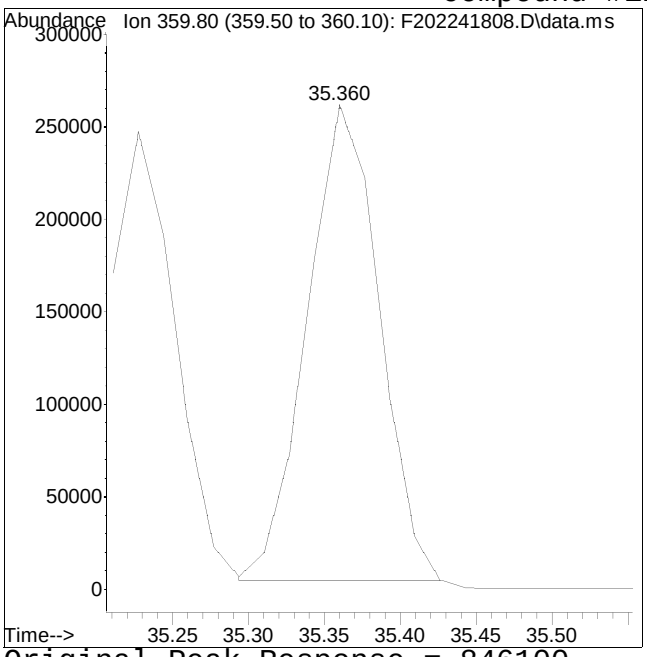
Manual Peak Response = 1701013 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

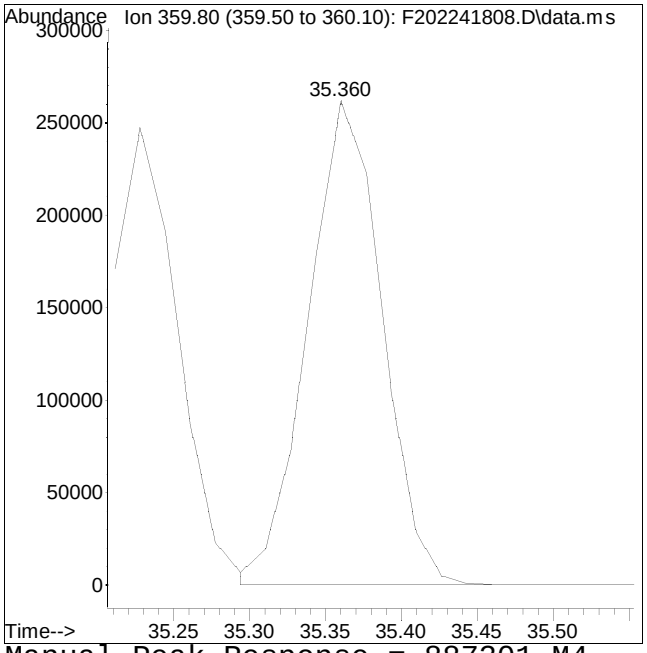
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #115: Cl6-BZ#136



Original Peak Response = 846100



Manual Peak Response = 887301 M4

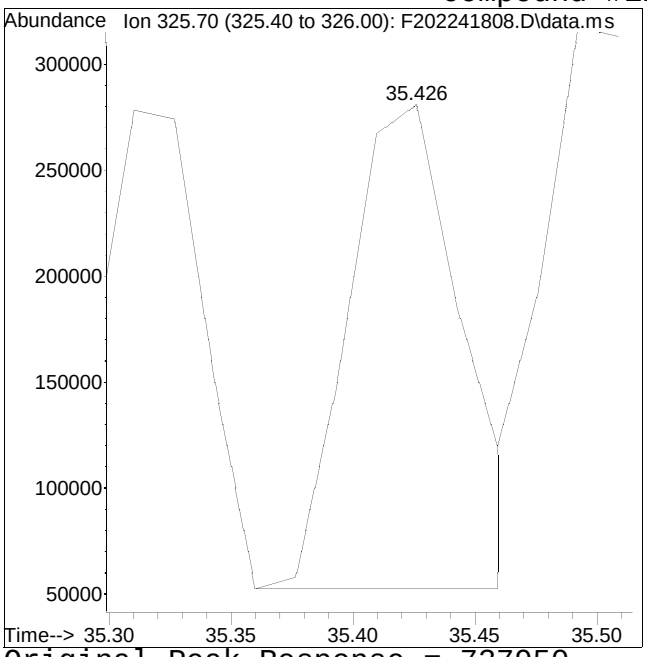
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

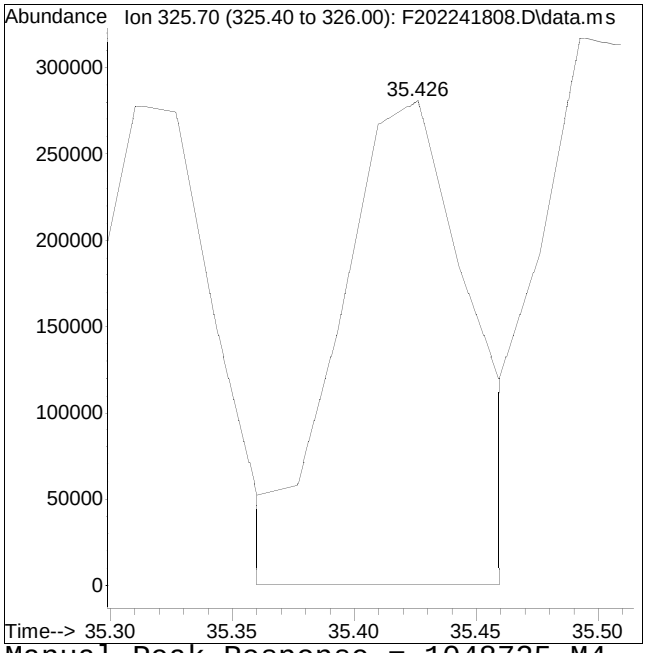
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #116: Cl5-BZ#117



Original Peak Response = 737950



Manual Peak Response = 1048725 M4

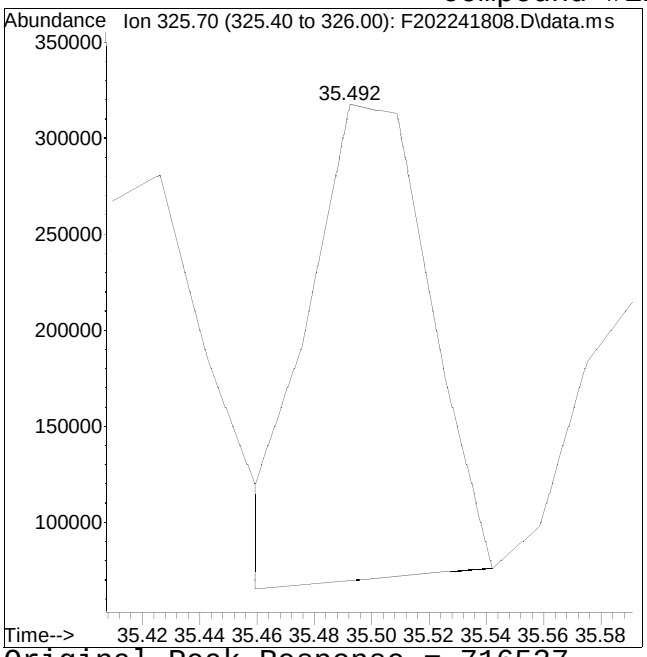
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

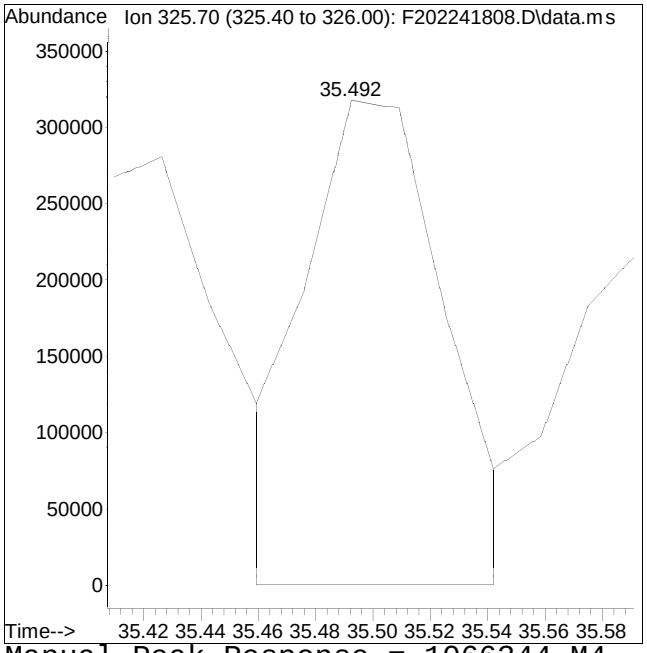
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #117: Cl5-BZ#115



Original Peak Response = 716537



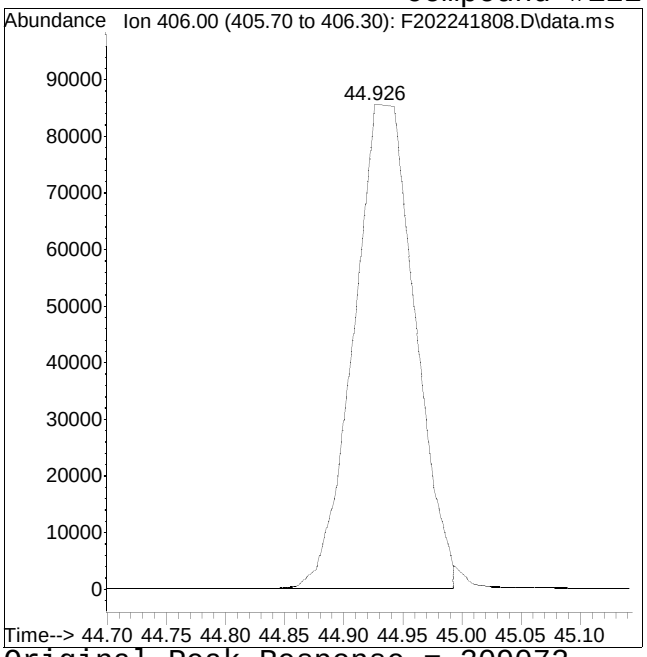
Manual Peak Response = 1066344 M4

M4 = Poor automated baseline construction.

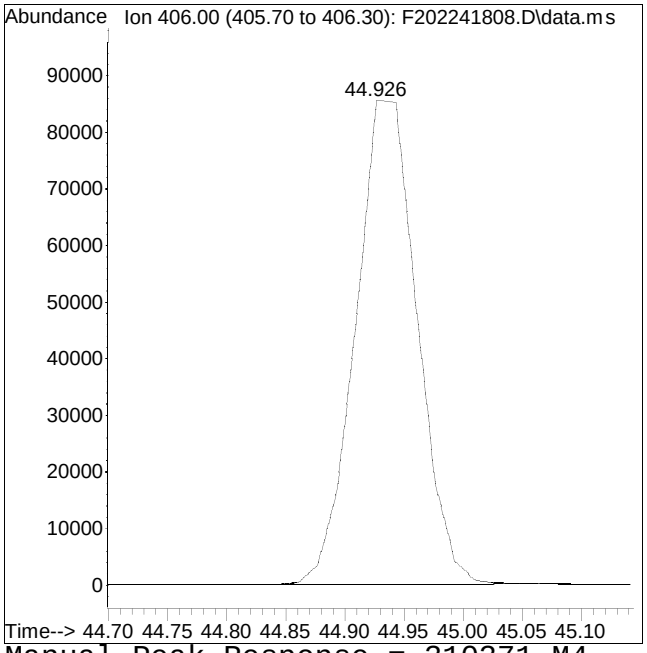
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #122: Cl7-BZ#180-C13



Original Peak Response = 309072



Manual Peak Response = 310371 M4

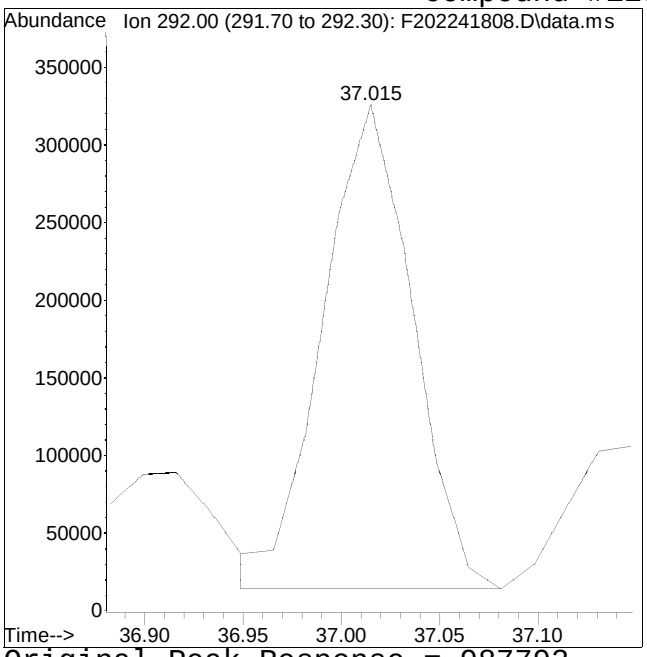
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

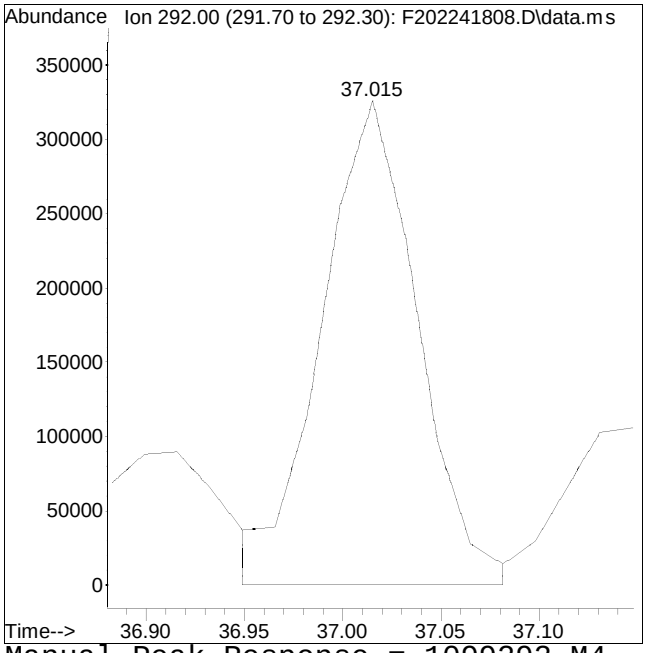
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 987792



Manual Peak Response = 1099292 M4

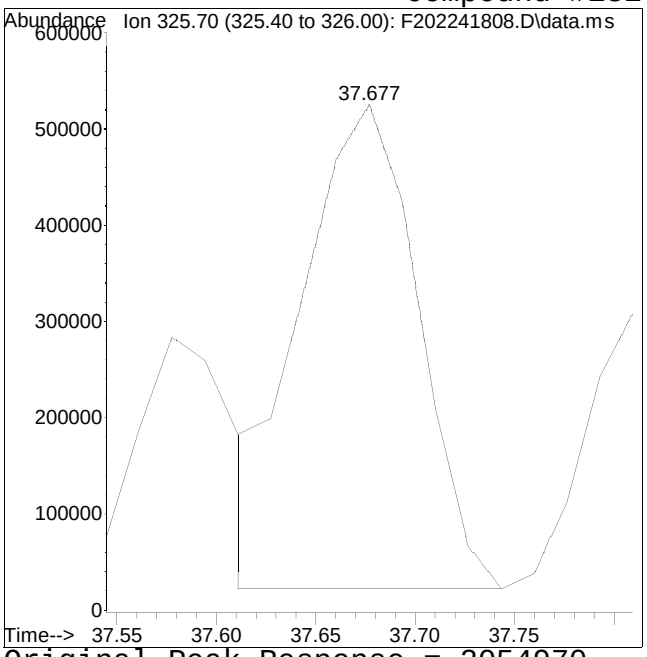
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

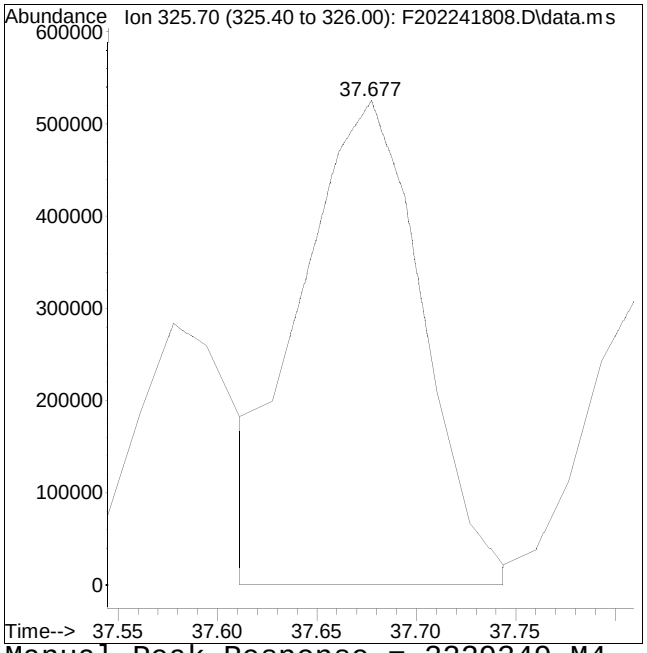
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 2054970



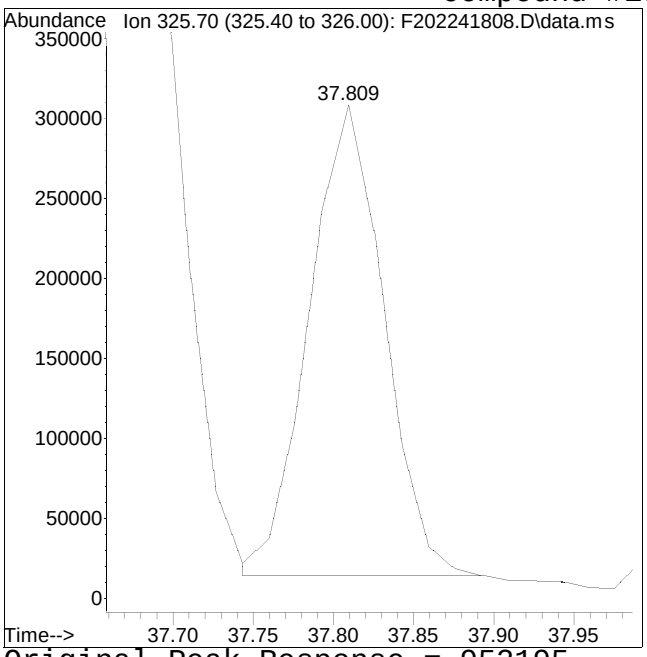
Manual Peak Response = 2229349 M4

M4 = Poor automated baseline construction.

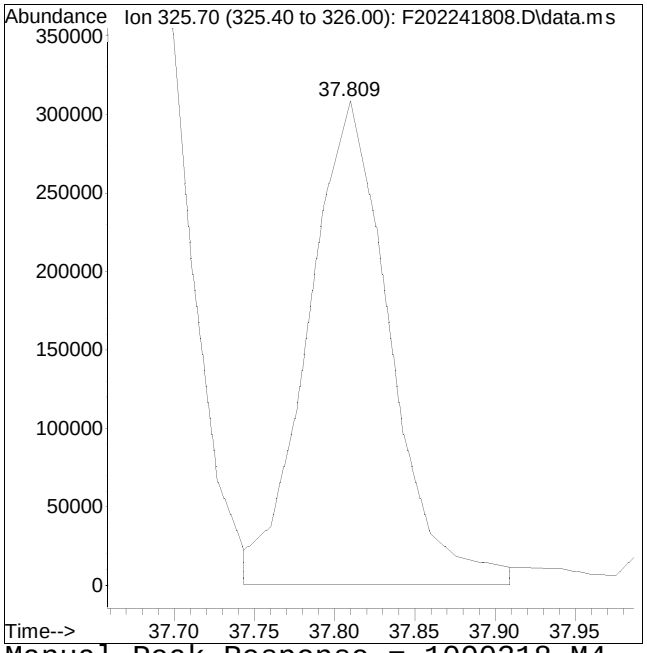
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #138: Cl5-BZ#106



Original Peak Response = 952195



Manual Peak Response = 1090318 M4

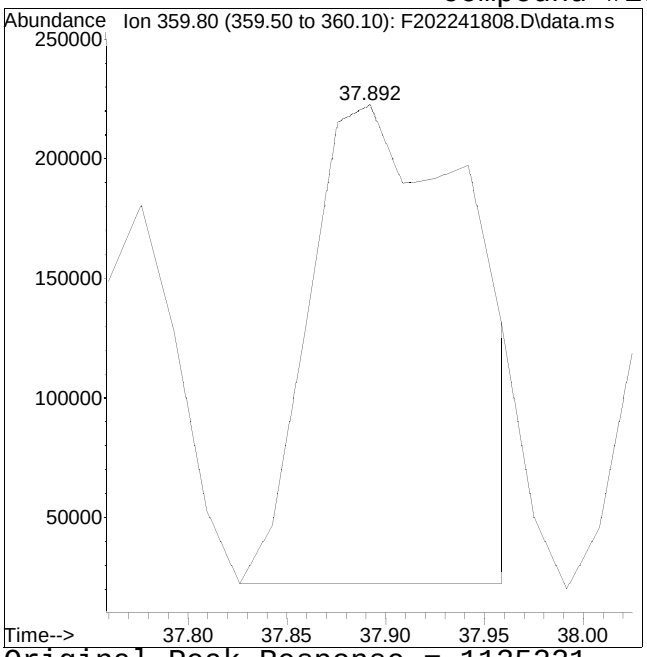
M4 = Poor automated baseline construction.

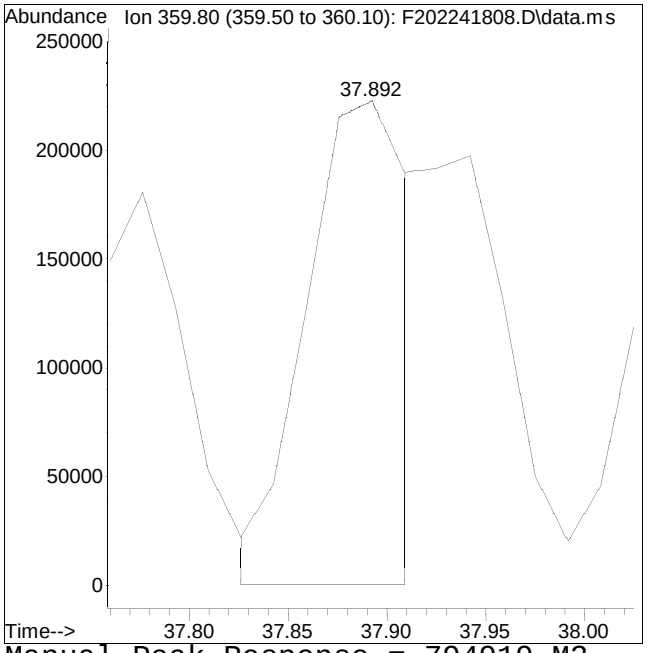
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #139: Cl6-BZ#133





Original Peak Response = 1135221 Manual Peak Response = 794919 M3

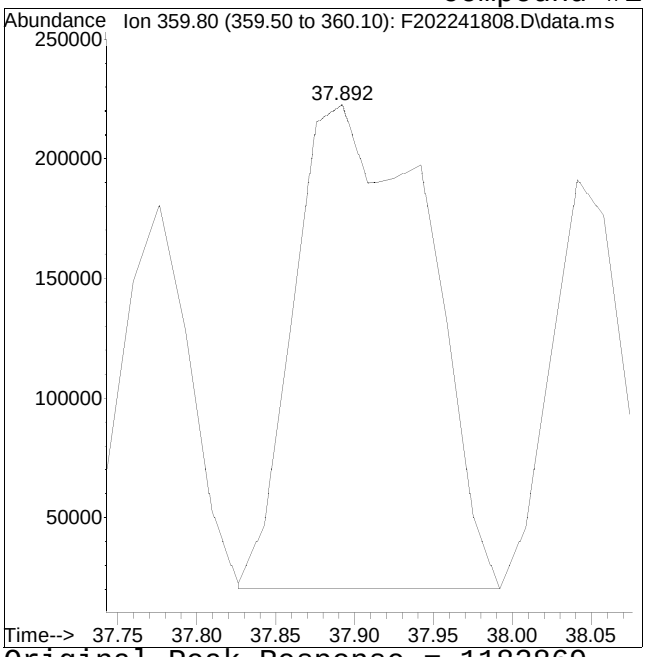
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

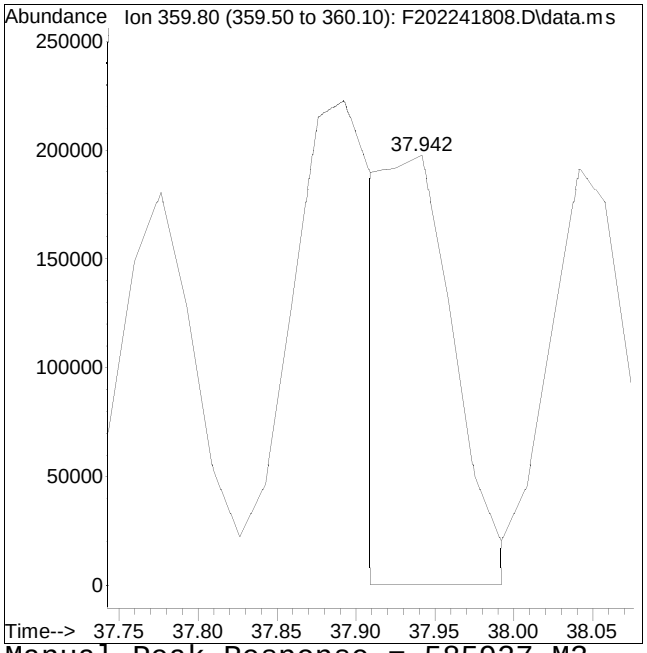
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #140: Cl6-BZ#142





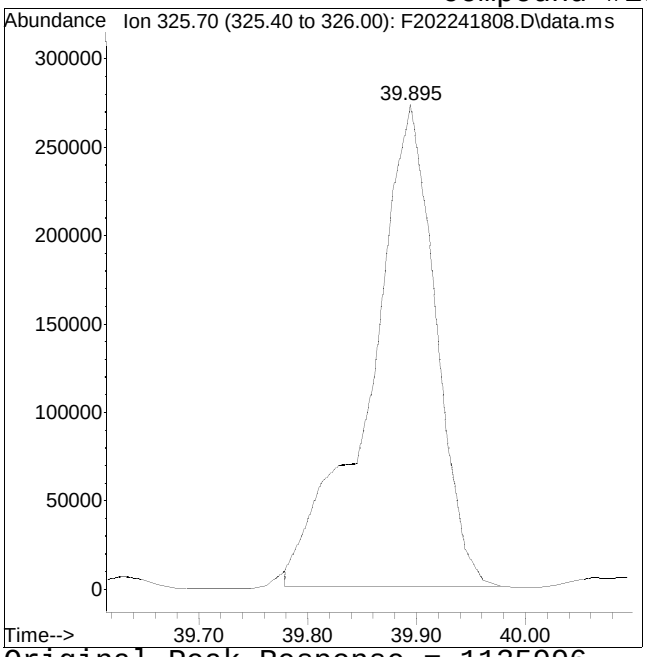
Original Peak Response = 1182869 Manual Peak Response = 585927 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

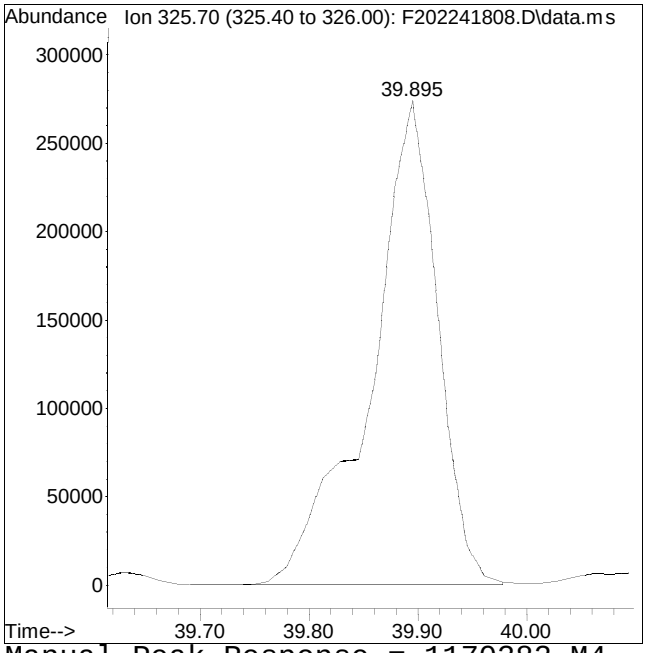
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #156: Cl5-BZ#105



Original Peak Response = 1135996



Manual Peak Response = 1170382 M4

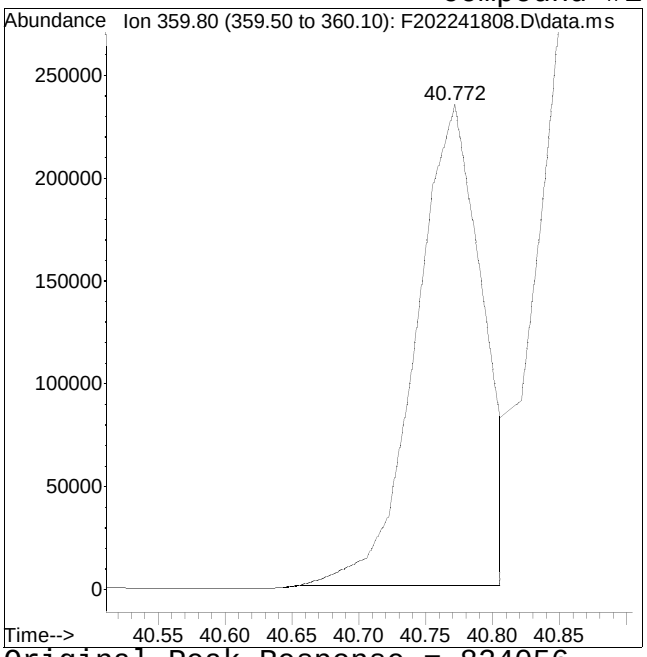
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

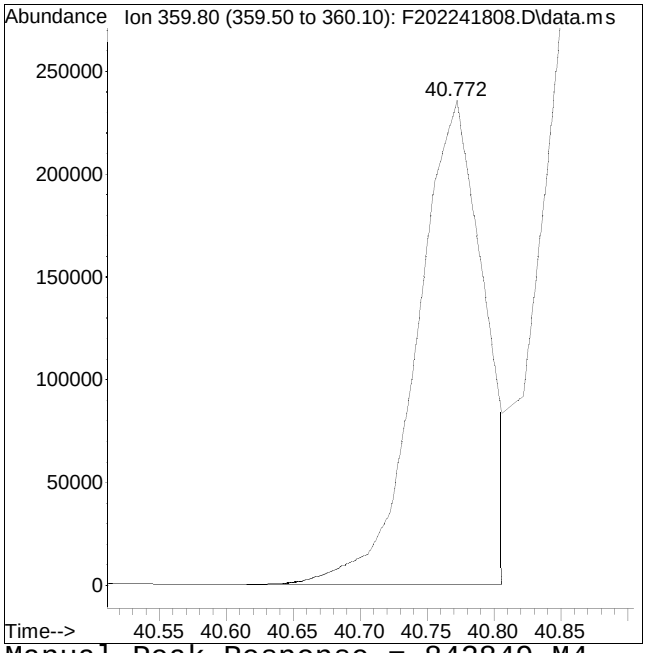
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #162: Cl6-BZ#138



Original Peak Response = 824056



Manual Peak Response = 842849 M4

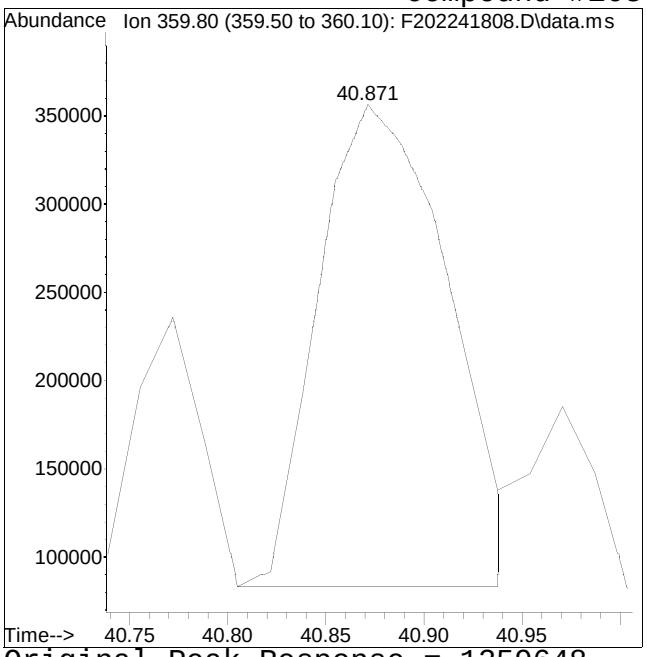
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

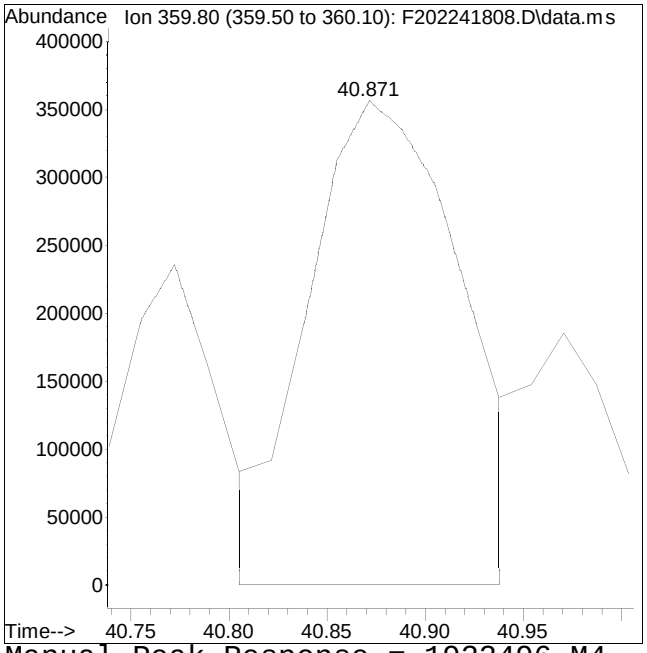
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241808.D
Date Inj'd : 2/24/2018 5:39 pm
Sample : I202241807

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/25/2018 10:51 am

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 1259648



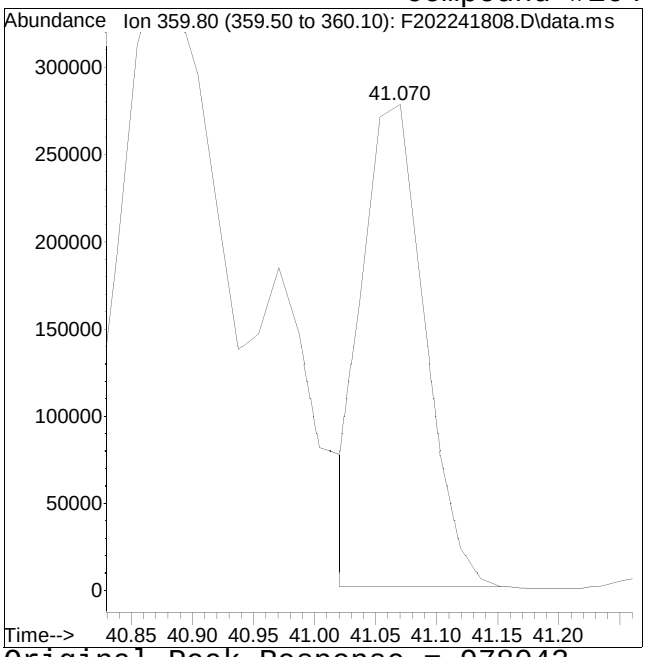
Manual Peak Response = 1922496 M4

M4 = Poor automated baseline construction.

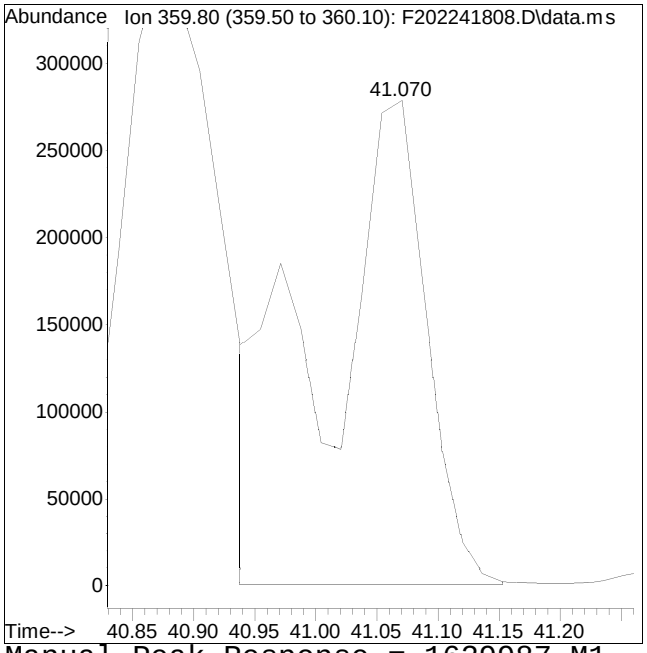
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 978043



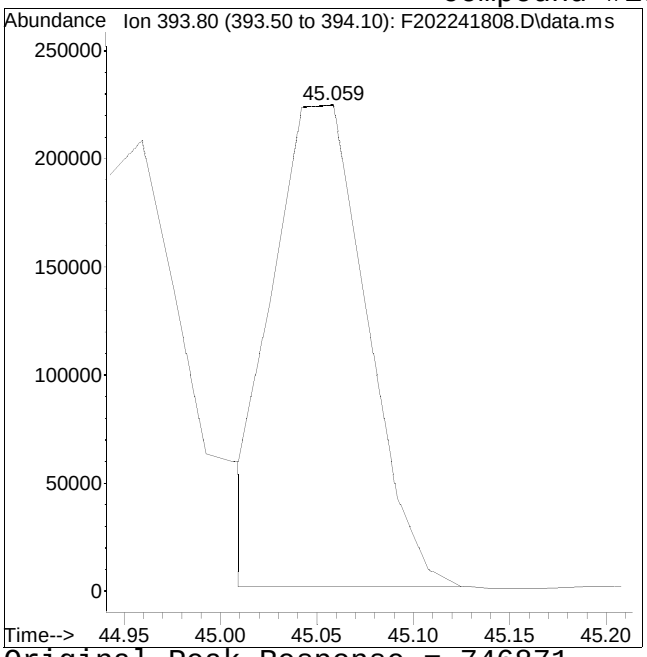
Manual Peak Response = 1629987 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

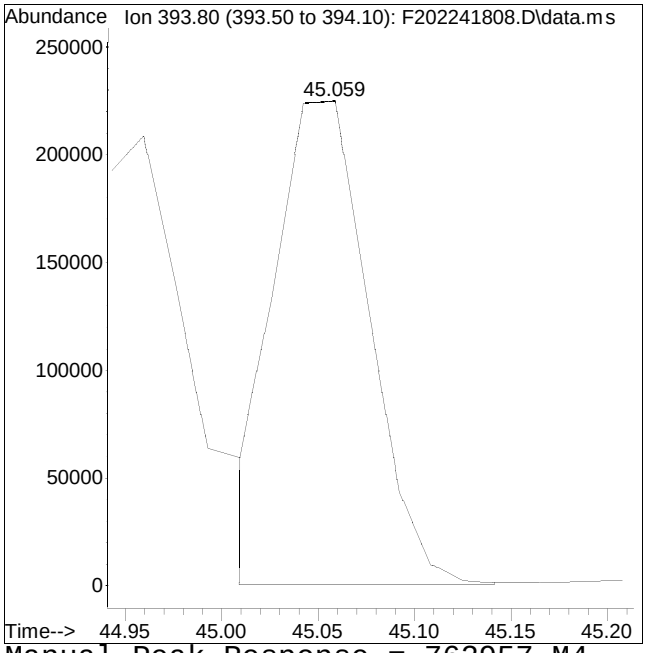
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241808.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 5:39 pm Instrument : BNA2
Sample : I202241807 Quant Date : 2/25/2018 10:51 am

Compound #190: Cl7-BZ#193



Original Peak Response = 746871



Manual Peak Response = 762957 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Cl2-BZ#15-C13	1.000	1.000	0.0	95	0.00
2	s	Cl3-BZ#19-C13 (surr)	0.352	0.356	-1.1	96	0.00
3	A1	Cl1-BZ#1-Cal/RTW	0.922	0.953	-3.4	98	0.00
4	A2	Monochlorobiphenyls	0.922	0.000#	100.0#	0#	-14.59#
5	A2	Cl1- conf Ion	0.922	0.000#	100.0#	0#	-14.59#
6	T	Cl1-BZ#2	0.970	0.998	-2.9	98	0.00
7	T	Cl1-BZ#3-RTW	0.952	0.988	-3.8	98	0.00
8	T	Cl2-BZ#4/#10-RTW	0.557	0.587	-5.4	99	0.00
9	T	Cl2-BZ#9	0.716	0.746	-4.2	98	0.00
10	T	Cl2-BZ#7	0.698	0.712	-2.0	95	0.00
11	T	Cl2-BZ#6	0.768	0.796	-3.6	98	0.00
12	T	Cl2-BZ#5	0.698	0.757	-8.5	103	0.00
13	A1	Cl2-BZ#8	0.794	0.825	-3.9	98	0.00
14	A2	Dichlorobiphenyls	0.794	0.000#	100.0#	0#	-17.55#
15	A2	Cl2-Conf Ion	0.794	0.000#	100.0#	0#	-17.55#
16	T	Cl3-BZ#19-RTW	0.392	0.404	-3.1	98	0.00
17	T	Cl2-BZ#14	0.766	0.790	-3.1	97	0.00
18	T	Cl3-BZ#30	0.626	0.650	-3.8	98	0.00
19	T	Cl3-BZ#18	0.436	0.441	-1.1	97	0.00
20	T	Cl2-BZ#11	0.822	0.860	-4.6	97	0.00
21	T	Cl3-BZ#17	0.406	0.411	-1.2	96	0.00
22	T	Cl2-BZ#12	0.727	0.759	-4.4	97	0.00
23	T	Cl3-BZ#27	0.562	0.588	-4.6	97	0.00
24	T	Cl2-BZ#13	0.838	0.862	-2.9	96	0.00
25	T	Cl3-BZ#24	0.577	0.581	-0.7	94	0.00
26	T	Cl3-BZ#16	0.354	0.362	-2.3	97	0.00
27	T	Cl3-BZ#32	0.620	0.631	-1.8	97	0.00
28	T	Cl2-BZ#15-RTW	0.849	0.862	-1.5	97	0.00
29	T	Cl3-BZ#34	0.579	0.602	-4.0	97	0.00
30	T	Cl3-BZ#23	0.569	0.597	-4.9	97	0.00
31	T	Cl4-BZ#54-RTW	0.530	0.553	-4.3	97	0.00
32	A1	Cl3-BZ#29-Cal	0.574	0.596	-3.8	97	0.00
33	A2	Trichlorobiphenyls	0.574	0.000#	100.0#	0#	-26.21#
34	A2	Cl3- Conf Ion	0.574	0.000#	100.0#	0#	-26.21#
35	A1	Cl4-BZ#50-Cal	0.443	0.460	-3.8	98	0.00
36	A2	Tetrachlorobiphenyls	0.443	0.000#	100.0#	0#	-28.37#
37	A2	Cl4-Conf Ion	0.443	0.000#	100.0#	0#	-28.36#
38	T	Cl3-BZ#26	0.644	0.630	2.2	93	0.00
39	T	Cl3-BZ#25	0.627	0.646	-3.0	97	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Cl4-BZ#53	0.489	0.500	-2.2	97	-0.02
41	T	Cl3-BZ#-31	0.866	0.825	4.7	90	0.00
42	T	Cl3-BZ#28	0.853	0.819	4.0	90	0.00
43	T	Cl3-BZ#33	0.608	0.668	-9.9	98	0.00
44	T	Cl3-BZ#21/#20	0.770	0.800	-3.9	95	-0.02
45	T	Cl4-BZ#51	0.539	0.567	-5.2	96	0.00
46	T	Cl4-BZ#45	0.421	0.425	-1.0	94	0.00
47	T	Cl3-BZ#22	0.750	0.784	-4.5	96	0.00
48	T	Cl4-BZ#73/#46	0.563	0.588	-4.4	95	-0.02
49	T	Cl4-BZ#69	0.673	0.711	-5.6	98	0.00
50	T	Cl4-BZ#43	0.444	0.452	-1.8	96	-0.02
51	T	Cl3-BZ#36	0.835	0.898	-7.5	98	-0.02
52	T	Cl4-BZ#52	0.547	0.557	-1.8	96	0.00
53	T	Cl4-BZ#48	0.486	0.497	-2.3	94	0.00
54	T	Cl4-BZ#49	0.523	0.532	-1.7	96	0.00
55	T	Cl5-BZ#104-RTW	0.540	0.561	-3.9	97	0.00
56	T	Cl4-BZ#47	0.564	0.551	2.3	99	0.00
57	T	Cl4-BZ#65/#75/#62	0.662	0.713	-7.7	96	0.00
58	T	Cl3-BZ#39	0.769	0.817	-6.2	99	0.00
59	T	Cl3-BZ#38	0.742	0.785	-5.8	96	0.00
60	T	Cl4-BZ#44	0.455	0.470	-3.3	97	0.00
61	T	Cl4-BZ#59	0.667	0.680	-1.9	97	-0.02
62	T	Cl4-BZ#42	0.432	0.455	-5.3	95	0.00
63	T	Cl4-BZ#71	0.701	0.732	-4.4	98	0.00
64	T	Cl3-BZ#35	0.776	0.802	-3.4	95	0.00
65	T	Cl4-BZ#41	0.426	0.435	-2.1	94	0.00
66	T	Cl4-BZ#72	0.733	0.773	-5.5	95	0.00
67	T	Cl5-BZ#96	0.584	0.614	-5.1	96	-0.02
68	T	Cl5-BZ#103	0.451	0.435	3.5	88	0.00
69	T	Cl4-BZ#68/#64	0.679	0.729	-7.4	97	0.00
70	T	Cl4-BZ#40	0.331	0.348	-5.1	97	0.00
71	T	Cl3-BZ#37-RTW	1.031	1.024	0.7	91	0.00
72	T	Cl5-BZ#100	0.486	0.509	-4.7	96	0.00
73	T	Cl5-BZ#94	0.359	0.372	-3.6	93	0.00
74	T	Cl4-BZ#57	0.730	0.788	-7.9	97	0.00
75	T	Cl4-BZ#67/#58	0.735	0.782	-6.4	97	0.00
76	T	Cl5-BZ#102	0.517	0.547	-5.8	97	0.00
77	T	Cl4-BZ#61	0.723	0.764	-5.7	97	-0.02
78	T	Cl5-BZ#98	0.473	0.499	-5.5	96	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	T	Cl4-BZ#76	0.764	0.828	-8.4	98	0.00
80	T	Cl5-BZ#93	0.382	0.403	-5.5	96	-0.02
81	T	Cl4-BZ#63	0.686	0.718	-4.7	96	0.00
82	T	Cl5-BZ#121/#95/#88	0.507	0.534	-5.3	95	-0.02
83	T	Cl4-BZ#74	0.759	0.799	-5.3	97	0.00
84	T	Cl6-BZ#155-RTW	0.562	0.576	-2.5	95	0.00
85	T	Cl4-BZ#70	0.781	0.911	-16.6	107	-0.02
86	T	Cl4-BZ#66	0.707	0.745	-5.4	96	0.00
87	T	Cl5-BZ#91	0.447	0.462	-3.4	97	0.00
88	T	Cl4-BZ#80	0.741	0.779	-5.1	97	0.00
89	T	Cl4-BZ#55	0.756	0.795	-5.2	97	-0.02
90	T	Cl5-BZ#92	0.436	0.456	-4.6	96	-0.02
91	T	Cl5-BZ#89/#84	0.418	0.486	-16.3	107	0.00
92	T	Cl5-BZ#101/#90	0.481	0.482	-0.2	91	-0.02
93	s	Cl5-BZ#101-C13 (surr)	0.514	0.563	-9.5	99	0.00
94	T	Cl4-BZ#56	0.748	0.795	-6.3	97	0.00
95	T	Cl5-BZ#113	0.566	0.628	-11.0	103	0.00
96	T	Cl5-BZ#99	0.543	0.559	-2.9	96	0.00
97	T	Cl6-BZ#150	0.602	0.629	-4.5	96	0.00
98	T	Cl4-BZ#60	0.800	0.889	-11.1	102	0.00
99	T	Cl6-BZ#152	0.646	0.682	-5.6	97	0.00
100	T	Cl5-BZ#119	0.658	0.721	-9.6	100	-0.02
101	T	Cl5-BZ#83/#125/#112	0.548	0.575	-4.9	96	0.00
102	T	Cl5-BZ#86/#109	0.545	0.553	-1.5	95	0.00
103	T	Cl5-BZ#97	0.406	0.439	-8.1	96	0.00
104	T	Cl5-BZ#116	0.560	0.587	-4.8	96	0.00
105	A1	Cl5-BZ#87/#111	0.548	0.582	-6.2	97	0.00
106	A2	Pentachlorobiphenyls	0.548	0.000#	100.0#	0#	-34.26#
107	A2	Cl5-Conf Ion	0.548	0.000#	100.0#	0#	-37.65#
108	T	Cl6-BZ#145	0.667	0.692	-3.7	96	0.00
109	T	Cl6-BZ#148	0.456	0.475	-4.2	96	0.00
110	T	Cl4-BZ#79	0.736	0.771	-4.8	96	0.00
111	A1	Cl6-BZ#154-Cal	0.527	0.547	-3.8	96	0.00
112	A2	Hexachlorobiphenyls	0.527	0.000#	100.0#	0#	-37.12#
113	A2	Cl6-Conf Ion	0.527	0.000#	100.0#	0#	-37.12#
114	T	Cl4-BZ#78	0.912	0.958	-5.0	95	0.00
115	T	Cl6-BZ#136	0.584	0.606	-3.8	95	0.00
116	T	Cl5-BZ#117	0.693	0.744	-7.4	97	0.00
117	T	Cl5-BZ#115	0.687	0.670	2.5	90	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
118	T	Cl5-BZ#85	0.429	0.418	2.6	93	-0.02
119	T	Cl5-BZ#120	0.671	0.705	-5.1	97	0.00
120	T	Cl5-BZ#110	0.648	0.658	-1.5	95	0.00
121	T	Cl4-BZ#81	0.739	0.767	-3.8	96	-0.02
122	i	Cl7-BZ#180-C13	1.000	1.000	0.0	95	0.00
123	T	Cl6-BZ#151	0.855	0.881	-3.0	97	0.00
124	T	Cl6-BZ#135	0.902	0.912	-1.1	92	0.00
125	T	Cl5-BZ#82	0.771	0.814	-5.6	97	0.00
126	T	Cl6-BZ#144	0.879	0.930	-5.8	98	0.00
127	T	Cl6-BZ#147/#149	0.939	0.952	-1.4	95	0.00
128	T	Cl4-BZ#77-RTW	1.283	1.313	-2.3	95	0.00
129	T	Cl6-BZ#143/#139	0.902	0.959	-6.3	97	0.00
130	T	Cl5-BZ#124	1.213	1.270	-4.7	96	0.00
131	T	Cl5-BZ#108	1.232	1.351	-9.7	98	0.00
132	T	Cl5-BZ#107/#123	1.314	1.326	-0.9	94	0.00
133	T	Cl6-BZ#140	0.872	0.901	-3.3	96	0.00
134	A1	Cl7-BZ#188-Cal/RTW	1.025	1.088	-6.1	97	0.00
135	A2	Heptachlorobiphenyls	1.025	0.000#	100.0#	0#	-41.10#
136	A2	Cl7-Conf Ion	1.025	0.000#	100.0#	0#	-41.10#
137	T	Cl6-BZ#134	0.743	0.807	-8.6	98	0.00
138	T	Cl5-BZ#106	1.194	1.346	-12.7	96	-0.02
139	T	Cl6-BZ#133	1.011	1.115	-10.3	98	0.00
140	T	Cl6-BZ#142	0.680	0.650	4.4	96	0.00
141	T	Cl5-BZ#118	1.159	1.215	-4.8	97	0.00
142	T	Cl6-BZ#131	0.783	0.766	2.2	91	0.00
143	T	Cl7-BZ#184	1.013	1.062	-4.8	98	0.00
144	T	Cl6-BZ#165	1.102	1.162	-5.4	97	-0.02
145	T	Cl6-BZ#146	0.964	0.985	-2.2	96	0.00
146	T	Cl6-BZ#161	1.227	1.293	-5.4	97	-0.02
147	T	Cl5-BZ#122	1.068	1.103	-3.3	95	-0.02
148	T	Cl6-BZ#168	1.179	1.294	-9.8	99	0.00
149	T	Cl5-BZ#114	1.173	1.238	-5.5	97	0.00
150	T	Cl6-BZ#153	1.050	1.022	2.7	94	0.00
151	s	Cl6-BZ#153-C13 (surr)	0.919	1.047	-13.9	105	0.00
152	T	Cl6-BZ#132	0.842	0.870	-3.3	97	0.00
153	T	Cl7-BZ#179	1.046	1.081	-3.3	97	0.00
154	T	Cl6-BZ#141	0.843	0.830	1.5	92	0.00
155	T	Cl7-BZ#176	0.994	1.007	-1.3	96	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
156	T	Cl5-BZ#105	1.435	1.440	-0.3	96	0.00
157	T	Cl6-BZ#137	0.864	0.914	-5.8	97	0.00
158	T	Cl5-BZ#127	1.574	1.604	-1.9	96	0.00
159	T	Cl7-BZ#186	1.106	1.157	-4.6	96	0.00
160	T	Cl6-BZ#130/#164	1.008	1.028	-2.0	94	-0.02
161	T	Cl7-BZ#178	0.758	0.774	-2.1	95	-0.02
162	T	Cl6-BZ#138	1.024	1.068	-4.3	98	-0.02
163	T	Cl6-BZ#163/#160	1.158	1.224	-5.7	96	-0.02
164	T	Cl6-BZ#129/#158	0.966	0.980	-1.4	96	-0.02
165	T	Cl7-BZ#182/#175	0.867	0.924	-6.6	97	0.00
166	T	Cl7-BZ#187	0.888	0.902	-1.6	95	0.00
167	T	Cl7-BZ#183	0.854	0.833	2.5	91	0.00
168	T	Cl6-BZ#166	1.258	1.309	-4.1	97	0.00
169	T	Cl6-BZ#159	1.258	1.303	-3.6	97	0.00
170	T	Cl5-BZ#126-RTW	1.539	1.595	-3.6	96	0.00
171	T	Cl7-BZ#185	0.794	0.812	-2.3	97	0.00
172	T	Cl6-BZ#162	1.166	1.272	-9.1	101	0.00
173	T	Cl7-BZ#174	0.788	0.821	-4.2	97	0.00
174	T	Cl6-BZ#128	0.862	0.899	-4.3	97	-0.02
175	T	Cl6-BZ#167	1.547	1.591	-2.8	96	0.00
176	T	Cl8-BZ#202-RTW	0.892	0.937	-5.0	97	0.00
177	s	Cl8-BZ#202-C13 (surr)	0.942	0.928	1.5	93	0.00
178	T	Cl7-BZ#181	0.886	0.933	-5.3	96	0.00
179	T	Cl7-BZ#177	0.769	0.789	-2.6	96	-0.02
180	A1	Cl8-BZ#204/#200-Cal	0.876	0.912	-4.1	97	0.00
181	A2	Octachlorobiphenyls	0.876	0.000#	100.0#	0#	-43.58#
182	A2	Cl8-Conf Ion	0.876	0.000#	100.0#	0#	-43.58#
183	T	Cl7-BZ#171	0.753	0.714	5.2	89	0.00
184	T	Cl7-BZ#173	0.742	0.757	-2.0	96	0.00
185	T	Cl7-BZ#172	0.797	0.808	-1.4	97	0.00
186	T	Cl7-BZ#192	1.092	1.128	-3.3	96	0.00
187	T	Cl6-BZ#156	1.206	1.236	-2.5	97	0.00
188	T	Cl6-BZ#157	1.246	1.269	-1.8	96	0.00
189	T	Cl7-BZ#180	0.970	0.988	-1.9	97	0.00
190	T	Cl7-BZ#193	0.998	1.263	-26.6	117	0.00
191	T	Cl8-BZ#197	0.894	0.918	-2.7	96	0.00
192	T	Cl7-BZ#191	1.037	1.067	-2.9	97	0.00
193	T	Cl8-BZ#199	0.889	0.901	-1.3	96	0.00
194	T	Cl8-BZ#198	0.754	0.721	4.4	97	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
195	T	Cl8-BZ#201	0.651	0.714	-9.7	96	0.00
196	T	Cl7-BZ#170	0.751	0.727	3.2	92	0.00
197	T	Cl7-BZ#190	1.093	1.136	-3.9	97	0.00
198	T	Cl8-BZ#196	0.706	0.750	-6.2	99	0.00
199	T	Cl8-BZ#203	0.763	0.773	-1.3	95	0.00
200	T	Cl6-BZ#169-RTW	1.332	1.346	-1.1	96	0.00
201	T	Cl9-BZ#208-RTW	0.943	0.933	1.1	97	-0.02
202	T	Cl9-BZ#207	0.921	0.955	-3.7	97	-0.02
203	T	Cl7-BZ#189-RTW	0.995	1.014	-1.9	97	0.00
204	T	Cl8-BZ#195	0.694	0.698	-0.6	97	-0.02
205	T	Cl8-BZ#194	0.743	0.737	0.8	96	0.00
206	T	Cl8-BZ#205-RTW	0.910	0.895	1.6	96	0.00
207	A1	Cl9-BZ#206-Cal/RTW	0.759	0.748	1.4	95	0.00
208	A2	Nonachlorobiphenyls	0.759	0.000#	100.0#	0#	-49.49#
209	A2	Cl9-Conf Ion	0.759	0.000#	100.0#	0#	-49.49#
210	A1	Cl10-BZ#209-Cal/RTW	0.753	0.772	-2.5	98	-0.02
211	A2	Decachlorobiphenyl	0.753	0.000#	100.0#	0#	-56.42#
212	A2	Cl10-Conf Ion	0.753	0.000#	100.0#	0#	-56.40#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.904	234	547973	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.926	406	294698	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.993	268	48820	50.664	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 50.66%			
93) Cl5-BZ#101-C13 (surr)	33.241	338	77091	54.735	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 54.73%			
151) Cl6-BZ#153-C13 (surr)	38.786	372	77122	56.938	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 56.94%			
177) Cl8-BZ#202-C13 (surr)	42.990	442	68349	49.246	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 49.25%#			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.584	188	130603	51.716	ng/mL	99
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.658	188	136776	51.475	ng/mL	100
7) Cl1-BZ#3-RTW	17.133	188	135284	51.858	ng/mL	99
8) Cl2-BZ#4/#10-RTW	17.551	222	160878	105.455	ng/mL	99
9) Cl2-BZ#9	19.111	222	102134	52.057	ng/mL	99
10) Cl2-BZ#7	19.208	222	97521	51.012	ng/mL	100
11) Cl2-BZ#6	19.634	222	109010	51.787	ng/mL	99
12) Cl2-BZ#5	20.076	222	103755	54.254	ng/mL	100
13) Cl2-BZ#8	20.229	222	113083	52.005	ng/mL	99
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	21.009	256	55322	51.507	ng/mL	99
17) Cl2-BZ#14	21.146	222	108216	51.564	ng/mL	97
18) Cl3-BZ#30	21.564	256	89055	51.948	ng/mL	99
19) Cl3-BZ#18	22.376	256	60469	50.677	ng/mL	98
20) Cl2-BZ#11	22.505	222	117765	52.285	ng/mL	98
21) Cl3-BZ#17	22.585	256	56257	50.634	ng/mL	99
22) Cl2-BZ#12	22.899	222	103985	52.189	ng/mL	98
23) Cl3-BZ#27	22.947	256	80500	52.311	ng/mL	99
24) Cl2-BZ#13	23.196	222	118113	51.450	ng/mL	99
25) Cl3-BZ#24	23.212	256	79581	50.304	ng/mL	98
26) Cl3-BZ#16	23.558	256	49581	51.073	ng/mL	97
27) Cl3-BZ#32	23.759	256	86453	50.891	ng/mL	97
28) Cl2-BZ#15-RTW	23.928	222	118100	50.770	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.153	256	82425	51.917	ng/mL	100
30) Cl3-BZ#23	24.338	256	81771	52.485	ng/mL	99
31) Cl4-BZ#54-RTW	24.346	292	75777	52.174	ng/mL	99
32) Cl3-BZ#29-Cal	24.563	256	81617	51.891	ng/mL	99
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.070	292	63079	51.982	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.094	256	86336	48.939	ng/mL	100
39) Cl3-BZ#25	25.303	256	88490	51.524	ng/mL	99
40) Cl4-BZ#53	25.777	292	68520	51.186	ng/mL	99
41) Cl3-BZ#-31	25.876	256	113050M4	47.662	ng/mL	
42) Cl3-BZ#28	26.075	256	112221	48.031	ng/mL	98
43) Cl3-BZ#33	26.158	256	91503M4	54.941	ng/mL	
44) Cl3-BZ#21/#20	26.207	256	219299M3	103.968	ng/mL	
45) Cl4-BZ#51	26.207	292	77662	52.555	ng/mL	98
46) Cl4-BZ#45	26.770	292	58178	50.415	ng/mL	100
47) Cl3-BZ#22	27.002	256	107436	52.280	ng/mL	97
48) Cl4-BZ#73/#46	27.134	292	161017	104.407	ng/mL	100
49) Cl4-BZ#69	27.432	292	97385	52.844	ng/mL	99
50) Cl4-BZ#43	27.515	292	61953	50.903	ng/mL	97
51) Cl3-BZ#36	27.548	256	122978	53.786	ng/mL	99
52) Cl4-BZ#52	27.664	292	76266	50.895	ng/mL	99
53) Cl4-BZ#48	27.829	292	68075	51.127	ng/mL	98
54) Cl4-BZ#49	27.978	292	72817	50.841	ng/mL	99
55) Cl5-BZ#104-RTW	28.193	326	76919	52.013	ng/mL	97
56) Cl4-BZ#47	28.276	292	75437M3	48.842	ng/mL	
57) Cl4-BZ#65/#75/#62	28.375	292	293219M3	161.589	ng/mL	
58) Cl3-BZ#39	28.425	256	111872	53.087	ng/mL	99
59) Cl3-BZ#38	28.541	256	107526	52.907	ng/mL	98
60) Cl4-BZ#44	28.938	292	64443	51.687	ng/mL	98
61) Cl4-BZ#59	29.153	292	93113	50.925	ng/mL	99
62) Cl4-BZ#42	29.253	292	62264	52.568	ng/mL	98
63) Cl4-BZ#71	29.484	292	100271	52.219	ng/mL	99
64) Cl3-BZ#35	29.600	256	109920	51.719	ng/mL	100
65) Cl4-BZ#41	29.716	292	59553	51.074	ng/mL	99
66) Cl4-BZ#72	29.832	292	105900	52.701	ng/mL	99
67) Cl5-BZ#96	29.849	326	84141	52.618	ng/mL	95
68) Cl5-BZ#103	29.981	326	59624	48.231	ng/mL	98
69) Cl4-BZ#68/#64	30.146	292	199681	107.311	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.262	292	47723	52.665	ng/mL	96
71) Cl3-BZ#37-RTW	30.477	256	140274	49.643	ng/mL	100
72) Cl5-BZ#100	30.477	326	69674	52.303	ng/mL	99
73) Cl5-BZ#94	30.577	326	50997	51.854	ng/mL	100
74) Cl4-BZ#57	30.676	292	107931M4	53.974	ng/mL	
75) Cl4-BZ#67/#58	31.007	292	214309	106.486	ng/mL	99
76) Cl5-BZ#102	31.057	326	74988	52.959	ng/mL	99
77) Cl4-BZ#61	31.355	292	104646	52.794	ng/mL	99
78) Cl5-BZ#98	31.388	326	68366	52.702	ng/mL	99
79) Cl4-BZ#76	31.520	292	113401	54.139	ng/mL	99
80) Cl5-BZ#93	31.504	326	55141	52.694	ng/mL	100
81) Cl4-BZ#63	31.619	292	98379M4	52.352	ng/mL	
82) Cl5-BZ#121/#95/#88	31.669	326	219261	157.881	ng/mL	100
83) Cl4-BZ#74	31.884	292	109476	52.668	ng/mL	99
84) Cl6-BZ#155-RTW	32.033	360	78947	51.280	ng/mL	99
85) Cl4-BZ#70	32.050	292	124745	58.269	ng/mL	97
86) Cl4-BZ#66	32.348	292	102064	52.662	ng/mL	99
87) Cl5-BZ#91	32.215	326	63342	51.743	ng/mL	99
88) Cl4-BZ#80	32.612	292	106752	52.605	ng/mL	98
89) Cl4-BZ#55	32.795	292	108962	52.584	ng/mL	99
90) Cl5-BZ#92	32.844	326	62472	52.313	ng/mL	97
91) Cl5-BZ#89/#84	33.142	326	133110	116.314	ng/mL	98
92) Cl5-BZ#101/#90	33.258	326	131956M4	100.089	ng/mL	
94) Cl4-BZ#56	33.258	292	108921	53.132	ng/mL	100
95) Cl5-BZ#113	33.357	326	86045	55.521	ng/mL	98
96) Cl5-BZ#99	33.622	326	76638	51.477	ng/mL	99
97) Cl6-BZ#150	33.688	360	86192	52.216	ng/mL	98
98) Cl4-BZ#60	33.688	292	121786	55.596	ng/mL	98
99) Cl6-BZ#152	34.052	360	93402	52.779	ng/mL	99
100) Cl5-BZ#119	34.119	326	98769	54.772	ng/mL	97
101) Cl5-BZ#83/#125/#112	34.284	326	236194M4	157.397	ng/mL	
102) Cl5-BZ#86/#109	34.450	326	151528M1	101.563	ng/mL	
103) Cl5-BZ#97	34.565	326	60159	54.088	ng/mL	98
104) Cl5-BZ#116	35.012	326	80367	52.360	ng/mL	99
105) Cl5-BZ#87/#111	35.310	326	159395M1	106.230	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.499	360	94792	51.885	ng/mL	99
109) Cl6-BZ#148	34.698	360	65023	52.093	ng/mL	99
110) Cl4-BZ#79	34.814	292	105647	52.356	ng/mL	100
111) Cl6-BZ#154-Cal	35.227	360	74984	51.979	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
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Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.277	292	131204M4	52.530	ng/mL	
115) Cl6-BZ#136	35.360	360	82986	51.891	ng/mL	98
116) Cl5-BZ#117	35.410	326	101903M4	53.660	ng/mL	
117) Cl5-BZ#115	35.492	326	91771M4	48.765	ng/mL	
118) Cl5-BZ#85	35.575	326	57272	48.724	ng/mL	100
119) Cl5-BZ#120	35.724	326	96547	52.482	ng/mL	100
120) Cl5-BZ#110	35.873	326	90189	50.793	ng/mL	99
121) Cl4-BZ#81	36.237	292	105059	51.863	ng/mL	99
123) Cl6-BZ#151	36.254	360	64934	51.542	ng/mL	98
124) Cl6-BZ#135	36.386	360	67183	50.556	ng/mL	99
125) Cl5-BZ#82	36.568	326	59951	52.741	ng/mL	99
126) Cl6-BZ#144	36.601	360	68501	52.875	ng/mL	98
127) Cl6-BZ#147/#149	36.899	360	140274	101.412	ng/mL	98
128) Cl4-BZ#77-RTW	37.015	292	96757M4	51.187	ng/mL	
129) Cl6-BZ#143/#139	37.147	360	141320	106.310	ng/mL	99
130) Cl5-BZ#124	37.296	326	93564	52.351	ng/mL	99
131) Cl5-BZ#108	37.578	326	99524	54.820	ng/mL	99
132) Cl5-BZ#107/#123	37.660	326	195342M4	100.920	ng/mL	
133) Cl6-BZ#140	37.313	360	66366	51.658	ng/mL	100
134) Cl7-BZ#188-Cal/RTW	37.677	394	80130	53.038	ng/mL	100
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.760	360	59471	54.314	ng/mL	96
138) Cl5-BZ#106	37.793	326	99132M4	56.325	ng/mL	
139) Cl6-BZ#133	37.876	360	82181M3	55.144	ng/mL	
140) Cl6-BZ#142	37.925	360	47917M3	47.844	ng/mL	
141) Cl5-BZ#118	38.041	326	89516	52.401	ng/mL	97
142) Cl6-BZ#131	38.041	360	56463	48.934	ng/mL	100
143) Cl7-BZ#184	38.173	394	78229	52.394	ng/mL	98
144) Cl6-BZ#165	38.223	360	85639	52.754	ng/mL	97
145) Cl6-BZ#146	38.339	360	72578	51.071	ng/mL	98
146) Cl6-BZ#161	38.505	360	95255	52.686	ng/mL	100
147) Cl5-BZ#122	38.488	326	81289	51.651	ng/mL	100
148) Cl6-BZ#168	38.736	360	95325	54.869	ng/mL	99
149) Cl5-BZ#114	38.786	326	91193	52.766	ng/mL	99
150) Cl6-BZ#153	38.802	360	75273	48.664	ng/mL	98
152) Cl6-BZ#132	39.067	360	64093	51.631	ng/mL	98
153) Cl7-BZ#179	39.332	394	79606	51.642	ng/mL	100
154) Cl6-BZ#141	39.630	360	61129	49.222	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.829	394	74197	50.679	ng/mL	99
156) Cl5-BZ#105	39.895	326	106123M4	50.177	ng/mL	
157) Cl6-BZ#137	40.060	360	67362	52.919	ng/mL	98
158) Cl5-BZ#127	40.209	326	118148	50.927	ng/mL#	74
159) Cl7-BZ#186	40.143	394	85256	52.327	ng/mL	100
160) Cl6-BZ#130/#164	40.391	360	151459	101.998	ng/mL	98
161) Cl7-BZ#178	40.689	394	56997	51.051	ng/mL	98
162) Cl6-BZ#138	40.755	360	78659	52.111	ng/mL	97
163) Cl6-BZ#163/#160	40.855	360	180301M4	105.626	ng/mL	
164) Cl6-BZ#129/#158	41.053	360	144373M1	101.461	ng/mL	
165) Cl7-BZ#182/#175	41.086	394	136116	106.507	ng/mL	100
166) Cl7-BZ#187	41.268	394	66418	50.742	ng/mL	96
167) Cl7-BZ#183	41.666	394	61353	48.770	ng/mL	100
168) Cl6-BZ#166	42.030	360	96469	52.026	ng/mL	98
169) Cl6-BZ#159	42.278	360	95964	51.753	ng/mL	99
170) Cl5-BZ#126-RTW	42.493	326	117477	51.807	ng/mL	89
171) Cl7-BZ#185	42.526	394	59831	51.131	ng/mL	99
172) Cl6-BZ#162	42.609	360	93691M4	54.522	ng/mL	
173) Cl7-BZ#174	42.758	394	60470	52.049	ng/mL	99
174) Cl6-BZ#128	42.758	360	66225	52.110	ng/mL	100
175) Cl6-BZ#167	43.056	360	117180	51.390	ng/mL	93
176) Cl8-BZ#202-RTW	43.006	428	69058	52.528	ng/mL	99
178) Cl7-BZ#181	43.139	394	68757	52.641	ng/mL	98
179) Cl7-BZ#177	43.470	394	58147	51.345	ng/mL	100
180) Cl8-BZ#204/#200-Cal	43.569	428	134431	104.125	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.784	394	52638	47.457	ng/mL	98
184) Cl7-BZ#173	43.999	394	55788	51.048	ng/mL	99
185) Cl7-BZ#172	44.446	394	59538	50.671	ng/mL	98
186) Cl7-BZ#192	44.661	394	83079	51.623	ng/mL	99
187) Cl6-BZ#156	44.661	360	91079	51.261	ng/mL	100
188) Cl6-BZ#157	44.910	360	93511	50.950	ng/mL	98
189) Cl7-BZ#180	44.959	394	72768	50.906	ng/mL	97
190) Cl7-BZ#193	45.042	394	93024M4	63.234	ng/mL	
191) Cl8-BZ#197	44.082	428	67608	51.304	ng/mL	98
192) Cl7-BZ#191	45.373	394	78610	51.460	ng/mL	97
193) Cl8-BZ#199	45.208	428	66413	50.717	ng/mL	99
194) Cl8-BZ#198	46.747	428	53143	47.819	ng/mL	99
195) Cl8-BZ#201	46.830	428	52607	54.848	ng/mL	97
196) Cl7-BZ#170	46.962	394	53559	48.393	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.293	394	83729	51.977	ng/mL	98
198) Cl8-BZ#196	47.293	428	55291	53.157	ng/mL	98
199) Cl8-BZ#203	47.376	428	56985	50.708	ng/mL	99
200) Cl6-BZ#169-RTW	47.657	360	99144	50.518	ng/mL	99
201) Cl9-BZ#208-RTW	48.799	464	68770	49.484	ng/mL	99
202) Cl9-BZ#207	49.478	464	70376	51.885	ng/mL	97
203) Cl7-BZ#189-RTW	49.660	394	74693	50.936	ng/mL	99
204) Cl8-BZ#195	49.792	428	51391	50.275	ng/mL	95
205) Cl8-BZ#194	51.480	428	54281	49.601	ng/mL	98
206) Cl8-BZ#205-RTW	52.076	428	65936	49.164	ng/mL	97
207) Cl9-BZ#206-Cal/RTW	54.112	464	55099	49.273	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.379	498	56904	51.307	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

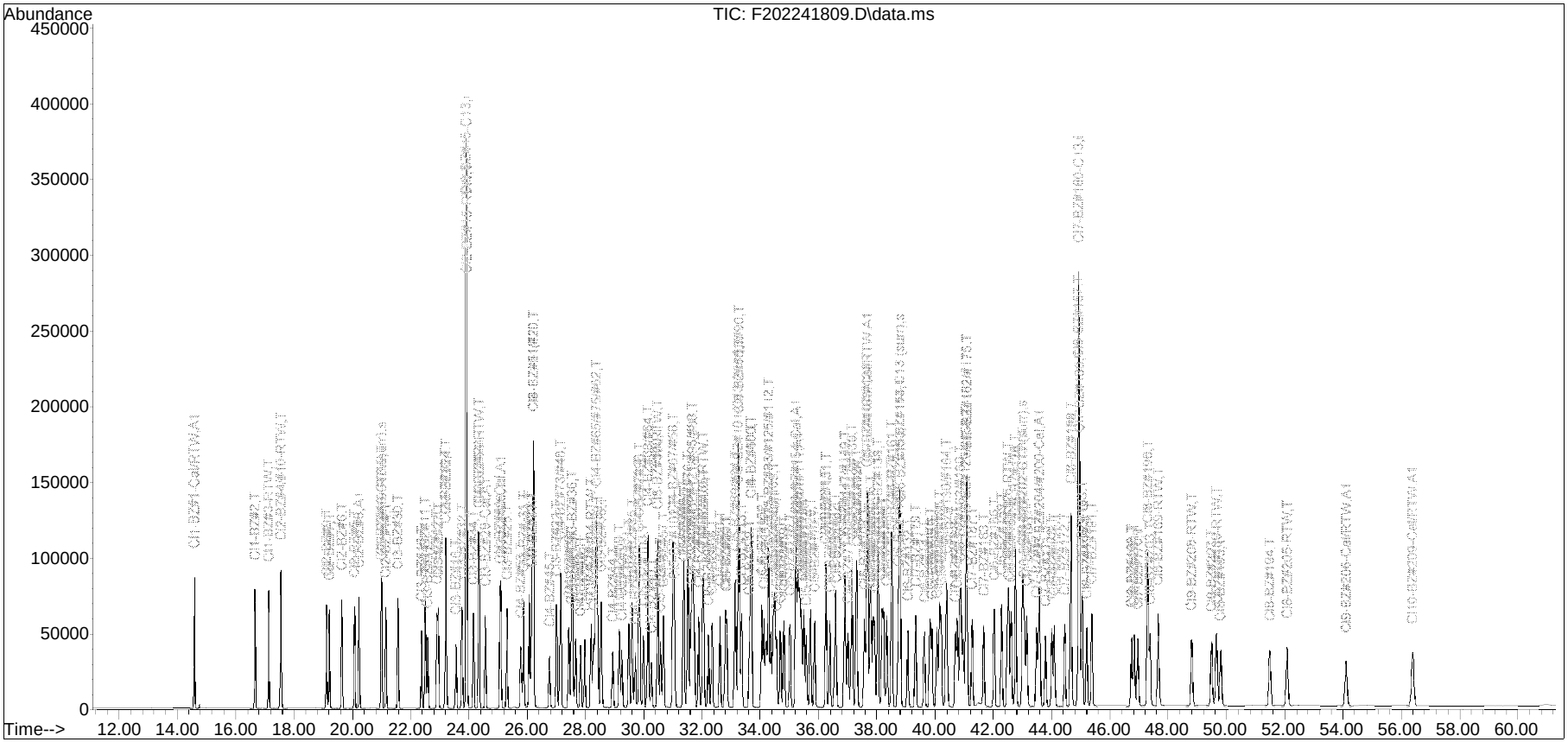
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Feb\Feb24\
Data File : F202241809.D
Acq On : 24 Feb 2018 6:53 pm
Operator : BNA2:JT
Sample : CQ202241801
Misc : wg1092764,MSAS56,50ug/l
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 26 16:07:22 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Feb\Feb24\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

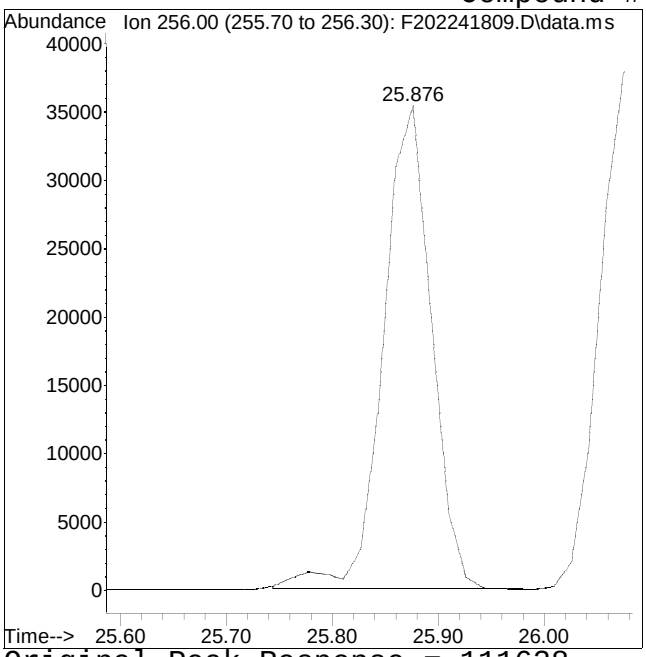
Sub List : Default - All compounds listed

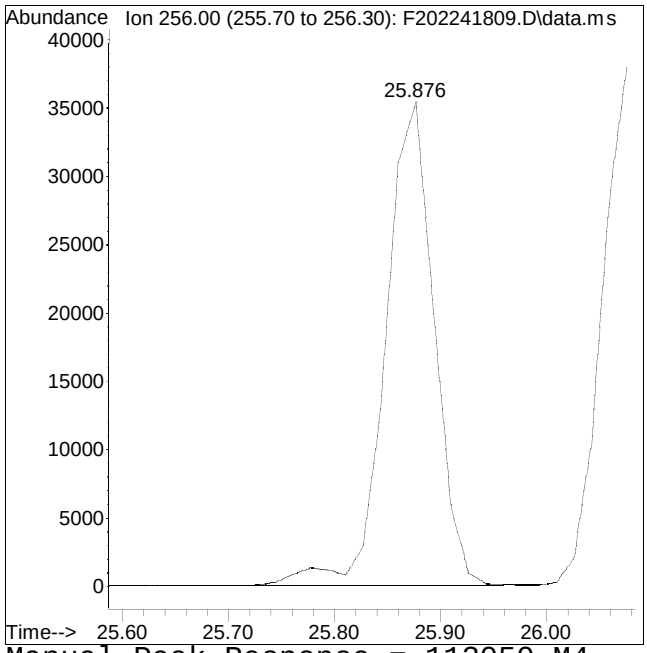


Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #41: Cl3-BZ#-31



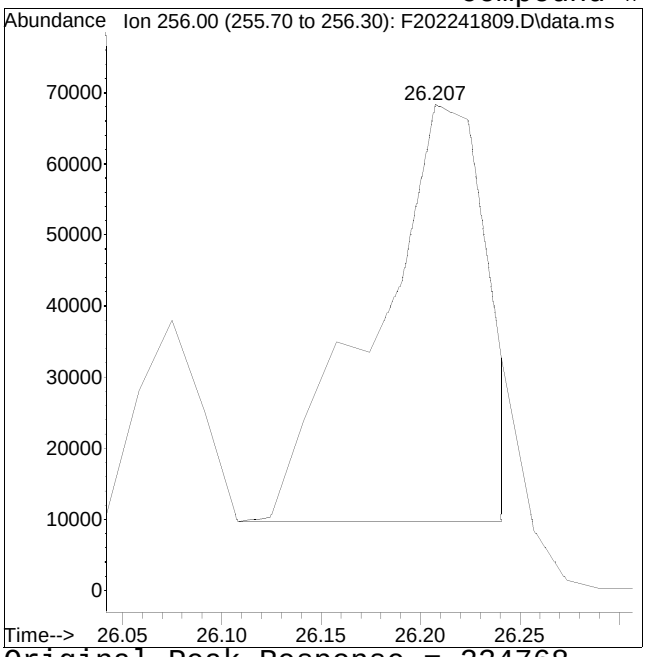


Original Peak Response = 111628 Manual Peak Response = 113050 M4
M4 = Poor automated baseline construction.

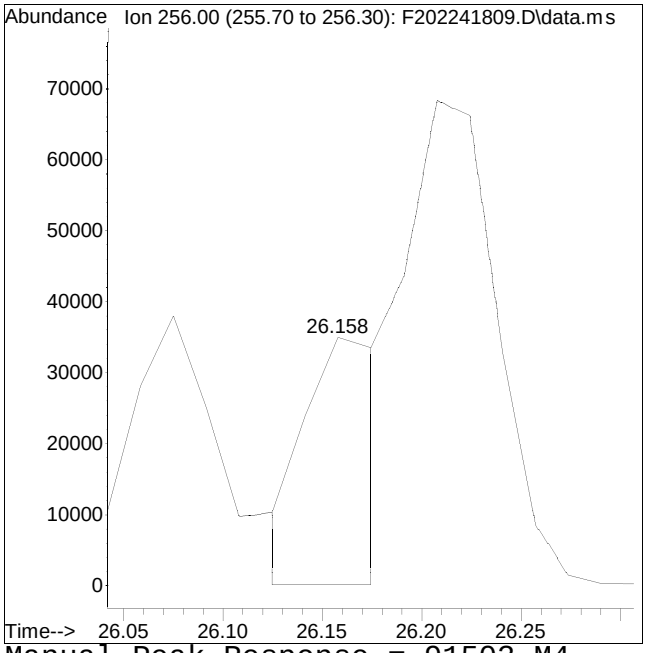
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #43: Cl3-BZ#33



Original Peak Response = 234768



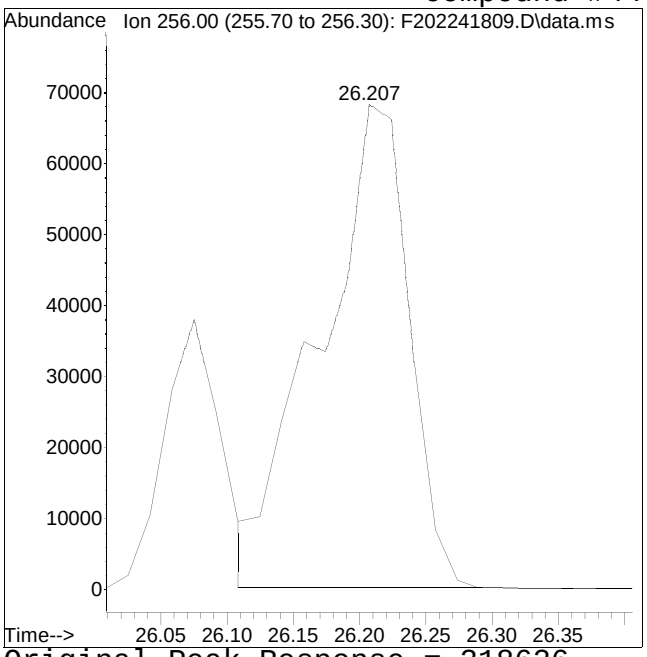
Manual Peak Response = 91503 M4

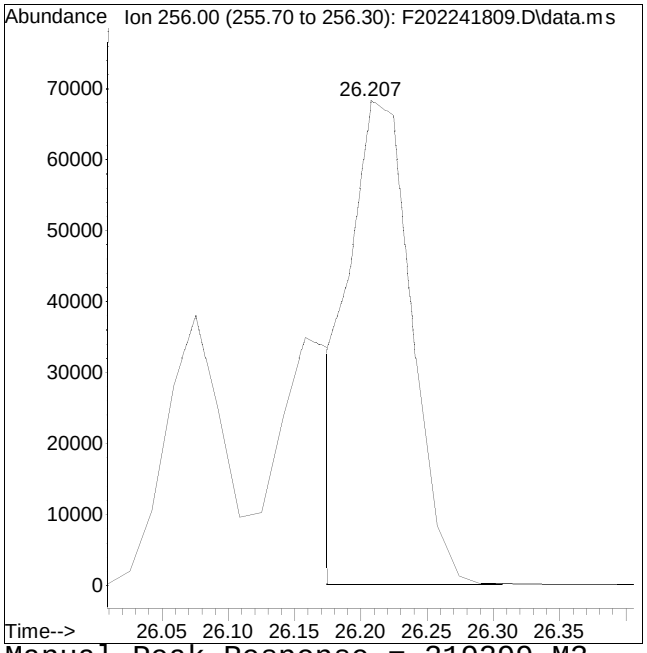
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #44: Cl3-BZ#21/#20





Original Peak Response = 318626 Manual Peak Response = 219299 M3

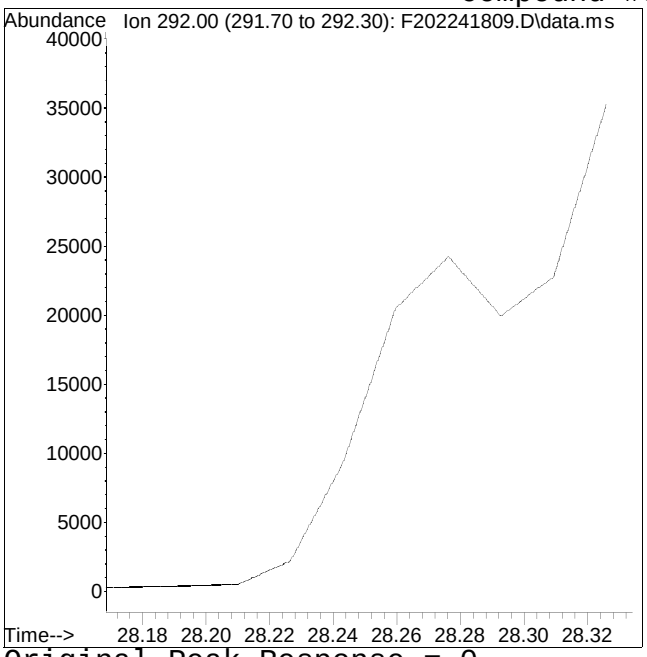
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

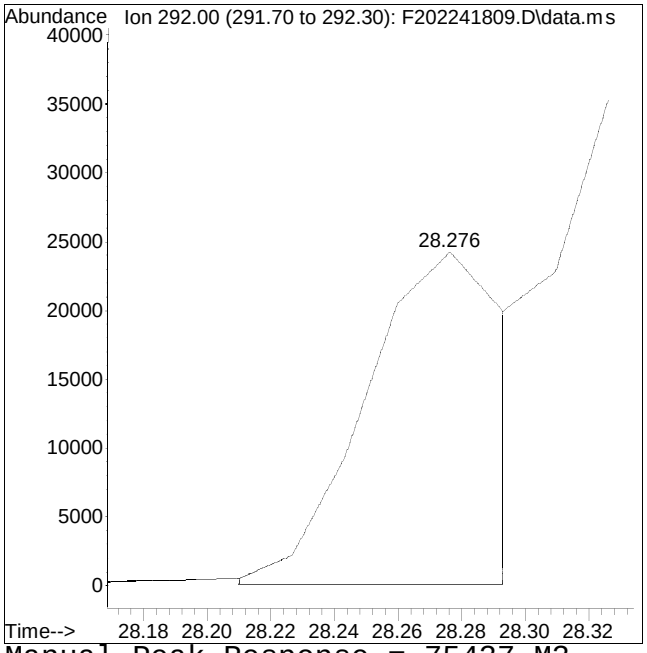
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #56: Cl4-BZ#47





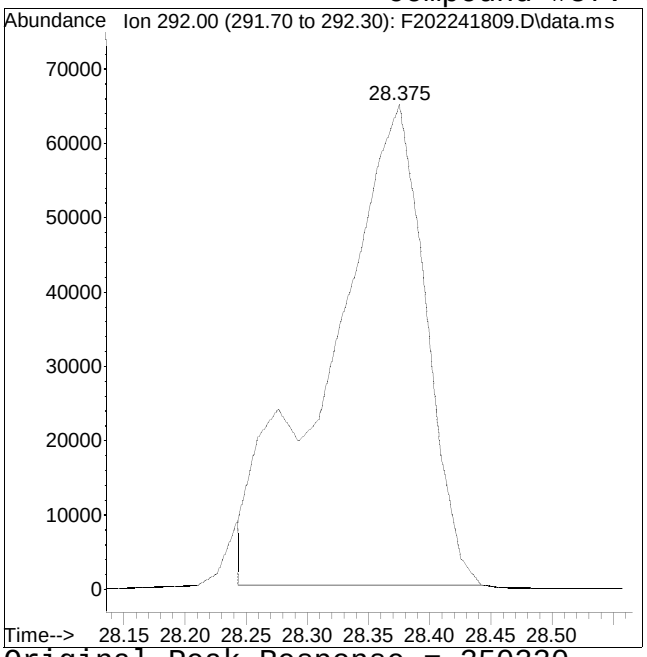
Original Peak Response = 0 Manual Peak Response = 75437 M3

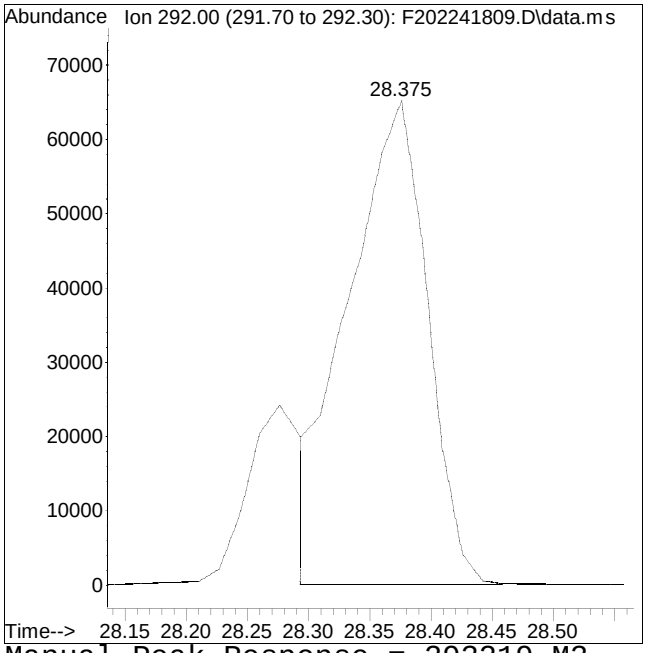
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ Method : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #57: Cl4-BZ#65/#75/#62



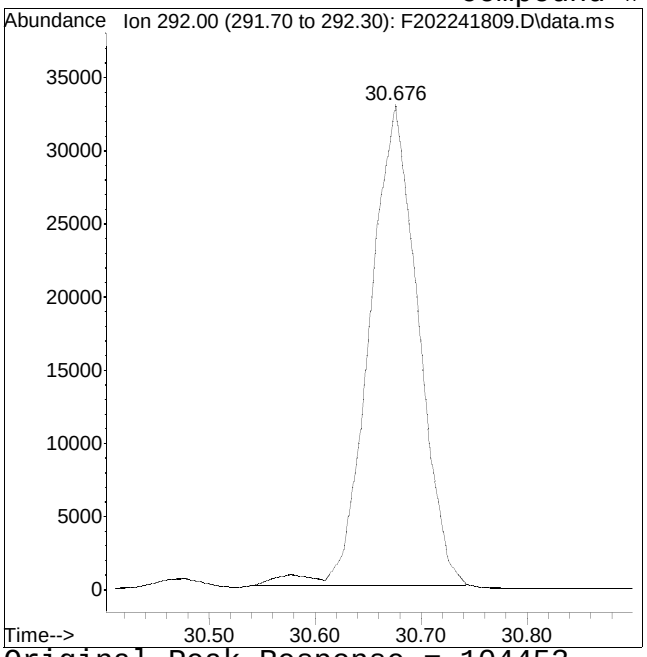


Original Peak Response = 350330 Manual Peak Response = 293219 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

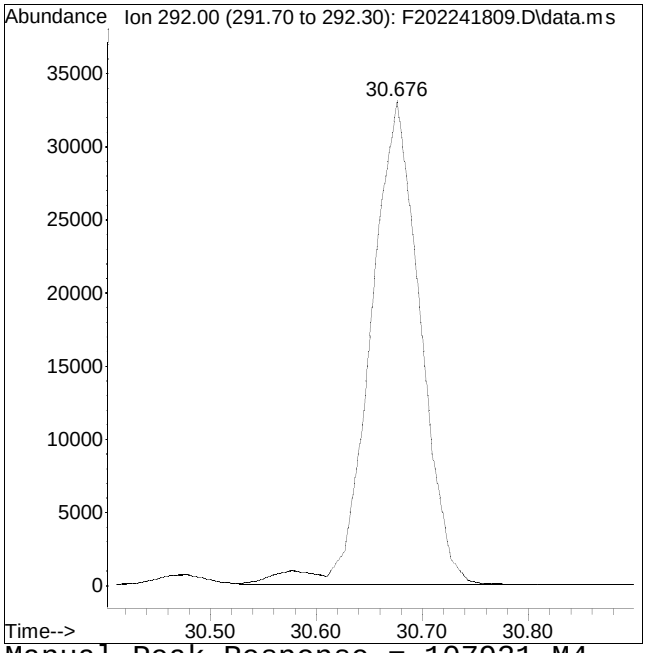
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #74: Cl4-BZ#57



Original Peak Response = 104453



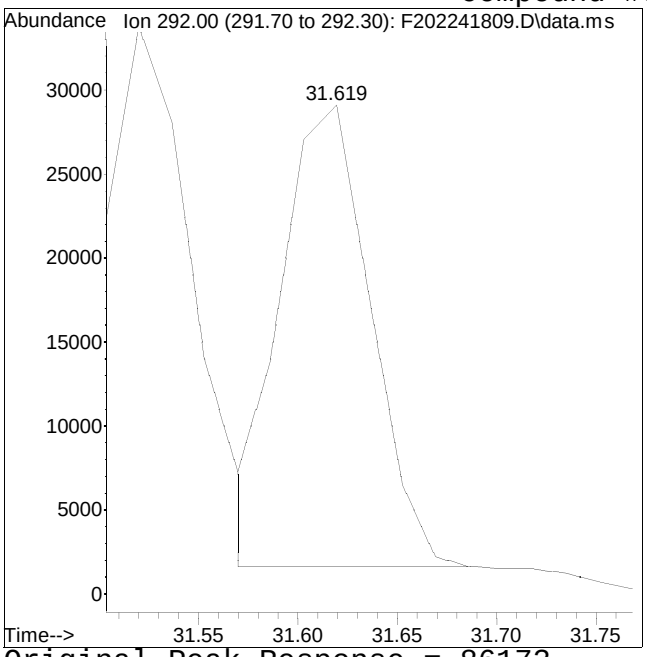
Manual Peak Response = 107931 M4

M4 = Poor automated baseline construction.

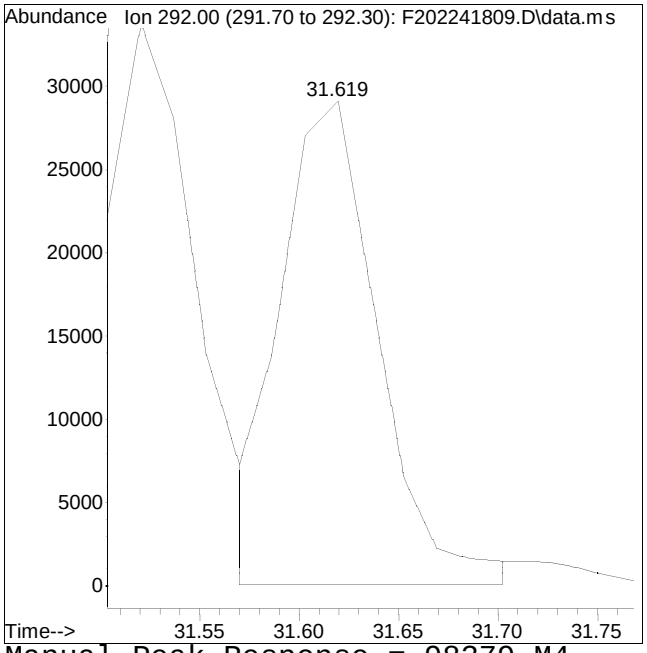
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #81: Cl4-BZ#63



Original Peak Response = 86173



Manual Peak Response = 98379 M4

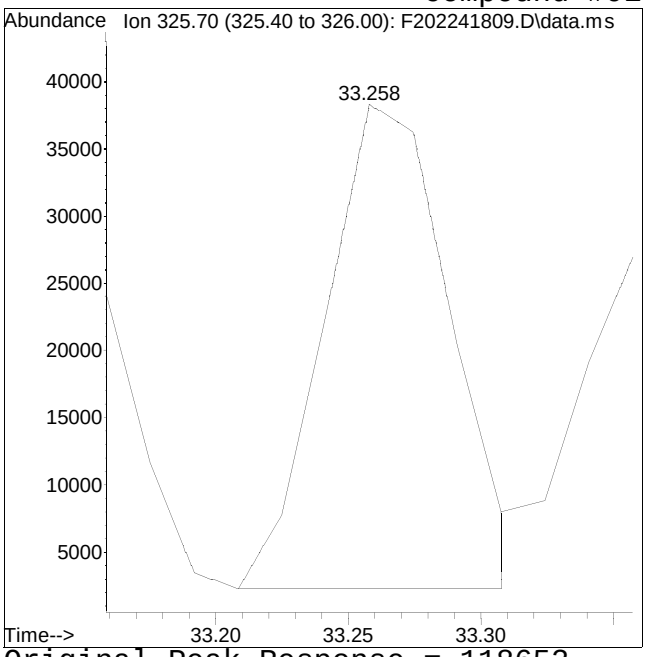
M4 = Poor automated baseline construction.

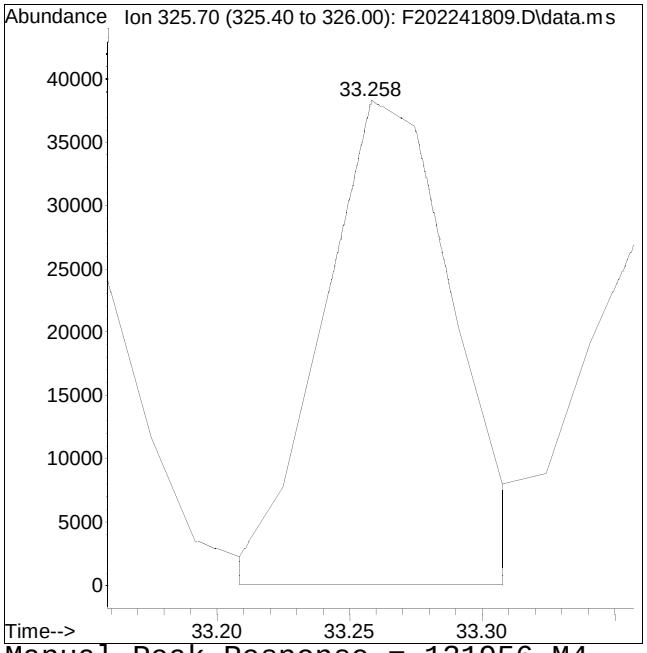
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #92: Cl5-BZ#101/#90





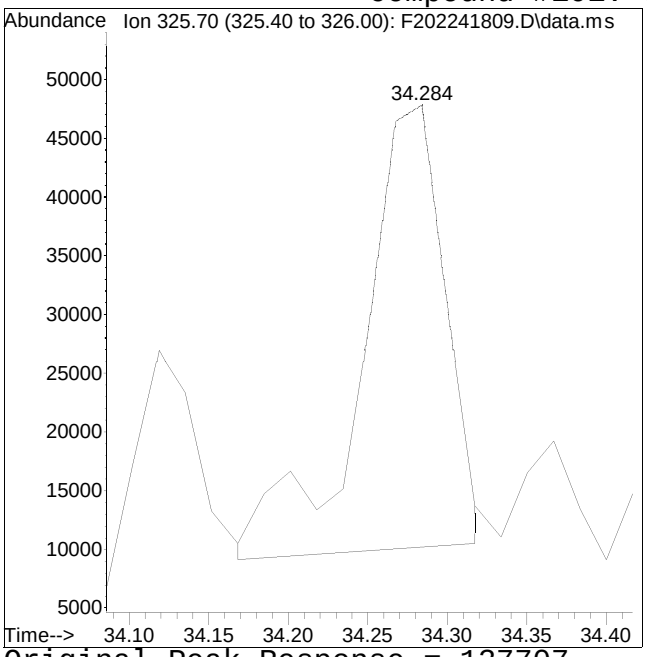
Original Peak Response = 118652 Manual Peak Response = 131956 M4
M4 = Poor automated baseline construction.

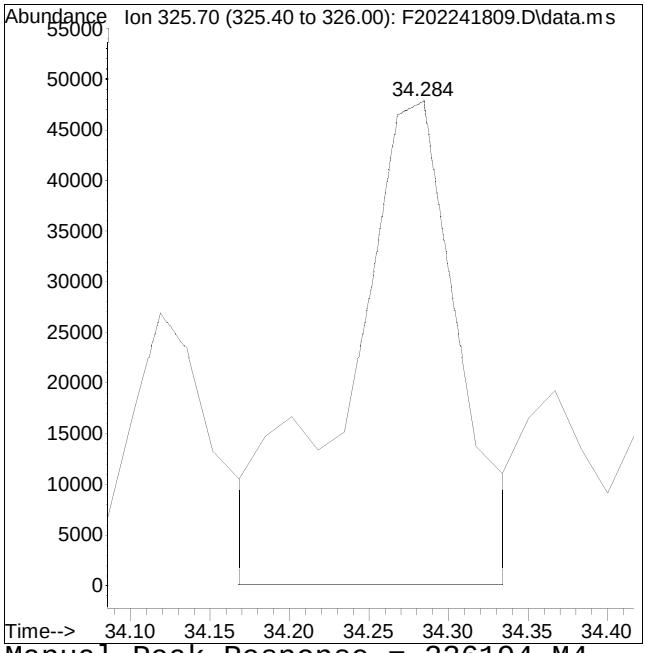
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #101: Cl5-BZ#83/#125/#112





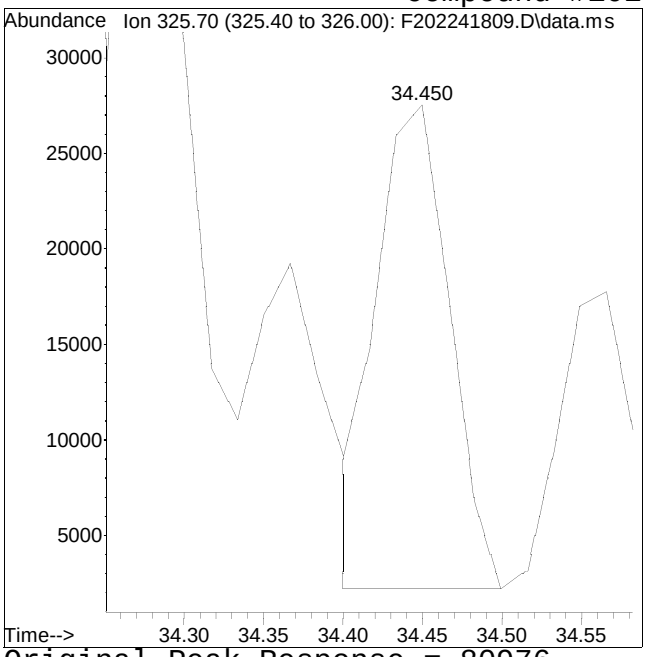
Original Peak Response = 137707 Manual Peak Response = 236194 M4
M4 = Poor automated baseline construction.

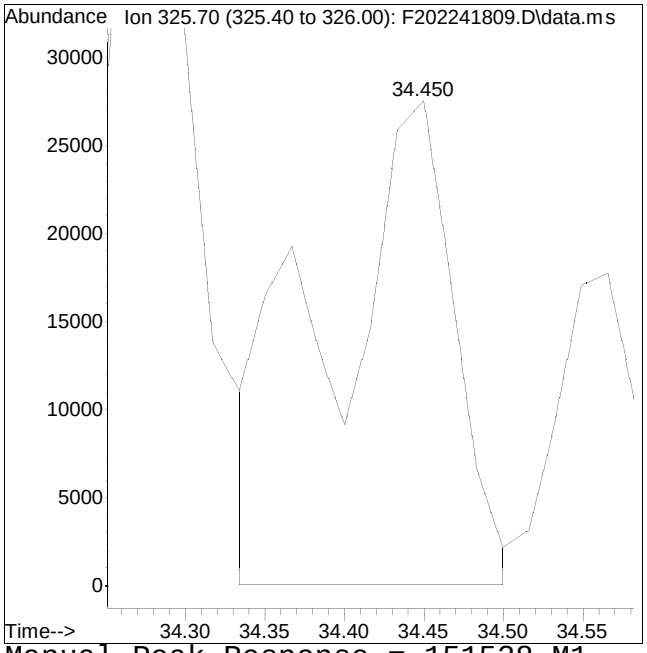
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #102: Cl5-BZ#86/#109





Original Peak Response = 80976 Manual Peak Response = 151528 M1

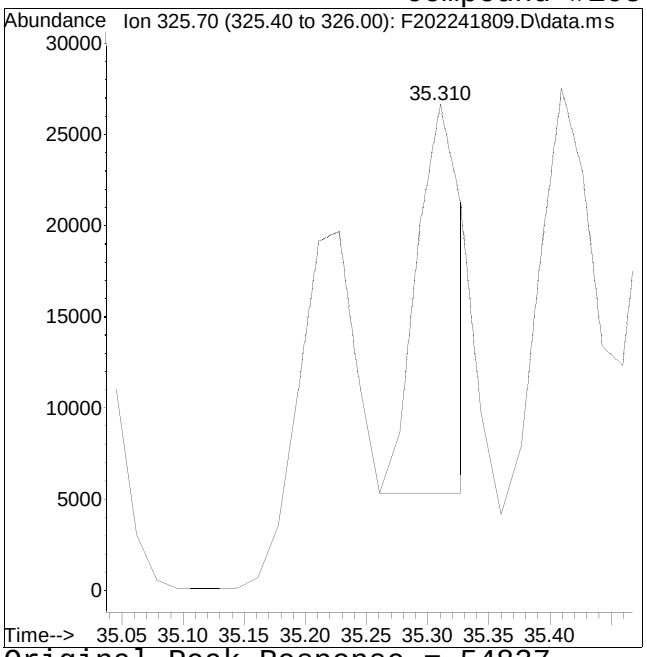
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

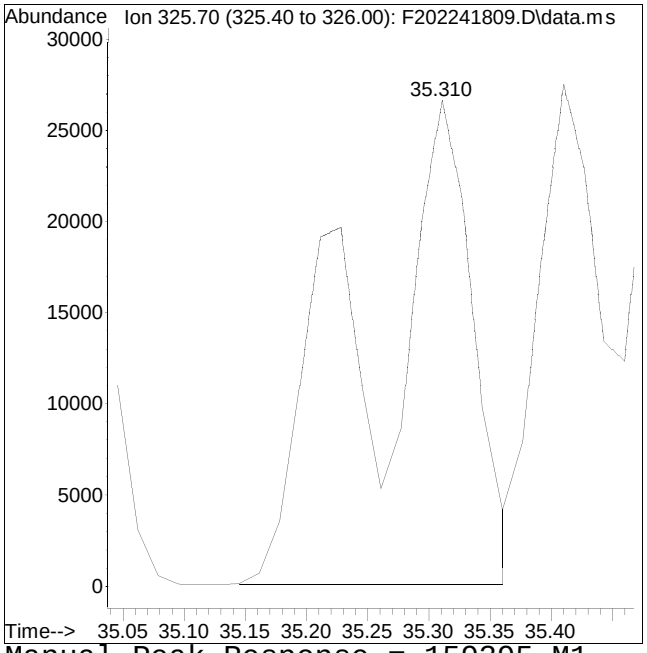
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #105: Cl5-BZ#87/#111



Original Peak Response = 54837



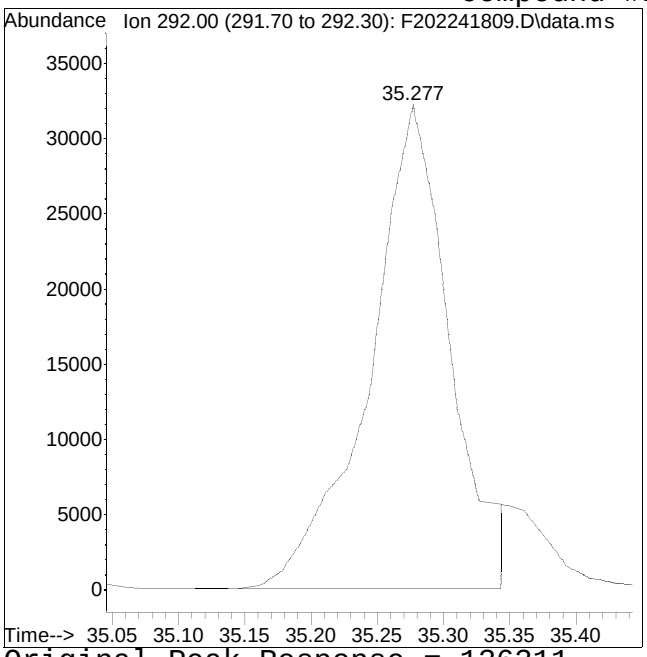
Manual Peak Response = 159395 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

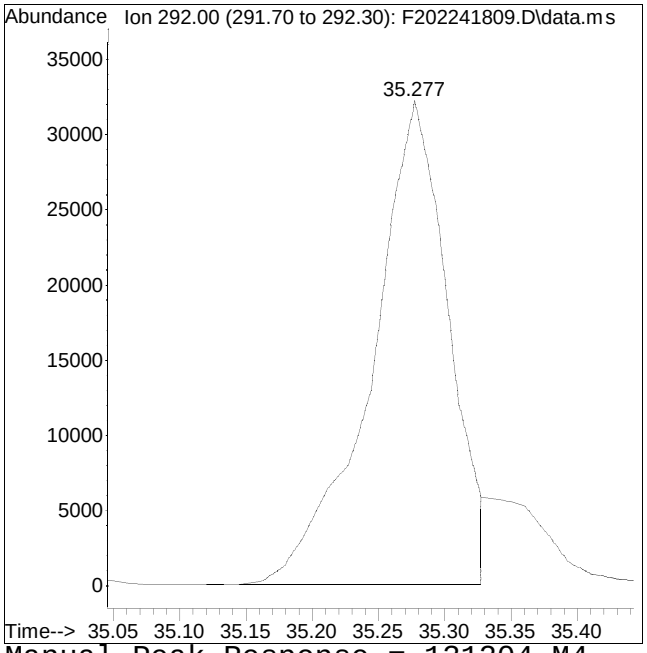
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #114: Cl4-BZ#78



Original Peak Response = 136311



Manual Peak Response = 131204 M4

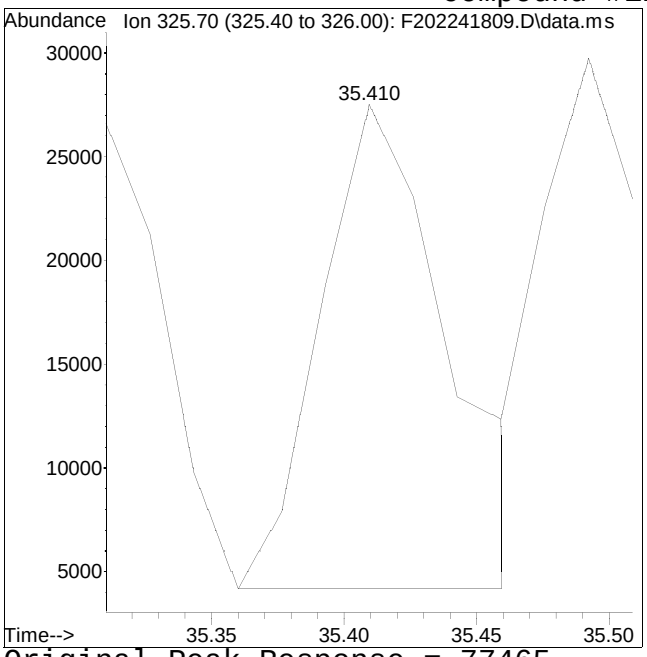
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

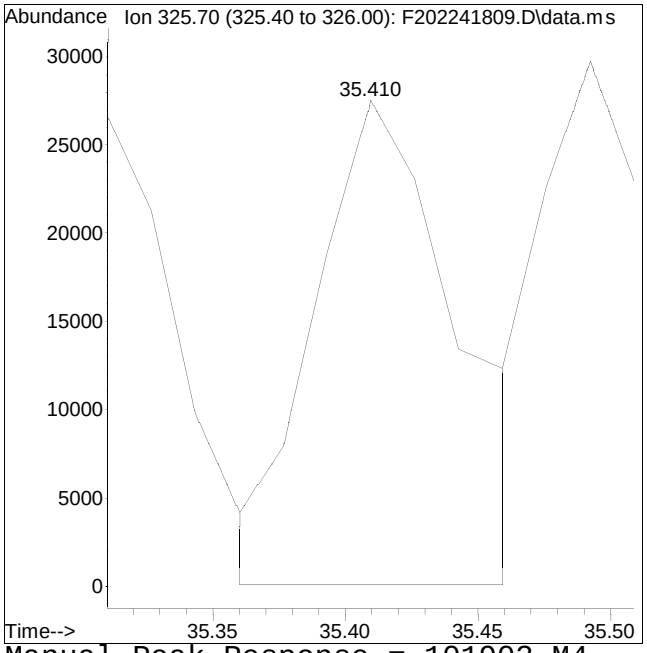
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #116: Cl5-BZ#117



Original Peak Response = 77465



Manual Peak Response = 101903 M4

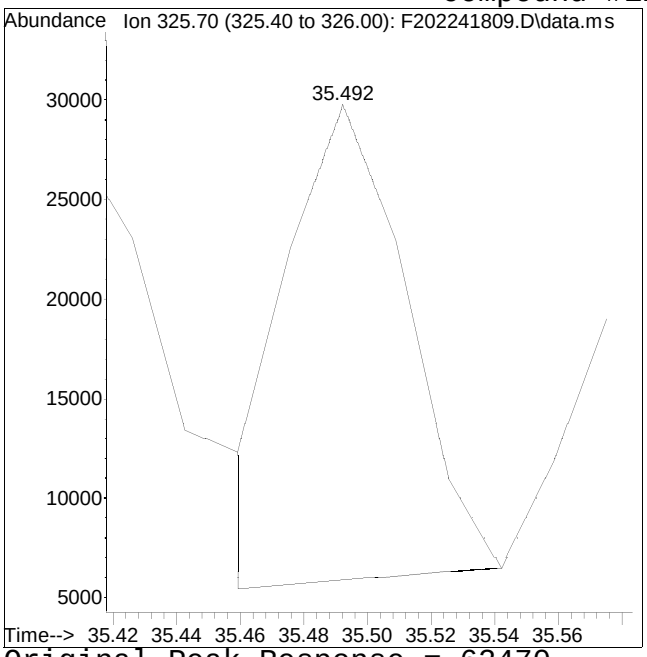
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

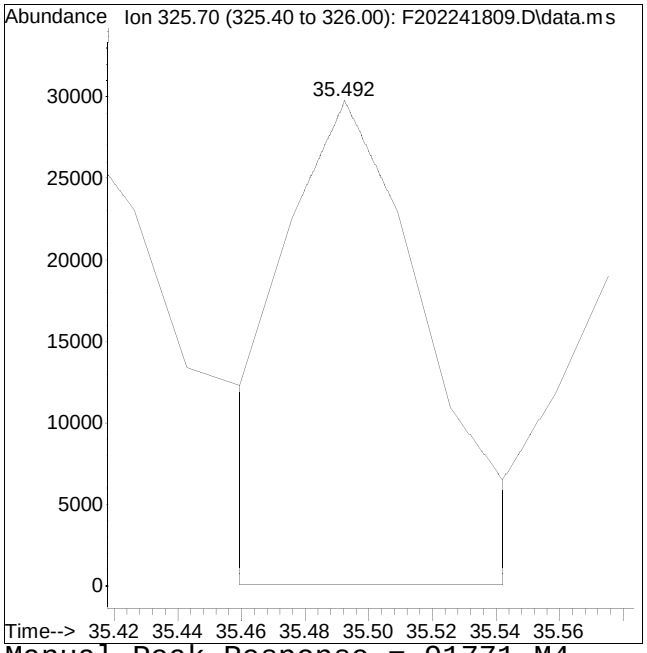
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #117: Cl5-BZ#115



Original Peak Response = 62470



Manual Peak Response = 91771 M4

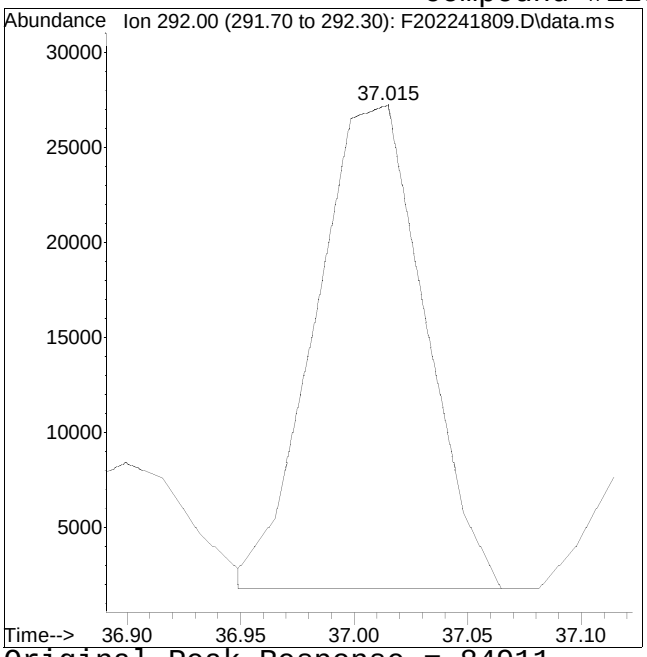
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

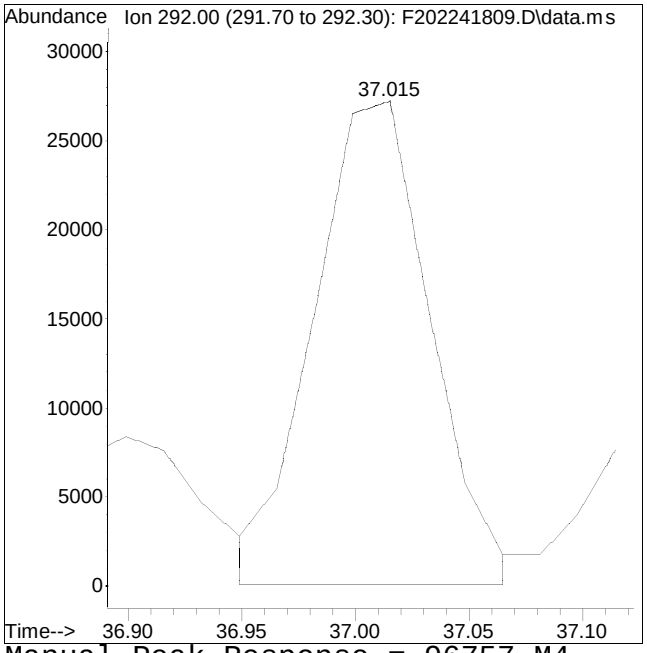
Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #128: Cl4-BZ#77-RTW



Original Peak Response = 84911



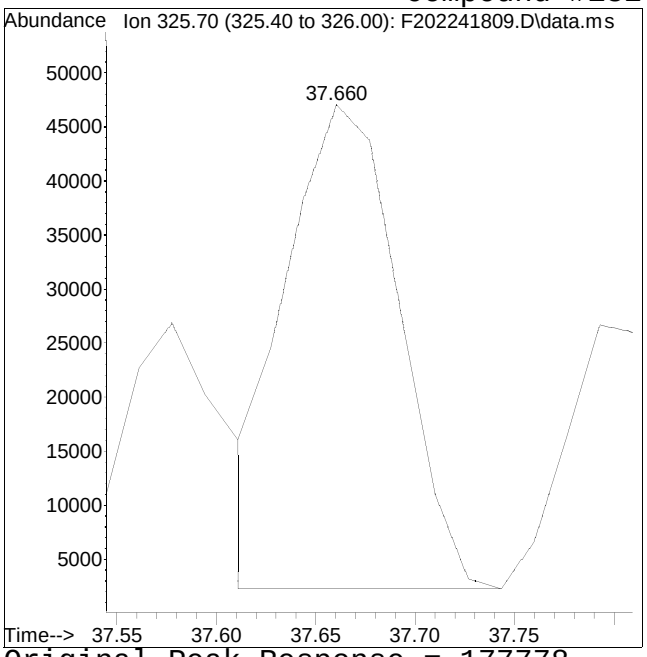
Manual Peak Response = 96757 M4

M4 = Poor automated baseline construction.

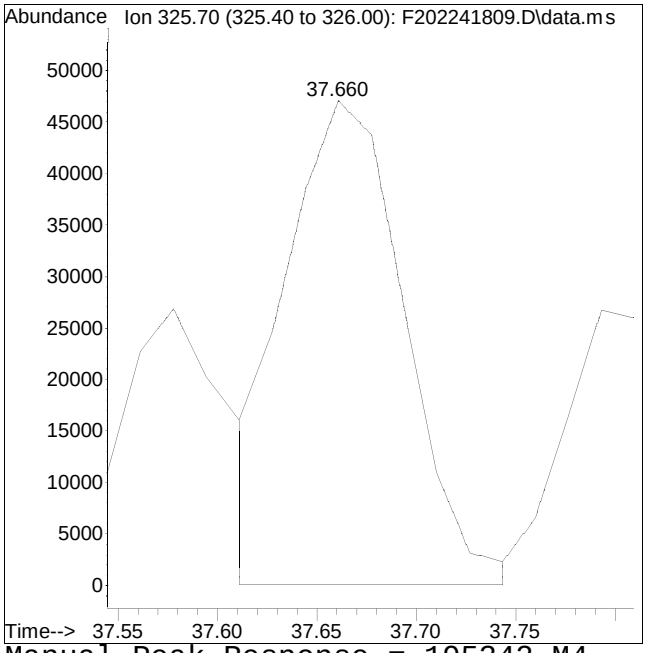
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #132: Cl5-BZ#107/#123



Original Peak Response = 177778



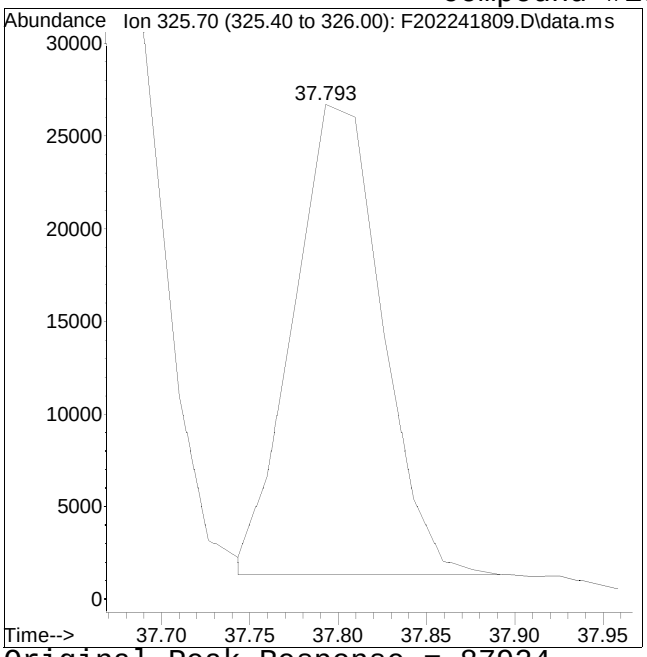
Manual Peak Response = 195342 M4

M4 = Poor automated baseline construction.

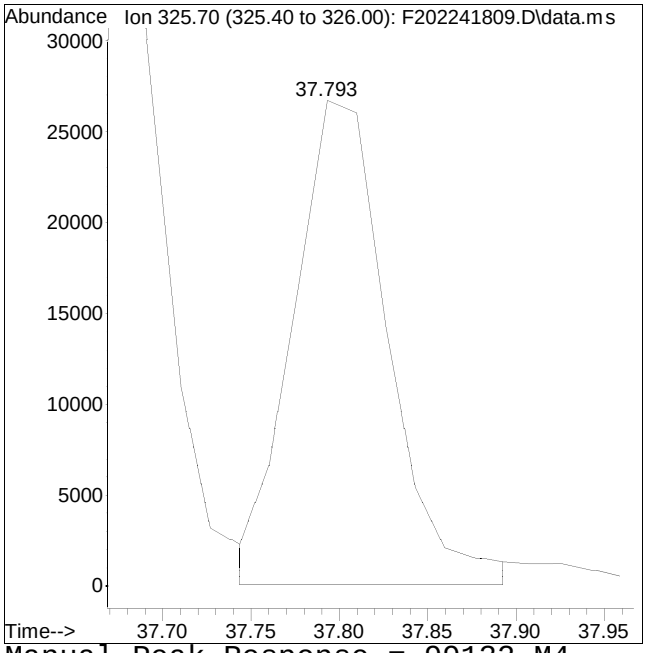
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #138: Cl5-BZ#106



Original Peak Response = 87924



Manual Peak Response = 99132 M4

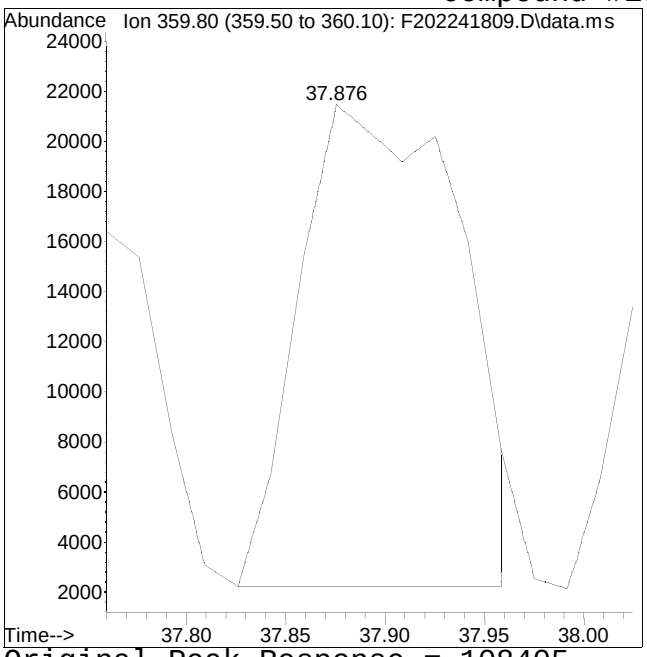
M4 = Poor automated baseline construction.

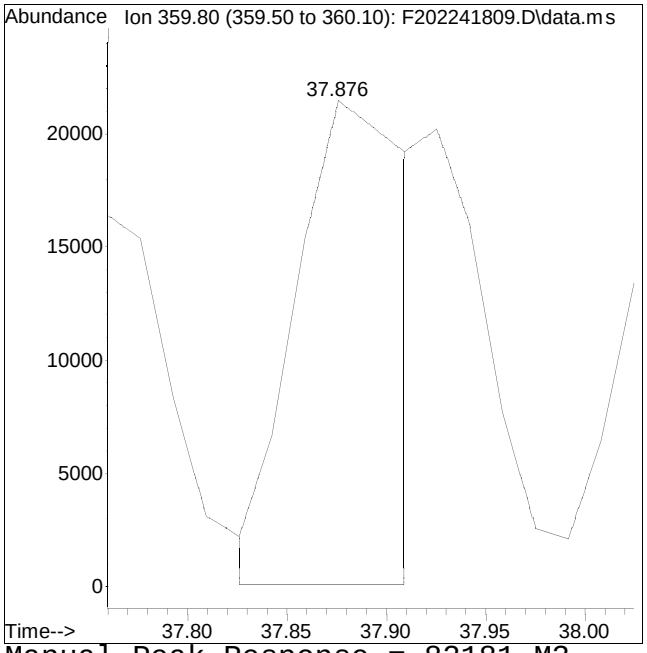
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\
Data File : F202241809.D
Date Inj'd : 2/24/2018 6:53 pm
Sample : CQ202241801

QMethod : 209CONG0224BNA2.M
Operator : BNA2:JT
Instrument : BNA2
Quant Date : 2/26/2018 4:07 pm

Compound #139: Cl6-BZ#133





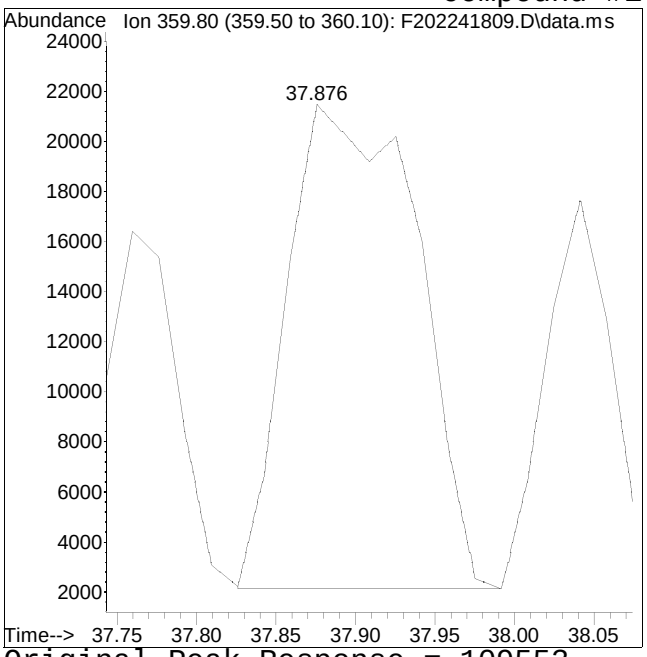
Original Peak Response = 108405 Manual Peak Response = 82181 M3

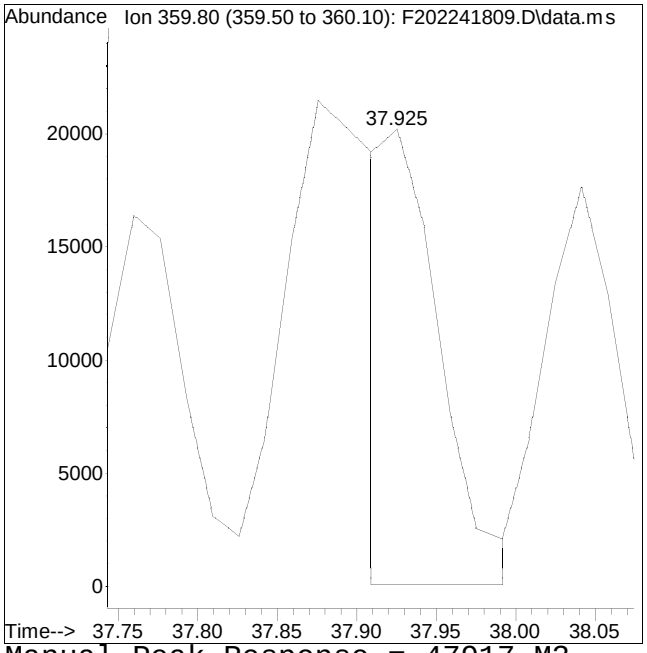
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #140: Cl6-BZ#142





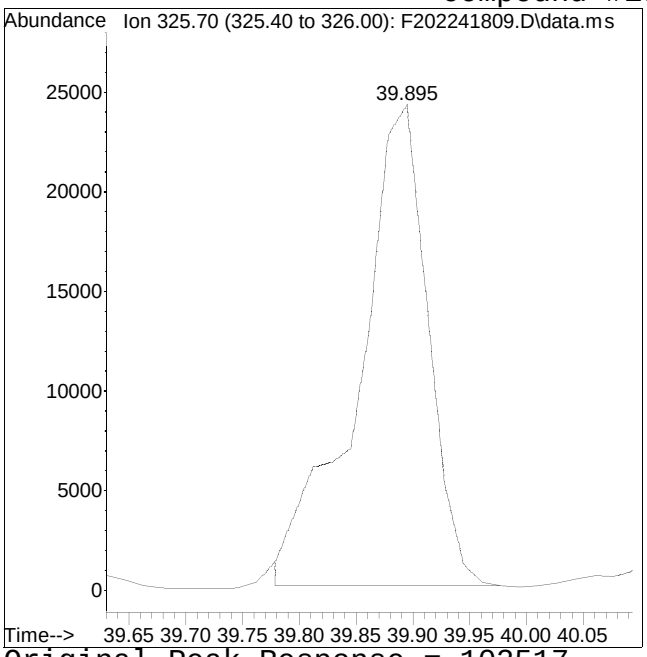
Original Peak Response = 109553 Manual Peak Response = 47917 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

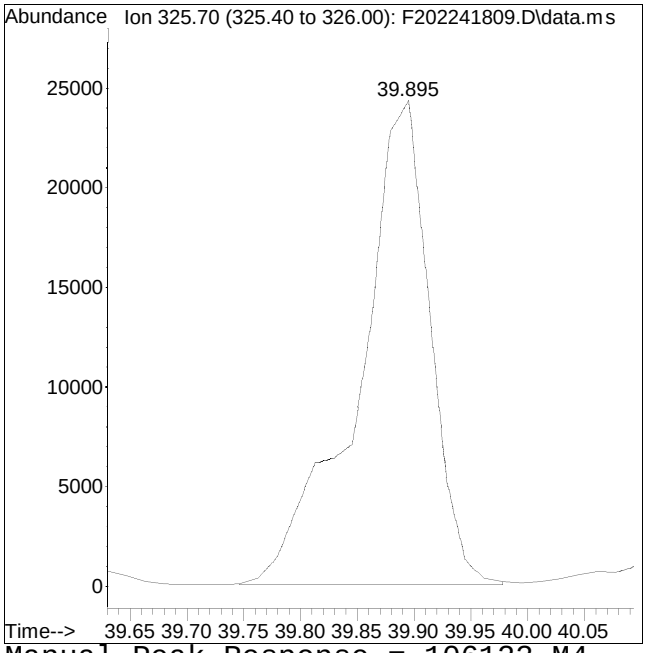
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #156: Cl5-BZ#105



Original Peak Response = 102517



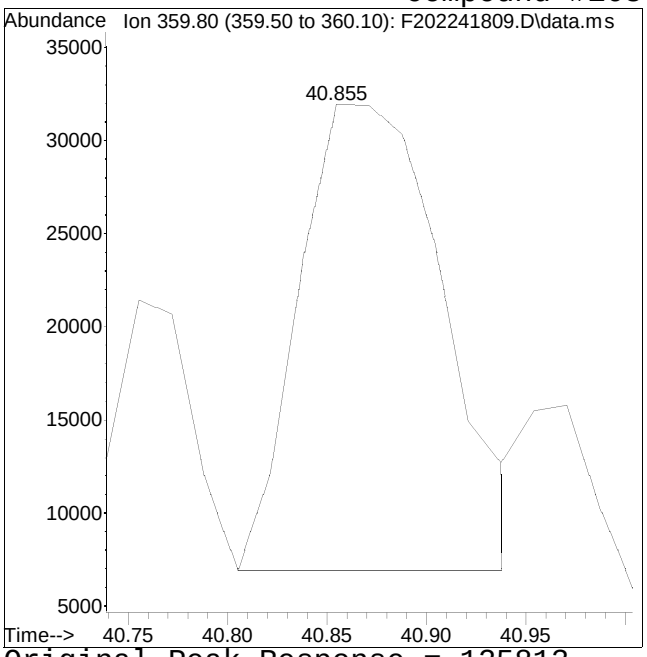
Manual Peak Response = 106123 M4

M4 = Poor automated baseline construction.

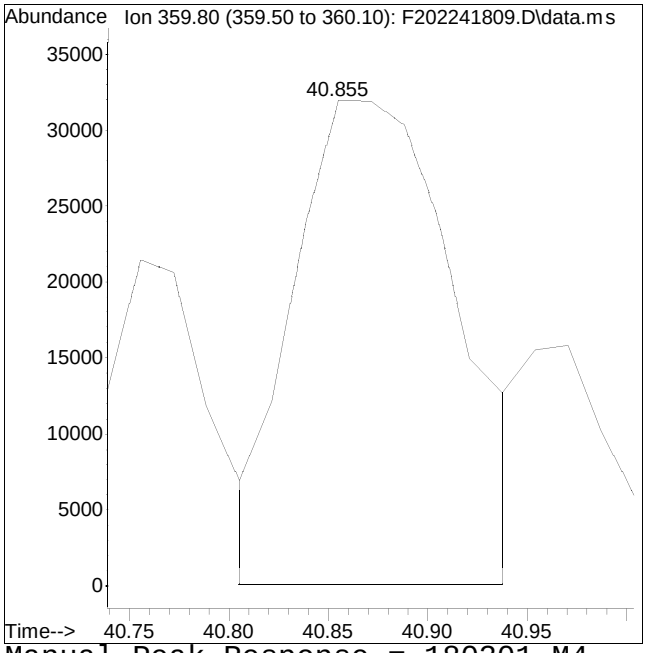
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #163: Cl6-BZ#163/#160



Original Peak Response = 125813



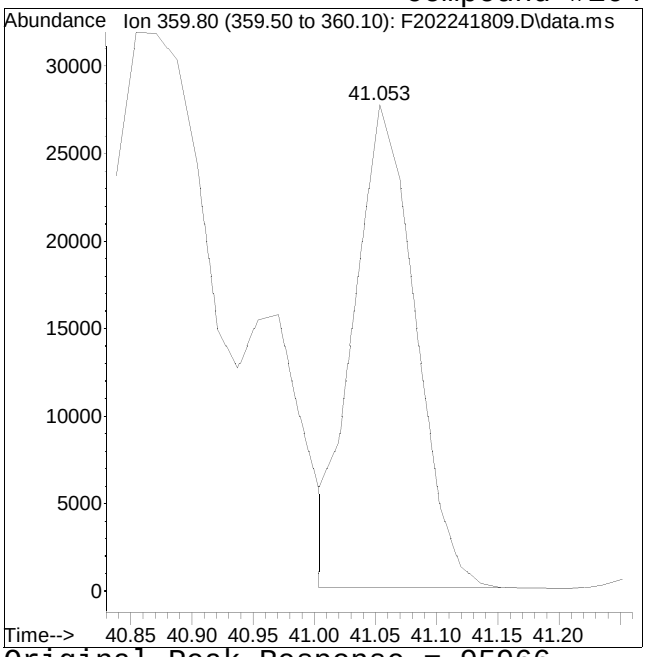
Manual Peak Response = 180301 M4

M4 = Poor automated baseline construction.

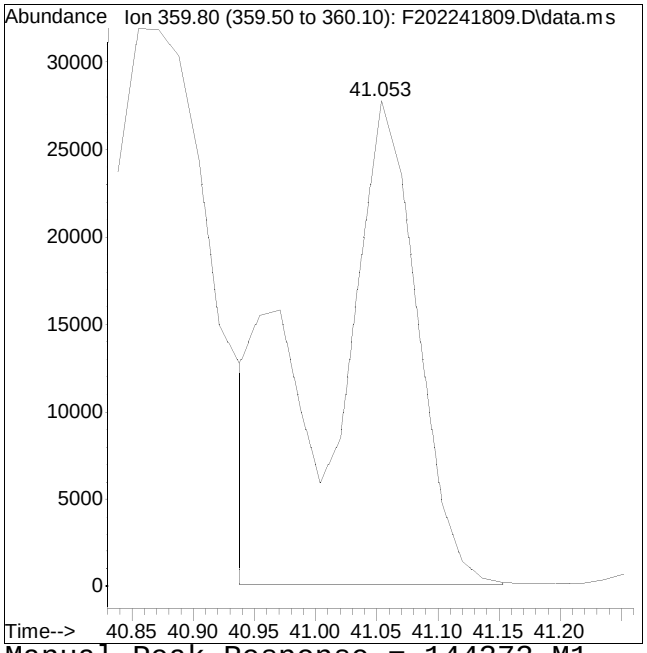
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #164: Cl6-BZ#129/#158



Original Peak Response = 95966



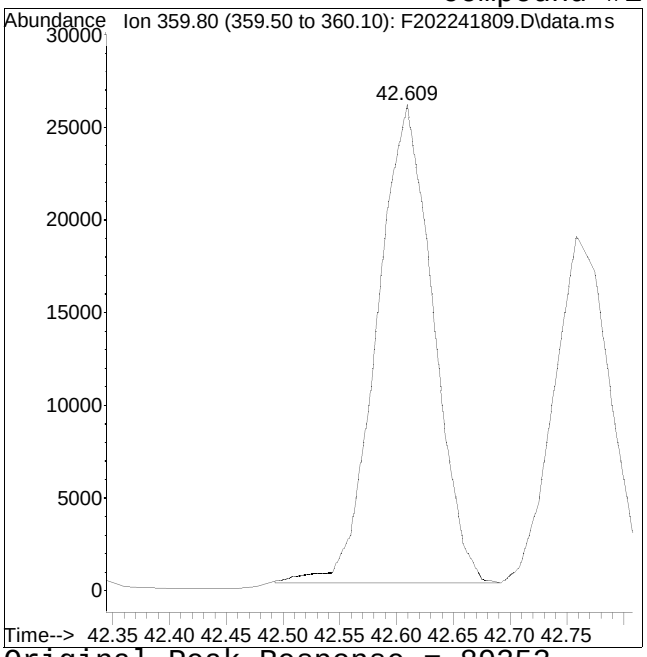
Manual Peak Response = 144373 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

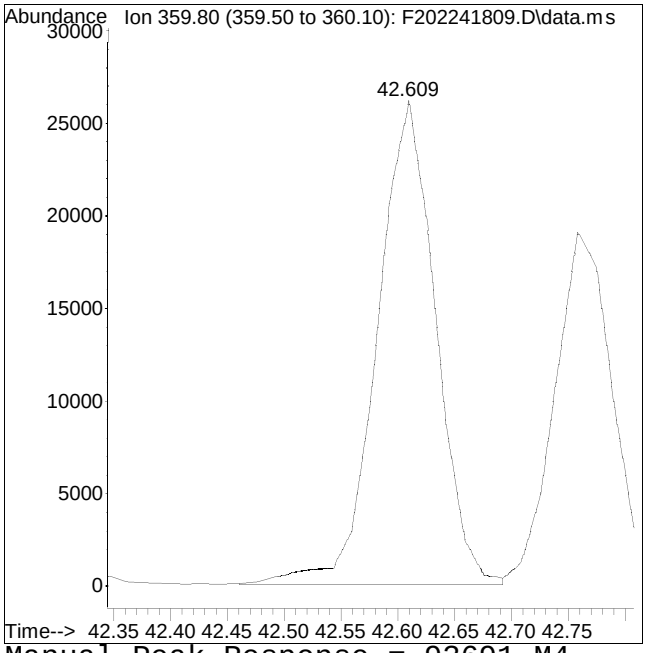
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #172: Cl6-BZ#162



Original Peak Response = 89353



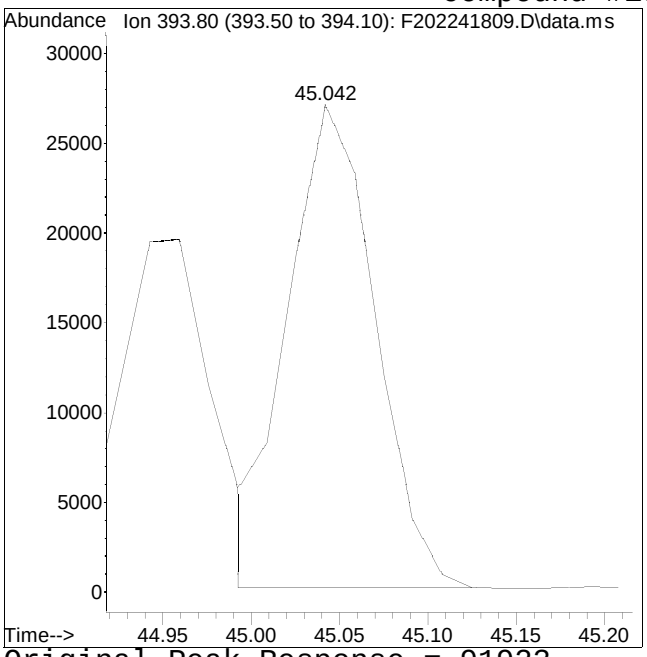
Manual Peak Response = 93691 M4

M4 = Poor automated baseline construction.

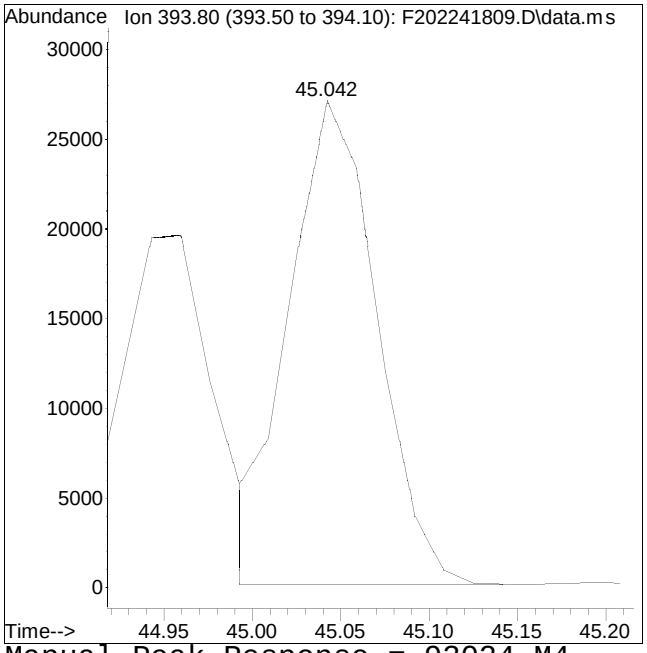
Manual Integration/Negative Proof Report

Data Path : O:\Organics\DATA\BNA2\2018\ QMethod : 209CONG0224BNA2.M
Data File : F202241809.D Operator : BNA2:JT
Date Inj'd : 2/24/2018 6:53 pm Instrument : BNA2
Sample : CQ202241801 Quant Date : 2/26/2018 4:07 pm

Compound #190: Cl7-BZ#193



Original Peak Response = 91923



Manual Peak Response = 93024 M4

M4 = Poor automated baseline construction.

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 13 2018, 12:03 pm

Work Group: WG1094741 for Department: 2 Organic Preparation

Created: 06-MAR-18 Due: Operator: BA

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1806872-01	SDT-DS-BFT-PC03	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-02	SDT-DS-BFT-PC06	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-03	SDT-DS-BFT-PC08	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-04	SDT-DS-BFT-CC03	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-05	SDT-DS-BFT-CC06	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-06	SDT-DS-BFT-CC08	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-07	SDT-DS-GVT-PC02	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-08	SDT-DS-GVT-PC04	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-09	SDT-DS-GVT-PC05	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-10	SDT-DS-GVT-CC02	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-11	SDT-DS-GVT-CC04	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
L1806872-12	SDT-DS-GVT-CC05	S	A2-PCBHOMS-SPLP	SOIL	DONE	U	0313	0314	S0	EAmber-A1
WG1094741-1	Laboratory Method Bl	S	A2-PCBHOMS-SPLP	SOIL	DONE	U				
WG1094741-2	Laboratory Control S	S	A2-PCBHOMS-SPLP	SOIL	DONE	U				
WG1094741-3	LCS Duplicate	S	A2-PCBHOMS-SPLP	SOIL	DONE	U				

Comments:

WG1094741-3 WG1094741-2

Sequence Logs

Analysis log File

Total Files Reported in Log : 9
Log Generated From Directory: O:\Organics\DATA\BNA2\2018\Feb\Feb24\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F202241801.D	209CONGDFTPP	T202241801	wg1092764,MSAS13 10X	2/24/2018 9:10 am
2	F202241802.D	209CONGBNA2P	I202241801	wg1092764,MSAT61,.5ug/l	2/24/2018 10:14 am
3	F202241803.D	209CONGBNA2P	I202241802	wg1092764,MSAT60,1.0ug/..	2/24/2018 11:28 am
4	F202241804.D	209CONGBNA2P	I202241803	wg1092764,MSAT59,10ug/l	2/24/2018 12:42 pm
5	F202241805.D	209CONGBNA2P	I202241804	wg1092764,MSAT58,50ug/l	2/24/2018 1:56 pm
6	F202241806.D	209CONGBNA2P	I202241805	wg1092764,MSAT57,50ug/l	2/24/2018 3:10 pm
7	F202241807.D	209CONGBNA2P	I202241806	wg1092764,MSAT56,200ug/..	2/24/2018 4:25 pm
8	F202241808.D	209CONGBNA2P	I202241807	wg1092764,MSAT55,500ug/..	2/24/2018 5:39 pm
9	F202241809.D	209CONGBNA2P	CQ202241801	wg1092764,MSAS56,50ug/l	2/24/2018 6:53 pm

SeqLog 1.0 - (c) 2009 Abacus Database Applications

Analysis log File

Total Files Reported in Log : 37
Log Generated From Directory: O:\Organics\DATA\BNA2\2018\Mar\Mar07\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	F203071801.D	209CONGDFTPP	WG1095518-1	WG1095518,MSAS13 10X	3/7/2018 10:13 am
2	F203071802.D	209CONGBNA2P	WG1095518-2	WG1095518,MSAT57,ICA..	3/7/2018 11:17 am
3	F203071803.D	209CONGBNA2P	WG1094741-1,HN	WG1095518,WG1094741,..	3/7/2018 12:31 pm
4	F203071804.D	209CONGBNA2P	WG1094743-1,H	WG1095518,WG1094743,..	3/7/2018 1:45 pm
5	F203071805.D	209CONGBNA2P	WG1094741-2,HN	WG1095518,WG1094741,..	3/7/2018 3:13 pm
6	F203071806.D	209CONGBNA2P	WG1094741-3,HN	WG1095518,WG1094741,..	3/7/2018 4:27 pm
7	F203071807.D	209CONGBNA2P	L1807215-01,H	WG1095518,WG1094743,..	3/7/2018 5:41 pm
8	F203071808.D	209CONGBNA2P	L1807215-02,H	WG1095518,WG1094743,..	3/7/2018 6:56 pm
9	F203071809.D	209CONGBNA2P	L1807215-03,H	WG1095518,WG1094743,..	3/7/2018 8:10 pm
10	F203071810.D	209CONGBNA2P	L1807545-08,HN	WG1095518,WG1094744,..	3/7/2018 9:24 pm
11	F203071811.D	209CONGBNA2P	L1806872-01,HN	WG1095518,WG1094741,..	3/7/2018 10:38 pm
12	F203071812.D	209CONGBNA2P	L1806872-02,HN	WG1095518,WG1094741,..	3/7/2018 11:52 pm
13	F203071813.D	209CONGDFTPP	WG1095518-3	WG1095518,MSAS13 10X	3/8/2018 1:06 am
14	F203071814.D	209CONGBNA2P	WG1095518-4	WG1095518,MSAT57,ICA..	3/8/2018 2:10 am
15	F203071815.D	209CONGBNA2P	L1806872-03,HN	WG1095518,WG1094741,..	3/8/2018 3:24 am
16	F203071816.D	209CONGBNA2P	L1806872-04,HN	WG1095518,WG1094741,..	3/8/2018 4:39 am
17	F203071817.D	209CONGBNA2P	L1806872-05,HN	WG1095518,WG1094741,..	3/8/2018 5:53 am
18	F203071818.D	209CONGBNA2P	L1806872-06,HN	WG1095518,WG1094741,..	3/8/2018 7:07 am
19	F203071819.D	209CONGBNA2P	L1806872-07,HN	WG1095518,WG1094741,..	3/8/2018 8:21 am
20	F203071820.D	209CONGBNA2P	L1806872-08,HN	WG1095518,WG1094741,..	3/8/2018 9:35 am
21	F203071821.D	209CONGBNA2P	L1806872-09,HN	WG1095518,WG1094741,..	3/8/2018 10:49 am
22	F203071822.D	209CONGBNA2P	L1806872-10,HN	WG1095518,WG1094741,..	3/8/2018 12:03 pm
23	F203071823.D	209CONGBNA2P	L1806872-11,HN	WG1095518,WG1094741,..	3/8/2018 1:18 pm
24	F203071824.D	209CONGBNA2P	L1806872-12,HN	WG1095518,WG1094741,..	3/8/2018 2:32 pm
25	F203071825.D	209CONGDFTPP	WG1095518-5	WG1095518,MSAS13 10X	3/8/2018 3:46 pm
26	F203071826.D	209CONGBNA2P	WG1095518-6	WG1095518,MSAT57,ICA..	3/8/2018 4:50 pm
27	F203071827.D	209CONGBNA2P	WG1095311-1,H	WG1095518,WG1095311,..	3/8/2018 6:04 pm
28	F203071828.D	209CONGBNA2P	WG1095311-2,H	WG1095518,WG1095311,..	3/8/2018 7:18 pm
29	F203071829.D	209CONGBNA2P	WG1095311-3,H	WG1095518,WG1095311,..	3/8/2018 8:32 pm
30	F203071830.D	209CONGBNA2P	L1807075-01,H	WG1095518,WG1095311,..	3/8/2018 9:46 pm
31	F203071831.D	209CONGBNA2P	L1807724-01,H	WG1095518,WG1095311,..	3/8/2018 11:00 pm
32	F203071832.D	209CONGBNA2P	L1807724-02,H	WG1095518,WG1095311,..	3/9/2018 12:14 am
33	F203071833.D	209CONGBNA2P	WG1095309-1,H	WG1095518,WG1095309,..	3/9/2018 1:28 am
34	F203071834.D	209CONGBNA2P	L1807810-01,H	WG1095518,WG1095309,..	3/9/2018 2:43 am
35	F203071835.D	209CONGBNA2P	WG1095518-8	WG1095518,MSAT57,ICA..	3/9/2018 3:57 am
36	F203071836.D	209CONGBNA2P	SURR CHECK	AT96 VIAL1 2X	3/9/2018 5:11 am
37	F203071837.D	209CONGBNA2P	SURR CHECK	AT96 VIAL6 2X	3/9/2018 6:25 am

SeqLog 1.0 - (c) 2009 Abacus Database Applications

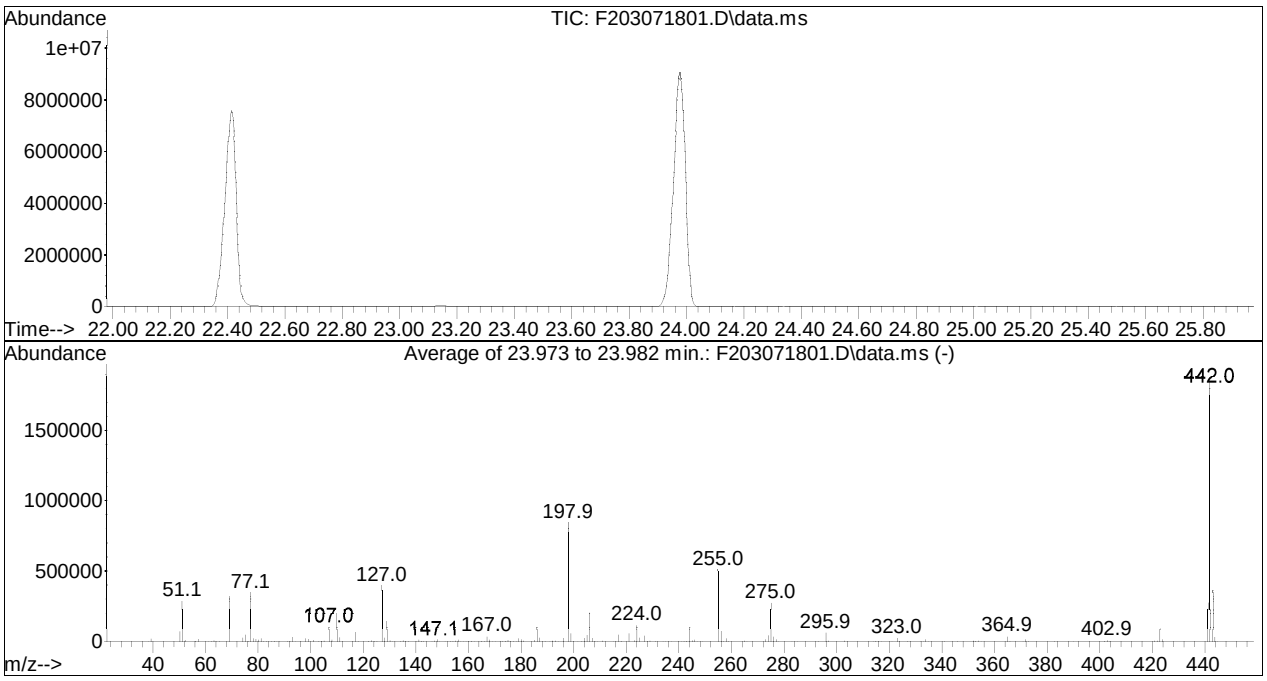
Analytical Event

Continuing Calibration
DFTPP Tune

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071801.D
Acq On : 7 Mar 2018 10:13 am
Operator : BNA2:MJS
Sample : WG1095518-1
Misc : WG1095518,MSAS13 10X
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Thu Mar 08 11:02:39 2018



AutoFind: Scans 2681, 2682, 2683; Background Corrected with Scan 2661

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	0.00	100	33.8	284651	PASS
68	69	0.00	100	0.0	0	PASS
69	198	0.00	100	37.4	315093	PASS
70	69	0.00	100	0.6	1742	PASS
127	198	30	80	46.9	395136	PASS
197	198	0.00	3	0.0	0	PASS
198	442	40	100	44.9	842731	PASS
199	198	5	15	6.7	56541	PASS
275	198	15	50	32.2	271701	PASS
365	198	3	100	4.2	35520	PASS
441	443	0.01	100	74.6	272832	PASS
442	442	100	100	100.0	1875627	PASS
443	442	18	30	19.5	365547	PASS

Continuing Calibration

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Cl2-BZ#15-C13	1.000	1.000	0.0	67	0.00
2	s	Cl3-BZ#19-C13 (surr)	0.352	0.369	-4.8	71	0.00
3	A1	Cl1-BZ#1-Cal/RTW	0.922	1.008	-9.3	74	0.00
4	A2	Monochlorobiphenyls	0.922	0.000#	100.0#	0#	-14.59#
5	A2	Cl1- conf Ion	0.922	0.000#	100.0#	0#	-14.59#
6	T	Cl1-BZ#2	0.970	1.034	-6.6	72	0.00
7	T	Cl1-BZ#3-RTW	0.952	1.020	-7.1	72	0.00
8	T	Cl2-BZ#4/#10-RTW	0.557	0.599	-7.5	72	0.00
9	T	Cl2-BZ#9	0.716	0.752	-5.0	70	0.00
10	T	Cl2-BZ#7	0.698	0.750	-7.4	71	0.00
11	T	Cl2-BZ#6	0.768	0.807	-5.1	71	0.00
12	T	Cl2-BZ#5	0.698	0.725	-3.9	70	0.00
13	A1	Cl2-BZ#8	0.794	0.838	-5.5	71	0.00
14	A2	Dichlorobiphenyls	0.794	0.000#	100.0#	0#	-17.55#
15	A2	Cl2-Conf Ion	0.794	0.000#	100.0#	0#	-17.55#
16	T	Cl3-BZ#19-RTW	0.392	0.408	-4.1	71	0.00
17	T	Cl2-BZ#14	0.766	0.803	-4.8	70	0.00
18	T	Cl3-BZ#30	0.626	0.650	-3.8	70	0.00
19	T	Cl3-BZ#18	0.436	0.437	-0.2	69	0.00
20	T	Cl2-BZ#11	0.822	0.861	-4.7	69	0.00
21	T	Cl3-BZ#17	0.406	0.418	-3.0	69	0.00
22	T	Cl2-BZ#12	0.727	0.754	-3.7	69	0.00
23	T	Cl3-BZ#27	0.562	0.586	-4.3	69	0.00
24	T	Cl2-BZ#13	0.838	0.874	-4.3	69	0.00
25	T	Cl3-BZ#24	0.577	0.602	-4.3	69	0.00
26	T	Cl3-BZ#16	0.354	0.360	-1.7	69	0.00
27	T	Cl3-BZ#32	0.620	0.637	-2.7	70	0.00
28	T	Cl2-BZ#15-RTW	0.849	0.878	-3.4	70	0.00
29	T	Cl3-BZ#34	0.579	0.596	-2.9	69	0.00
30	T	Cl3-BZ#23	0.569	0.595	-4.6	69	0.00
31	T	Cl4-BZ#54-RTW	0.530	0.555	-4.7	70	0.00
32	A1	Cl3-BZ#29-Cal	0.574	0.584	-1.7	68	0.00
33	A2	Trichlorobiphenyls	0.574	0.000#	100.0#	0#	-26.21#
34	A2	Cl3- Conf Ion	0.574	0.000#	100.0#	0#	-26.21#
35	A1	Cl4-BZ#50-Cal	0.443	0.452	-2.0	68	0.00
36	A2	Tetrachlorobiphenyls	0.443	0.000#	100.0#	0#	-28.37#
37	A2	Cl4-Conf Ion	0.443	0.000#	100.0#	0#	-28.36#
38	T	Cl3-BZ#26	0.644	0.658	-2.2	69	0.00
39	T	Cl3-BZ#25	0.627	0.638	-1.8	68	0.00

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Cl4-BZ#53	0.489	0.497	-1.6	69	0.00
41	T	Cl3-BZ#-31	0.866	0.857	1.0	67	0.00
42	T	Cl3-BZ#28	0.853	0.817	4.2	64	0.00
43	T	Cl3-BZ#33	0.608	0.756	-24.3#	79	0.00
44	T	Cl3-BZ#21/#20	0.770	0.770	0.0	65	0.00
45	T	Cl4-BZ#51	0.539	0.566	-5.0	68	0.00
46	T	Cl4-BZ#45	0.421	0.428	-1.7	67	0.00
47	T	Cl3-BZ#22	0.750	0.760	-1.3	67	0.00
48	T	Cl4-BZ#73/#46	0.563	0.580	-3.0	67	0.00
49	T	Cl4-BZ#69	0.673	0.662	1.6	65	0.00
50	T	Cl4-BZ#43	0.444	0.470	-5.9	71	0.00
51	T	Cl3-BZ#36	0.835	0.895	-7.2	70	0.00
52	T	Cl4-BZ#52	0.547	0.548	-0.2	68	0.00
53	T	Cl4-BZ#48	0.486	0.497	-2.3	67	0.00
54	T	Cl4-BZ#49	0.523	0.518	1.0	66	0.00
55	T	Cl5-BZ#104-RTW	0.540	0.560	-3.7	69	0.00
56	T	Cl4-BZ#47	0.564	0.585	-3.7	75	0.00
57	T	Cl4-BZ#65/#75/#62	0.662	0.688	-3.9	66	0.00
58	T	Cl3-BZ#39	0.769	0.812	-5.6	70	0.00
59	T	Cl3-BZ#38	0.742	0.782	-5.4	68	0.00
60	T	Cl4-BZ#44	0.455	0.457	-0.4	67	0.00
61	T	Cl4-BZ#59	0.667	0.664	0.4	68	0.00
62	T	Cl4-BZ#42	0.432	0.441	-2.1	66	0.00
63	T	Cl4-BZ#71	0.701	0.709	-1.1	68	0.00
64	T	Cl3-BZ#35	0.776	0.792	-2.1	67	0.00
65	T	Cl4-BZ#41	0.426	0.434	-1.9	67	0.00
66	T	Cl4-BZ#72	0.733	0.766	-4.5	67	0.00
67	T	Cl5-BZ#96	0.584	0.629	-7.7	70	0.00
68	T	Cl5-BZ#103	0.451	0.474	-5.1	69	0.00
69	T	Cl4-BZ#68/#64	0.679	0.713	-5.0	67	0.00
70	T	Cl4-BZ#40	0.331	0.330	0.3	66	0.00
71	T	Cl3-BZ#37-RTW	1.031	1.062	-3.0	67	0.00
72	T	Cl5-BZ#100	0.486	0.522	-7.4	70	0.00
73	T	Cl5-BZ#94	0.359	0.378	-5.3	68	0.00
74	T	Cl4-BZ#57	0.730	0.742	-1.6	65	0.00
75	T	Cl4-BZ#67/#58	0.735	0.763	-3.8	67	0.00
76	T	Cl5-BZ#102	0.517	0.557	-7.7	70	0.00
77	T	Cl4-BZ#61	0.723	0.733	-1.4	67	0.00
78	T	Cl5-BZ#98	0.473	0.494	-4.4	68	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	T	Cl4-BZ#76	0.764	0.836	-9.4	71	0.00
80	T	Cl5-BZ#93	0.382	0.405	-6.0	69	0.00
81	T	Cl4-BZ#63	0.686	0.659	3.9	63	0.00
82	T	Cl5-BZ#121/#95/#88	0.507	0.544	-7.3	69	0.00
83	T	Cl4-BZ#74	0.759	0.772	-1.7	67	0.00
84	T	Cl6-BZ#155-RTW	0.562	0.570	-1.4	67	0.00
85	T	Cl4-BZ#70	0.781	0.779	0.3	65	0.00
86	T	Cl4-BZ#66	0.707	0.724	-2.4	66	0.00
87	T	Cl5-BZ#91	0.447	0.461	-3.1	69	0.00
88	T	Cl4-BZ#80	0.741	0.748	-0.9	66	0.00
89	T	Cl4-BZ#55	0.756	0.760	-0.5	66	0.00
90	T	Cl5-BZ#92	0.436	0.458	-5.0	69	0.00
91	T	Cl5-BZ#89/#84	0.418	0.430	-2.9	67	0.00
92	T	Cl5-BZ#101/#90	0.481	0.504	-4.8	68	0.00
93	s	Cl5-BZ#101-C13 (surr)	0.514	0.528	-2.7	66	0.00
94	T	Cl4-BZ#56	0.748	0.777	-3.9	67	0.00
95	T	Cl5-BZ#113	0.566	0.630	-11.3	73	0.00
96	T	Cl5-BZ#99	0.543	0.551	-1.5	67	0.00
97	T	Cl6-BZ#150	0.602	0.620	-3.0	68	0.00
98	T	Cl4-BZ#60	0.800	0.820	-2.5	67	0.00
99	T	Cl6-BZ#152	0.646	0.657	-1.7	66	0.00
100	T	Cl5-BZ#119	0.658	0.680	-3.3	67	0.00
101	T	Cl5-BZ#83/#125/#112	0.548	0.578	-5.5	69	0.00
102	T	Cl5-BZ#86/#109	0.545	0.584	-7.2	71	0.00
103	T	Cl5-BZ#97	0.406	0.421	-3.7	66	0.00
104	T	Cl5-BZ#116	0.560	0.572	-2.1	67	0.00
105	A1	Cl5-BZ#87/#111	0.548	0.599	-9.3	71	0.00
106	A2	Pentachlorobiphenyls	0.548	0.000#	100.0#	0#	-34.26#
107	A2	Cl5-Conf Ion	0.548	0.000#	100.0#	0#	-37.65#
108	T	Cl6-BZ#145	0.667	0.682	-2.2	67	0.00
109	T	Cl6-BZ#148	0.456	0.464	-1.8	67	0.00
110	T	Cl4-BZ#79	0.736	0.721	2.0	64	0.00
111	A1	Cl6-BZ#154-Cal	0.527	0.536	-1.7	67	0.00
112	A2	Hexachlorobiphenyls	0.527	0.000#	100.0#	0#	-37.12#
113	A2	Cl6-Conf Ion	0.527	0.000#	100.0#	0#	-37.12#
114	T	Cl4-BZ#78	0.912	0.948	-3.9	67	0.00
115	T	Cl6-BZ#136	0.584	0.614	-5.1	69	0.00
116	T	Cl5-BZ#117	0.693	0.683	1.4	64	0.00
117	T	Cl5-BZ#115	0.687	0.735	-7.0	70	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
118	T	Cl5-BZ#85	0.429	0.474	-10.5	75	0.00
119	T	Cl5-BZ#120	0.671	0.696	-3.7	68	0.00
120	T	Cl5-BZ#110	0.648	0.645	0.5	66	0.00
121	T	Cl4-BZ#81	0.739	0.738	0.1	66	0.00
122	i	Cl7-BZ#180-C13	1.000	1.000	0.0	64	0.00
123	T	Cl6-BZ#151	0.855	0.900	-5.3	68	0.00
124	T	Cl6-BZ#135	0.902	0.969	-7.4	67	0.00
125	T	Cl5-BZ#82	0.771	0.835	-8.3	68	0.00
126	T	Cl6-BZ#144	0.879	0.940	-6.9	67	0.00
127	T	Cl6-BZ#147/#149	0.939	0.985	-4.9	67	0.00
128	T	Cl4-BZ#77-RTW	1.283	1.330	-3.7	65	0.00
129	T	Cl6-BZ#143/#139	0.902	0.972	-7.8	67	0.00
130	T	Cl5-BZ#124	1.213	1.321	-8.9	68	0.00
131	T	Cl5-BZ#108	1.232	1.258	-2.1	62	0.00
132	T	Cl5-BZ#107/#123	1.314	1.469	-11.8	71	0.00
133	T	Cl6-BZ#140	0.872	0.940	-7.8	68	0.00
134	A1	Cl7-BZ#188-Cal/RTW	1.025	1.122	-9.5	68	0.00
135	A2	Heptachlorobiphenyls	1.025	0.000#	100.0#	0#	-41.10#
136	A2	Cl7-Conf Ion	1.025	0.000#	100.0#	0#	-41.10#
137	T	Cl6-BZ#134	0.743	0.794	-6.9	66	0.00
138	T	Cl5-BZ#106	1.194	1.229	-2.9	59	0.00
139	T	Cl6-BZ#133	1.011	1.038	-2.7	62	0.00
140	T	Cl6-BZ#142	0.680	0.780	-14.7	78	0.00
141	T	Cl5-BZ#118	1.159	1.278	-10.3	69	0.00
142	T	Cl6-BZ#131	0.783	0.834	-6.5	68	0.00
143	T	Cl7-BZ#184	1.013	1.082	-6.8	68	0.00
144	T	Cl6-BZ#165	1.102	1.161	-5.4	66	0.00
145	T	Cl6-BZ#146	0.964	1.033	-7.2	68	0.00
146	T	Cl6-BZ#161	1.227	1.311	-6.8	67	0.00
147	T	Cl5-BZ#122	1.068	1.138	-6.6	67	0.00
148	T	Cl6-BZ#168	1.179	1.187	-0.7	62	0.00
149	T	Cl5-BZ#114	1.173	1.287	-9.7	68	0.00
150	T	Cl6-BZ#153	1.050	1.186	-13.0	75	0.00
151	s	Cl6-BZ#153-C13 (surr)	0.919	0.973	-5.9	66	0.00
152	T	Cl6-BZ#132	0.842	0.868	-3.1	66	0.00
153	T	Cl7-BZ#179	1.046	1.087	-3.9	67	0.00
154	T	Cl6-BZ#141	0.843	0.858	-1.8	65	0.00
155	T	Cl7-BZ#176	0.994	1.016	-2.2	66	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
156	T	Cl5-BZ#105	1.435	1.486	-3.6	67	0.00
157	T	Cl6-BZ#137	0.864	0.909	-5.2	66	0.00
158	T	Cl5-BZ#127	1.574	1.638	-4.1	67	0.00
159	T	Cl7-BZ#186	1.106	1.165	-5.3	66	0.00
160	T	Cl6-BZ#130/#164	1.008	1.061	-5.3	66	0.00
161	T	Cl7-BZ#178	0.758	0.774	-2.1	65	0.00
162	T	Cl6-BZ#138	1.024	1.055	-3.0	66	0.00
163	T	Cl6-BZ#163/#160	1.158	1.223	-5.6	66	0.00
164	T	Cl6-BZ#129/#158	0.966	1.041	-7.8	69	0.00
165	T	Cl7-BZ#182/#175	0.867	0.939	-8.3	67	0.00
166	T	Cl7-BZ#187	0.888	0.909	-2.4	65	0.00
167	T	Cl7-BZ#183	0.854	0.875	-2.5	65	0.00
168	T	Cl6-BZ#166	1.258	1.280	-1.7	65	0.00
169	T	Cl6-BZ#159	1.258	1.286	-2.2	65	0.00
170	T	Cl5-BZ#126-RTW	1.539	1.644	-6.8	67	0.00
171	T	Cl7-BZ#185	0.794	0.817	-2.9	66	0.00
172	T	Cl6-BZ#162	1.166	1.212	-3.9	66	0.00
173	T	Cl7-BZ#174	0.788	0.814	-3.3	66	0.00
174	T	Cl6-BZ#128	0.862	0.926	-7.4	68	0.00
175	T	Cl6-BZ#167	1.547	1.652	-6.8	68	0.00
176	T	Cl8-BZ#202-RTW	0.892	0.931	-4.4	66	0.00
177	s	Cl8-BZ#202-C13 (surr)	0.942	0.965	-2.4	66	0.00
178	T	Cl7-BZ#181	0.886	0.932	-5.2	65	0.00
179	T	Cl7-BZ#177	0.769	0.800	-4.0	66	0.00
180	A1	Cl8-BZ#204/#200-Cal	0.876	0.909	-3.8	66	0.00
181	A2	Octachlorobiphenyls	0.876	0.000#	100.0#	0#	-43.58#
182	A2	Cl8-Conf Ion	0.876	0.000#	100.0#	0#	-43.58#
183	T	Cl7-BZ#171	0.753	0.764	-1.5	65	0.00
184	T	Cl7-BZ#173	0.742	0.750	-1.1	65	0.00
185	T	Cl7-BZ#172	0.797	0.788	1.1	64	0.00
186	T	Cl7-BZ#192	1.092	1.116	-2.2	65	0.00
187	T	Cl6-BZ#156	1.206	1.237	-2.6	66	0.00
188	T	Cl6-BZ#157	1.246	1.276	-2.4	66	0.00
189	T	Cl7-BZ#180	0.970	1.024	-5.6	69	0.00
190	T	Cl7-BZ#193	0.998	0.976	2.2	62	0.00
191	T	Cl8-BZ#197	0.894	0.914	-2.2	65	0.00
192	T	Cl7-BZ#191	1.037	1.047	-1.0	65	0.00
193	T	Cl8-BZ#199	0.889	0.895	-0.7	65	0.00
194	T	Cl8-BZ#198	0.754	0.763	-1.2	70	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
195	T	Cl8-BZ#201	0.651	0.659	-1.2	61	0.00
196	T	Cl7-BZ#170	0.751	0.769	-2.4	66	0.00
197	T	Cl7-BZ#190	1.093	1.134	-3.8	66	0.00
198	T	Cl8-BZ#196	0.706	0.699	1.0	63	0.00
199	T	Cl8-BZ#203	0.763	0.792	-3.8	66	0.00
200	T	Cl6-BZ#169-RTW	1.332	1.353	-1.6	66	0.00
201	T	Cl9-BZ#208-RTW	0.943	0.904	4.1	64	0.00
202	T	Cl9-BZ#207	0.921	0.924	-0.3	64	0.00
203	T	Cl7-BZ#189-RTW	0.995	0.999	-0.4	65	0.00
204	T	Cl8-BZ#195	0.694	0.683	1.6	65	0.00
205	T	Cl8-BZ#194	0.743	0.719	3.2	64	0.00
206	T	Cl8-BZ#205-RTW	0.910	0.858	5.7	62	0.00
207	A1	Cl9-BZ#206-Cal/RTW	0.759	0.721	5.0	62	0.00
208	A2	Nonachlorobiphenyls	0.759	0.000#	100.0#	0#	-49.49#
209	A2	Cl9-Conf Ion	0.759	0.000#	100.0#	0#	-49.49#
210	A1	Cl10-BZ#209-Cal/RTW	0.753	0.710	5.7	61	0.00
211	A2	Decachlorobiphenyl	0.753	0.000#	100.0#	0#	-56.30#
212	A2	Cl10-Conf Ion	0.753	0.000#	100.0#	0#	-56.30#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.855	234	390307	200.000	ng/mL	-0.06
122) Cl7-BZ#180-C13	44.876	406	200718M1	200.000	ng/mL	-0.05
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	35966	52.402	ng/mL	-0.05
Spiked Amount 100.000	Range 50 - 125		Recovery = 52.40%			
93) Cl5-BZ#101-C13 (surr)	33.175	338	51487	51.323	ng/mL	-0.07
Spiked Amount 100.000	Range 50 - 125		Recovery = 51.32%			
151) Cl6-BZ#153-C13 (surr)	38.719	372	48830	52.930	ng/mL	-0.07
Spiked Amount 100.000	Range 50 - 125		Recovery = 52.93%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	48405	51.206	ng/mL	-0.07
Spiked Amount 100.000	Range 50 - 125		Recovery = 51.21%			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.543	188	98354	54.679	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.618	188	100902	53.314	ng/mL	100
7) Cl1-BZ#3-RTW	17.084	188	99518	53.558	ng/mL	99
8) Cl2-BZ#4/#10-RTW	17.502	222	116871	107.555	ng/mL	100
9) Cl2-BZ#9	19.063	222	73377	52.508	ng/mL	99
10) Cl2-BZ#7	19.159	222	73158	53.726	ng/mL	98
11) Cl2-BZ#6	19.593	222	78732	52.512	ng/mL	99
12) Cl2-BZ#5	20.028	222	70712	51.912	ng/mL	100
13) Cl2-BZ#8	20.180	222	81740	52.776	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	20.960	256	39805	52.031	ng/mL	99
17) Cl2-BZ#14	21.097	222	78332	52.402	ng/mL	97
18) Cl3-BZ#30	21.515	256	63391	51.914	ng/mL	99
19) Cl3-BZ#18	22.327	256	42644	50.175	ng/mL	97
20) Cl2-BZ#11	22.456	222	84038	52.383	ng/mL	99
21) Cl3-BZ#17	22.537	256	40812	51.571	ng/mL	100
22) Cl2-BZ#12	22.850	222	73555	51.829	ng/mL	98
23) Cl3-BZ#27	22.898	256	57207	52.191	ng/mL	98
24) Cl2-BZ#13	23.148	222	85284	52.157	ng/mL	99
25) Cl3-BZ#24	23.164	256	58723	52.114	ng/mL	99
26) Cl3-BZ#16	23.510	256	35150	50.834	ng/mL	96
27) Cl3-BZ#32	23.711	256	62118	51.337	ng/mL	98
28) Cl2-BZ#15-RTW	23.871	222	85659	51.699	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.105	256	58193	51.461	ng/mL	100
30) Cl3-BZ#23	24.290	256	58023	52.286	ng/mL	99
31) Cl4-BZ#54-RTW	24.290	292	54182	52.375	ng/mL	98
32) Cl3-BZ#29-Cal	24.515	256	57003	50.882	ng/mL	99
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.013	292	44127	51.053	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.046	256	64195	51.087	ng/mL	99
39) Cl3-BZ#25	25.255	256	62244	50.882	ng/mL	98
40) Cl4-BZ#53	25.727	292	48492	50.858	ng/mL	98
41) Cl3-BZ#-31	25.826	256	83632	49.502	ng/mL	97
42) Cl3-BZ#28	26.025	256	79762	47.929	ng/mL	99
43) Cl3-BZ#33	26.108	256	73748M4	62.168	ng/mL	
44) Cl3-BZ#21/#20	26.157	256	150175M4	99.957	ng/mL	
45) Cl4-BZ#51	26.141	292	55226	52.469	ng/mL	98
46) Cl4-BZ#45	26.720	292	41774	50.823	ng/mL	100
47) Cl3-BZ#22	26.952	256	74174	50.675	ng/mL	98
48) Cl4-BZ#73/#46	27.084	292	113226	103.076	ng/mL	99
49) Cl4-BZ#69	27.366	292	64590	49.206	ng/mL	99
50) Cl4-BZ#43	27.465	292	45817	52.852	ng/mL	98
51) Cl3-BZ#36	27.498	256	87364	53.645	ng/mL	98
52) Cl4-BZ#52	27.597	292	53426	50.055	ng/mL	95
53) Cl4-BZ#48	27.779	292	48527	51.168	ng/mL	97
54) Cl4-BZ#49	27.928	292	50565	49.566	ng/mL	98
55) Cl5-BZ#104-RTW	28.144	326	54621	51.855	ng/mL	98
56) Cl4-BZ#47	28.226	292	57035M4	51.844	ng/mL	
57) Cl4-BZ#65/#75/#62	28.326	292	201283M4	155.733	ng/mL	
58) Cl3-BZ#39	28.359	256	79242	52.793	ng/mL	99
59) Cl3-BZ#38	28.491	256	76321	52.723	ng/mL	98
60) Cl4-BZ#44	28.872	292	44545	50.160	ng/mL	99
61) Cl4-BZ#59	29.104	292	64797	49.754	ng/mL	98
62) Cl4-BZ#42	29.186	292	43049	51.027	ng/mL	96
63) Cl4-BZ#71	29.435	292	69159	50.566	ng/mL	99
64) Cl3-BZ#35	29.550	256	77256	51.034	ng/mL	99
65) Cl4-BZ#41	29.666	292	42346	50.987	ng/mL	99
66) Cl4-BZ#72	29.782	292	74745	52.222	ng/mL	100
67) Cl5-BZ#96	29.799	326	61372	53.883	ng/mL	97
68) Cl5-BZ#103	29.931	326	46222	52.494	ng/mL	98
69) Cl4-BZ#68/#64	30.097	292	139171	105.004	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.212	292	32173	49.847	ng/mL	98
71) Cl3-BZ#37-RTW	30.411	256	103623	51.486	ng/mL	97
72) Cl5-BZ#100	30.411	326	50949	53.696	ng/mL	99
73) Cl5-BZ#94	30.527	326	36904	52.683	ng/mL	99
74) Cl4-BZ#57	30.626	292	72446	50.863	ng/mL	99
75) Cl4-BZ#67/#58	30.941	292	148822	103.818	ng/mL	100
76) Cl5-BZ#102	31.007	326	54303	53.842	ng/mL	100
77) Cl4-BZ#61	31.305	292	71508	50.649	ng/mL	99
78) Cl5-BZ#98	31.321	326	48246	52.216	ng/mL	100
79) Cl4-BZ#76	31.470	292	81566	54.671	ng/mL	100
80) Cl5-BZ#93	31.454	326	39567	53.085	ng/mL	99
81) Cl4-BZ#63	31.553	292	64319M4	48.053	ng/mL	
82) Cl5-BZ#121/#95/#88	31.619	326	159348	161.090	ng/mL	100
83) Cl4-BZ#74	31.834	292	75328	50.879	ng/mL	98
84) Cl6-BZ#155-RTW	31.967	360	55570	50.677	ng/mL	98
85) Cl4-BZ#70	32.000	292	75982	49.829	ng/mL	100
86) Cl4-BZ#66	32.281	292	70636	51.169	ng/mL	99
87) Cl5-BZ#91	32.165	326	44952	51.554	ng/mL	98
88) Cl4-BZ#80	32.563	292	72951	50.470	ng/mL	99
89) Cl4-BZ#55	32.745	292	74116	50.216	ng/mL	98
90) Cl5-BZ#92	32.794	326	44737	52.595	ng/mL	100
91) Cl5-BZ#89/#84	33.076	326	83826	102.838	ng/mL	98
92) Cl5-BZ#101/#90	33.208	326	98326M4	104.707	ng/mL	
94) Cl4-BZ#56	33.208	292	75797	51.909	ng/mL	100
95) Cl5-BZ#113	33.307	326	61480M4	55.695	ng/mL	
96) Cl5-BZ#99	33.572	326	53757	50.694	ng/mL	99
97) Cl6-BZ#150	33.622	360	60540	51.491	ng/mL	98
98) Cl4-BZ#60	33.638	292	80043	51.301	ng/mL	99
99) Cl6-BZ#152	33.986	360	64121	50.870	ng/mL	100
100) Cl5-BZ#119	34.069	326	66351M6	51.658	ng/mL	
101) Cl5-BZ#83/#125/#112	34.218	326	169225M4	158.323	ng/mL	
102) Cl5-BZ#86/#109	34.383	326	113949M4	107.228	ng/mL	
103) Cl5-BZ#97	34.499	326	41106	51.887	ng/mL	98
104) Cl5-BZ#116	34.962	326	55822	51.060	ng/mL	99
105) Cl5-BZ#87/#111	35.260	326	116840M4	109.325	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.433	360	66569	51.156	ng/mL	99
109) Cl6-BZ#148	34.631	360	45293	50.944	ng/mL	99
110) Cl4-BZ#79	34.747	292	70346	48.945	ng/mL	100
111) Cl6-BZ#154-Cal	35.161	360	52326	50.925	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.227	292	92532	52.012	ng/mL	84
115) Cl6-BZ#136	35.293	360	59901M4	52.586	ng/mL	
116) Cl5-BZ#117	35.360	326	66629M4	49.259	ng/mL	
117) Cl5-BZ#115	35.442	326	71710M4	53.498	ng/mL	
118) Cl5-BZ#85	35.525	326	46255M6	55.248	ng/mL	
119) Cl5-BZ#120	35.658	326	67944	51.854	ng/mL	100
120) Cl5-BZ#110	35.807	326	62908	49.740	ng/mL	100
121) Cl4-BZ#81	36.187	292	71968	49.879	ng/mL	99
123) Cl6-BZ#151	36.204	360	45182	52.655	ng/mL	98
124) Cl6-BZ#135	36.336	360	48638	53.738	ng/mL	99
125) Cl5-BZ#82	36.502	326	41892	54.109	ng/mL	98
126) Cl6-BZ#144	36.535	360	47173	53.461	ng/mL	99
127) Cl6-BZ#147/#149	36.849	360	98873	104.950	ng/mL	97
128) Cl4-BZ#77-RTW	36.949	292	66746M4	51.844	ng/mL	
129) Cl6-BZ#143/#139	37.081	360	97588	107.785	ng/mL	99
130) Cl5-BZ#124	37.230	326	66310	54.474	ng/mL	99
131) Cl5-BZ#108	37.511	326	63135	51.059	ng/mL	100
132) Cl5-BZ#107/#123	37.611	326	147404M4	111.810	ng/mL	
133) Cl6-BZ#140	37.263	360	47151	53.886	ng/mL	98
134) Cl7-BZ#188-Cal/RTW	37.627	394	56282	54.696	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.710	360	39831	53.410	ng/mL	96
138) Cl5-BZ#106	37.743	326	61664	51.441	ng/mL	99
139) Cl6-BZ#133	37.826	360	52104M4	51.332	ng/mL	
140) Cl6-BZ#142	37.842	360	39147M4	57.389	ng/mL	
141) Cl5-BZ#118	37.975	326	64122	55.111	ng/mL	96
142) Cl6-BZ#131	37.975	360	41861	53.266	ng/mL	99
143) Cl7-BZ#184	38.107	394	54304	53.400	ng/mL	100
144) Cl6-BZ#165	38.173	360	58279	52.709	ng/mL	96
145) Cl6-BZ#146	38.289	360	51819	53.536	ng/mL	100
146) Cl6-BZ#161	38.455	360	65794	53.430	ng/mL	100
147) Cl5-BZ#122	38.438	326	57091	53.260	ng/mL	98
148) Cl6-BZ#168	38.670	360	59551	50.327	ng/mL	98
149) Cl5-BZ#114	38.719	326	64578	54.862	ng/mL	99
150) Cl6-BZ#153	38.736	360	59488M4	56.466	ng/mL	
152) Cl6-BZ#132	39.001	360	43561	51.521	ng/mL	98
153) Cl7-BZ#179	39.266	394	54531	51.938	ng/mL	100
154) Cl6-BZ#141	39.564	360	43055	50.901	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
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Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.762	394	50999	51.144	ng/mL	99
156) Cl5-BZ#105	39.828	326	74580M4	51.774	ng/mL	
157) Cl6-BZ#137	39.994	360	45622	52.621	ng/mL	98
158) Cl5-BZ#127	40.143	326	82191	52.016	ng/mL#	75
159) Cl7-BZ#186	40.093	394	58470	52.690	ng/mL	100
160) Cl6-BZ#130/#164	40.341	360	106442	105.245	ng/mL	98
161) Cl7-BZ#178	40.639	394	38819	51.049	ng/mL	99
162) Cl6-BZ#138	40.706	360	52949M4	51.503	ng/mL	
163) Cl6-BZ#163/#160	40.805	360	122722M4	105.557	ng/mL	
164) Cl6-BZ#129/#158	41.003	360	104442M4	107.765	ng/mL	
165) Cl7-BZ#182/#175	41.037	394	94188	108.207	ng/mL	100
166) Cl7-BZ#187	41.219	394	45591	51.139	ng/mL	96
167) Cl7-BZ#183	41.599	394	43911	51.249	ng/mL	99
168) Cl6-BZ#166	41.963	360	64247	50.872	ng/mL	98
169) Cl6-BZ#159	42.212	360	64526	51.092	ng/mL	98
170) Cl5-BZ#126-RTW	42.427	326	82520	53.430	ng/mL	89
171) Cl7-BZ#185	42.460	394	40990	51.431	ng/mL	100
172) Cl6-BZ#162	42.543	360	60809	51.956	ng/mL	98
173) Cl7-BZ#174	42.692	394	40866	51.645	ng/mL	99
174) Cl6-BZ#128	42.708	360	46443	53.655	ng/mL	100
175) Cl6-BZ#167	43.006	360	82917M4	53.390	ng/mL	
176) Cl8-BZ#202-RTW	42.940	428	46742	52.200	ng/mL	98
178) Cl7-BZ#181	43.089	394	46789	52.594	ng/mL	98
179) Cl7-BZ#177	43.420	394	40139	52.039	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.519	428	91217	103.734	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.718	394	38341	50.752	ng/mL	98
184) Cl7-BZ#173	43.949	394	37611	50.530	ng/mL	99
185) Cl7-BZ#172	44.396	394	39547	49.416	ng/mL	97
186) Cl7-BZ#192	44.595	394	56010	51.099	ng/mL	100
187) Cl6-BZ#156	44.611	360	62066	51.287	ng/mL	99
188) Cl6-BZ#157	44.860	360	64036	51.226	ng/mL	97
189) Cl7-BZ#180	44.893	394	51399	52.793	ng/mL	96
190) Cl7-BZ#193	44.992	394	48978	48.882	ng/mL	99
191) Cl8-BZ#197	44.032	428	45861	51.096	ng/mL	97
192) Cl7-BZ#191	45.323	394	52553	50.511	ng/mL	97
193) Cl8-BZ#199	45.141	428	44917	50.362	ng/mL	99
194) Cl8-BZ#198	46.680	428	38274	50.565	ng/mL	98
195) Cl8-BZ#201	46.763	428	33057	50.602	ng/mL	99
196) Cl7-BZ#170	46.895	394	38573	51.171	ng/mL	96

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.227	394	56880	51.842	ng/mL	98
198) Cl8-BZ#196	47.227	428	35093	49.535	ng/mL	100
199) Cl8-BZ#203	47.309	428	39740	51.920	ng/mL	99
200) Cl6-BZ#169-RTW	47.591	360	67900	50.797	ng/mL	98
201) Cl9-BZ#208-RTW	48.733	464	45364	47.925	ng/mL	98
202) Cl9-BZ#207	49.411	464	46348	50.170	ng/mL	96
203) Cl7-BZ#189-RTW	49.577	394	50106	50.168	ng/mL	98
204) Cl8-BZ#195	49.726	428	34284	49.243	ng/mL	94
205) Cl8-BZ#194	51.414	428	36067	48.389	ng/mL	97
206) Cl8-BZ#205-RTW	51.993	428	43035	47.113	ng/mL	99
207) Cl9-BZ#206-Cal/RTW	54.012	464	36201	47.531	ng/mL	100
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.296	498	35620	47.154	ng/mL#	80
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

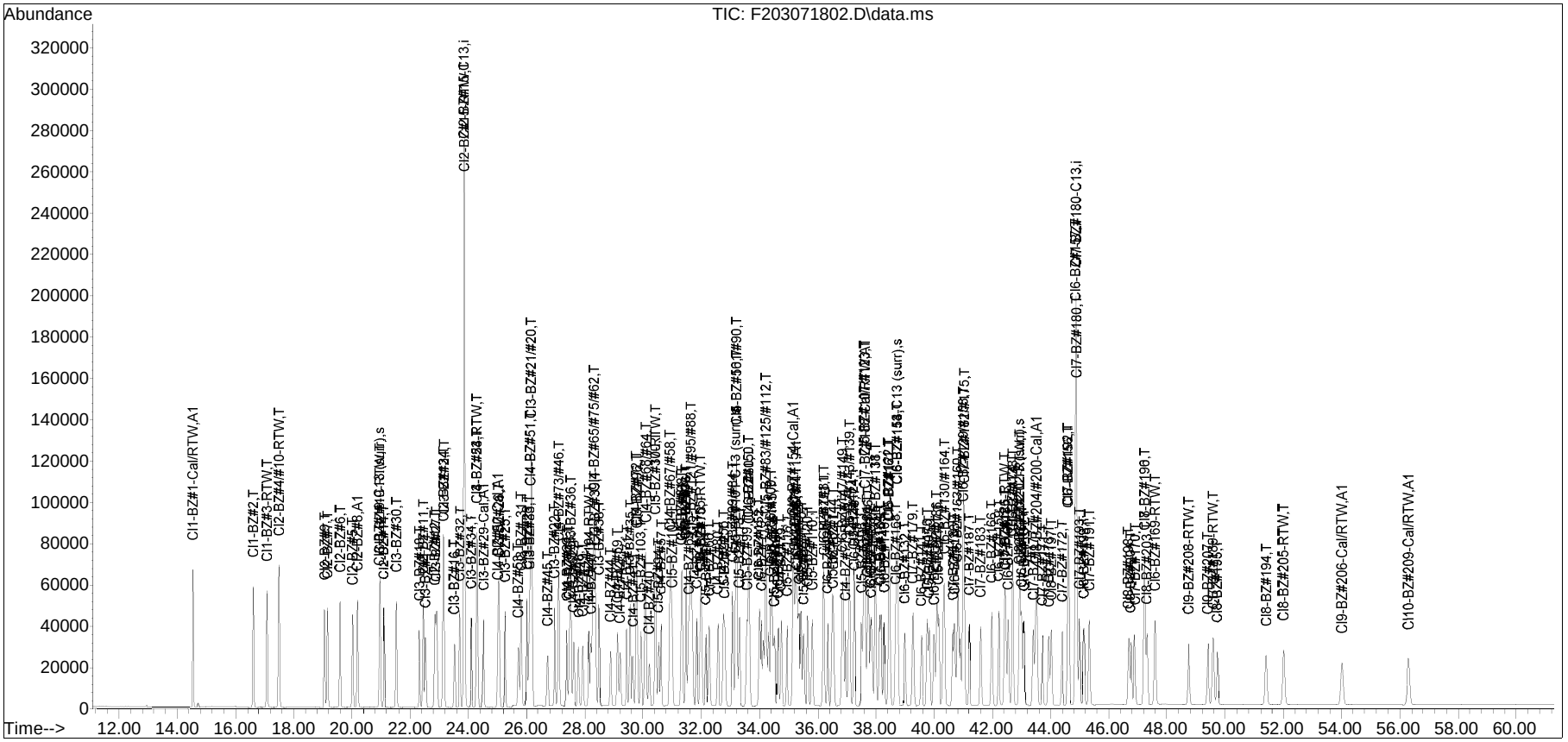
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071802.D
Acq On : 7 Mar 2018 11:17 am
Operator : BNA2:MJS
Sample : WG1095518-2
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 08 11:01:53 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Mon Feb 26 16:07:10 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed



Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071811.D
Acq On : 7 Mar 2018 10:38 pm
Operator : BNA2:MJS
Sample : L1806872-01,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 13:42:19 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.864	234	362171	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.943	406	196144M4	200.000	ng/mL	0.07
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.952	268	48666	76.414	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 76.41%			
93)	Cl5-BZ#101-C13 (surr)	33.208	338	73539	79.000	ng/mL	0.03
	Spiked Amount 100.000	Range 50 - 125		Recovery = 79.00%			
151)	Cl6-BZ#153-C13 (surr)	38.753	372	72724	80.668	ng/mL	0.03
	Spiked Amount 100.000	Range 50 - 125		Recovery = 80.67%			
177)	Cl8-BZ#202-C13 (surr)	42.973	442	66256	71.725	ng/mL	0.05
	Spiked Amount 100.000	Range 50 - 125		Recovery = 71.72%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.197	222	23828M5	16.580	ng/mL	
15)	Cl2-Conf Ion	18.789	224	147378M5	102.548	ng/mL	
33)	Trichlorobiphenyls	22.336	256	36755M5	35.357	ng/mL	
34)	Cl3- Conf Ion	22.336	258	36371M5	34.987	ng/mL	
36)	Tetrachlorobiphenyls	28.888	292	35585M5	44.369	ng/mL	
37)	Cl4-Conf Ion	28.888	290	34107M5	42.526	ng/mL	
106)	Pentachlorobiphenyls	0.000		0	N.D.	d	
107)	Cl5-Conf Ion	0.000		0	N.D.	d	
112)	Hexachlorobiphenyls	0.000		0	N.D.	d	
113)	Cl6-Conf Ion	0.000		0	N.D.		
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

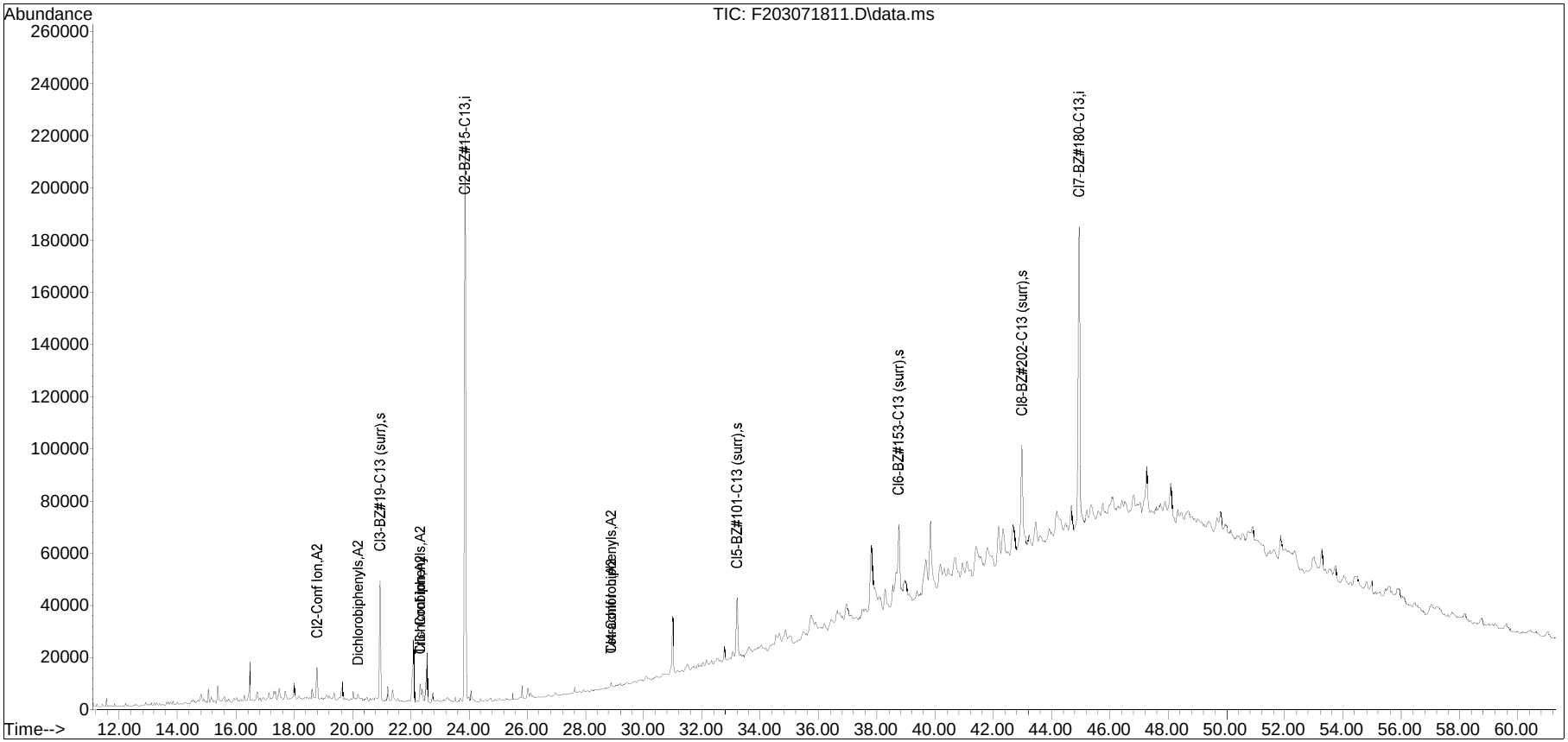
(#) = qualifier out of range (m) = manual integration (+) = signals summed

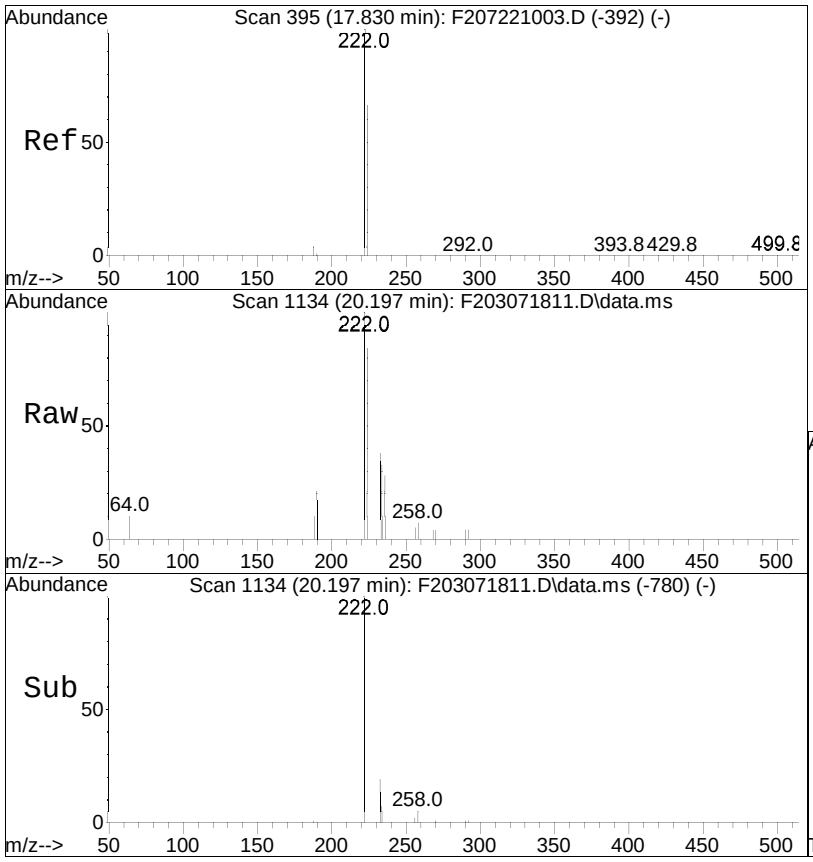
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071811.D
Acq On : 7 Mar 2018 10:38 pm
Operator : BNA2:MJS
Sample : L1806872-01,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 13:42:19 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

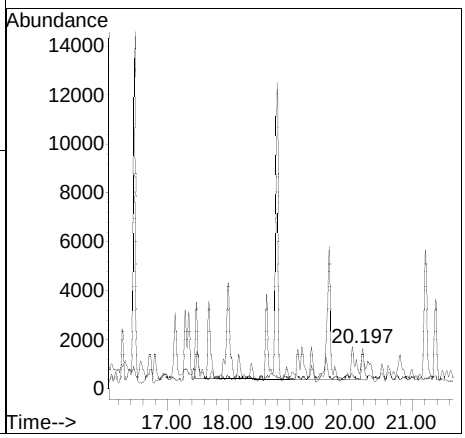


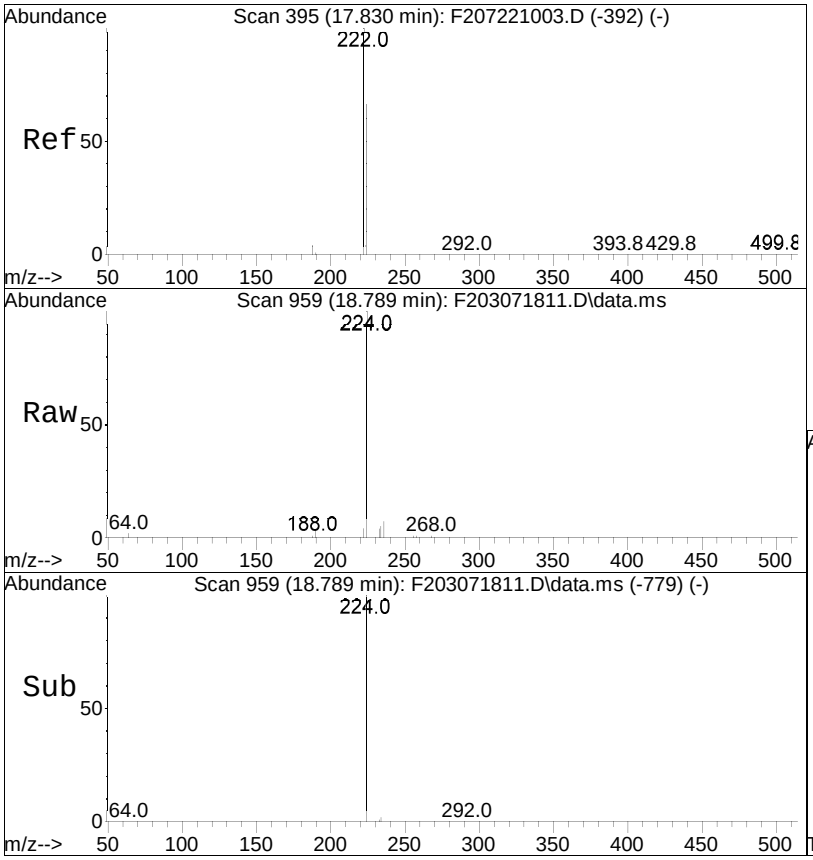


#14
Dichlorobiphenyls
Concen: 16.58 ng/mL M5
RT: 20.197 min Scan# 1134
Delta R.T. 2.645 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:222 Resp: 23828

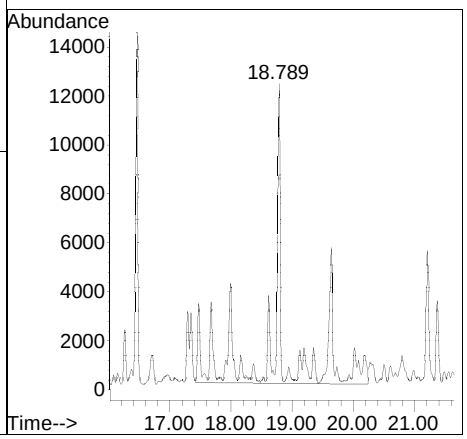
Ion	Ratio	Lower	Upper
222	100		
224	0.0	52.1	78.1#

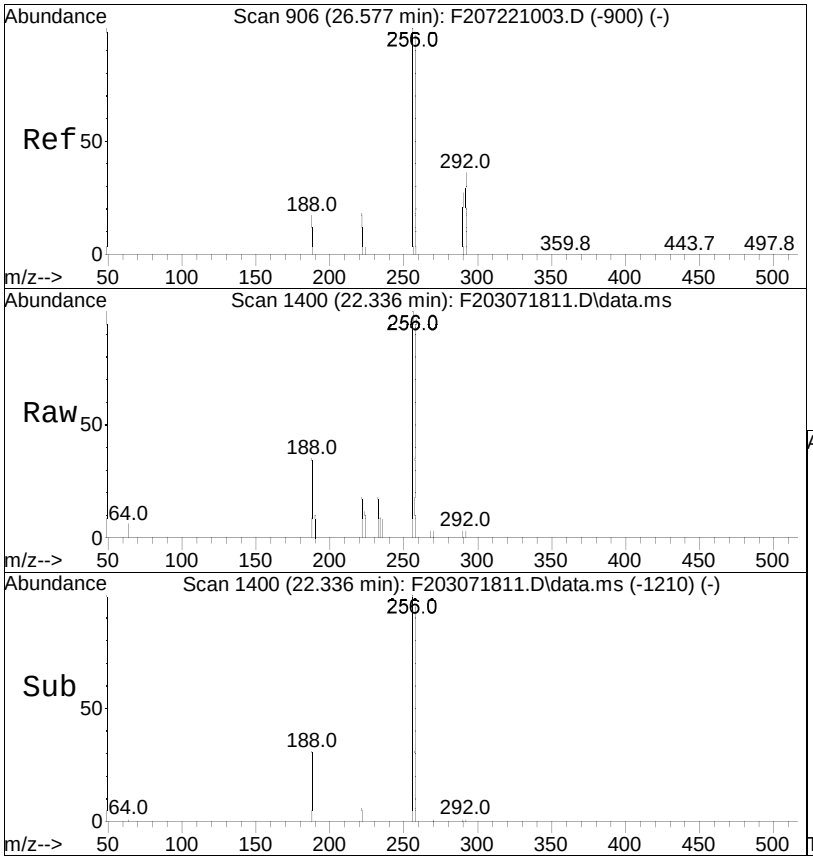




#15
Cl2-Conf Ion
Concen: 102.55 ng/mL M5
RT: 18.789 min Scan# 959
Delta R.T. 1.237 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:224 Resp: 147378

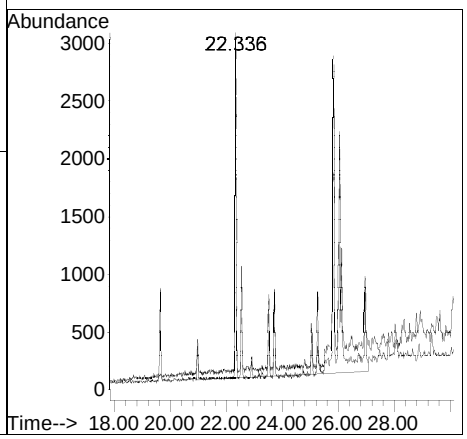


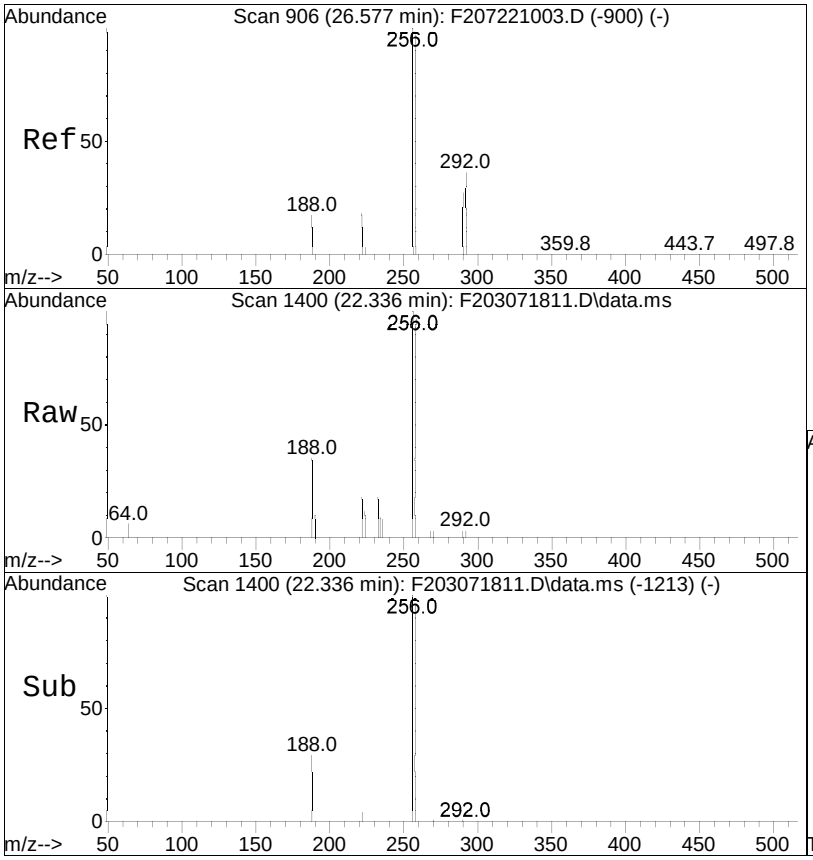


#33
Trichlorobiphenyls
Concen: 35.36 ng/mL M5
RT: 22.336 min Scan# 1400
Delta R.T. -3.874 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:256 Resp: 36755

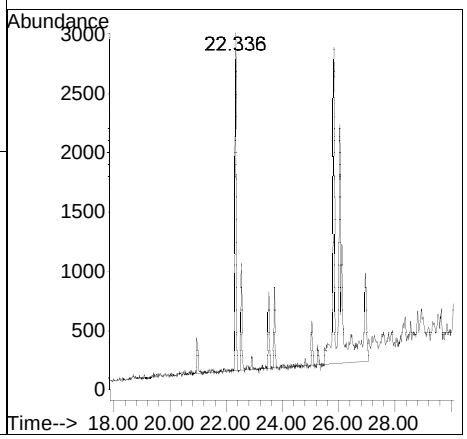
Ion	Ratio	Lower	Upper
256	100		
258	8.5	76.8	115.2#

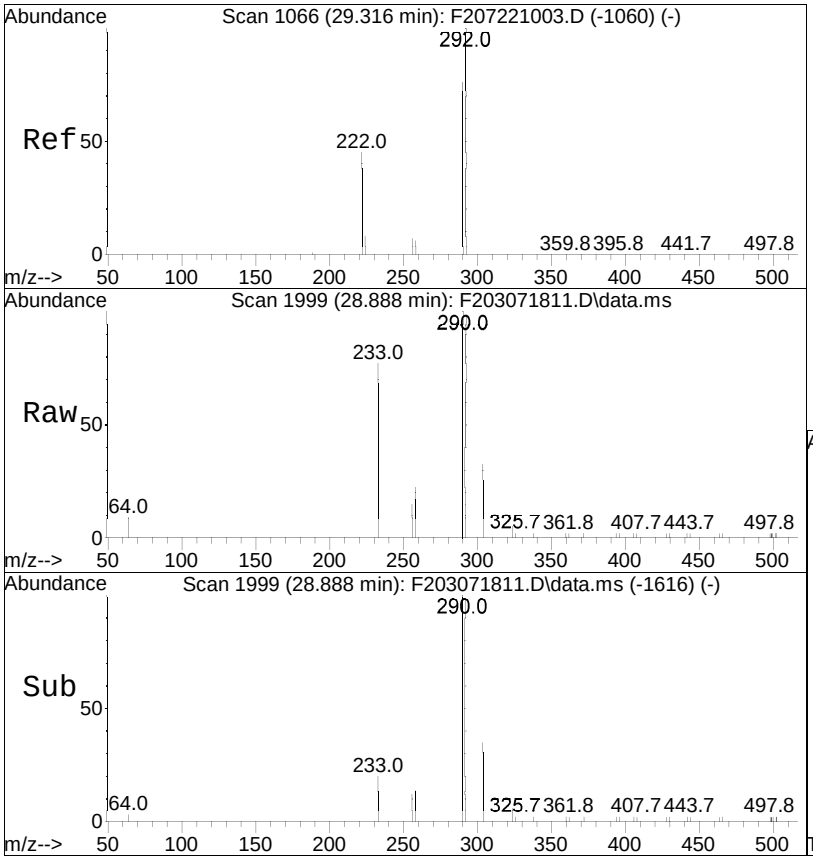




#34
Cl3- Conf Ion
Concen: 34.99 ng/mL M5
RT: 22.336 min Scan# 1400
Delta R.T. -3.874 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:258 Resp: 36371

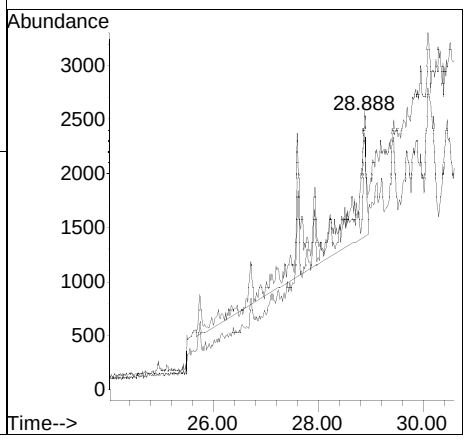


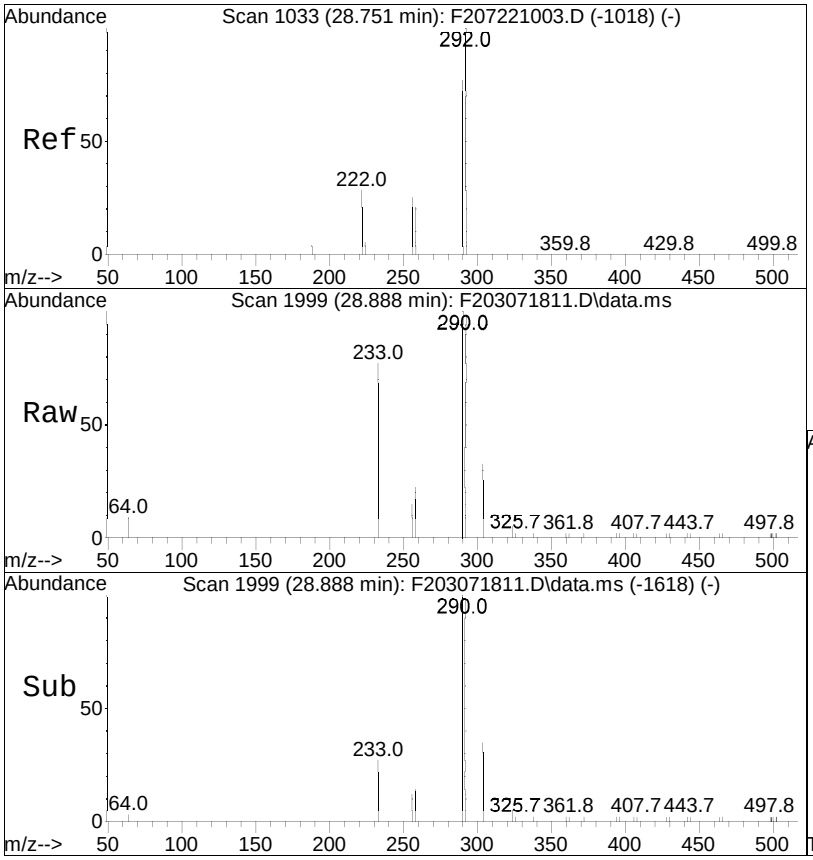


#36
Tetrachlorobiphenyls
Concen: 44.37 ng/mL M5
RT: 28.888 min Scan# 1999
Delta R.T. 0.516 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:292 Resp: 35585

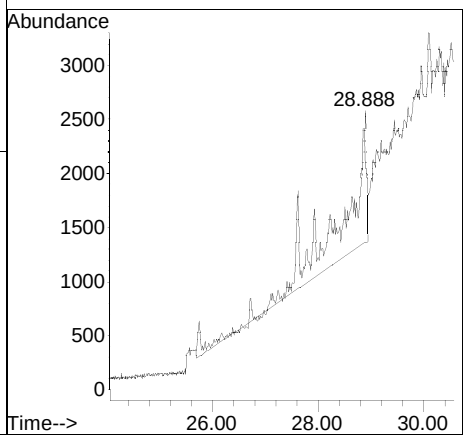
Ion	Ratio	Lower	Upper
292	100		
290	0.0	61.0	91.4#





#37
Cl4-Conf Ion
Concen: 42.53 ng/mL M5
RT: 28.888 min Scan# 1999
Delta R.T. 0.533 min
Lab File: F203071811.D
Acq: 7 Mar 2018 10:38 pm

Tgt Ion:290 Resp: 34107



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071812.D
Acq On : 7 Mar 2018 11:52 pm
Operator : BNA2:MJS
Sample : L1806872-02,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 12:48:07 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.864	234	357670	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	194404M4	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.953	268	52441	83.378	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 83.38%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	86393	93.976	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 93.98%			
151)	Cl6-BZ#153-C13 (surr)	38.736	372	87097	97.476	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 97.48%			
177)	Cl8-BZ#202-C13 (surr)	42.940	442	79640	86.985	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 86.98%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.189	222	36745M5	25.890	ng/mL	
15)	Cl2-Conf Ion	20.180	224	24894M5	17.540	ng/mL	
33)	Trichlorobiphenyls	25.827	256	101796M5	99.156	ng/mL	
34)	Cl3- Conf Ion	25.827	258	89913M5	87.581	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	77794M5	98.217	ng/mL	
37)	Cl4-Conf Ion	27.614	290	67525M5	85.252	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	7143M5	7.293	ng/mL	
107)	Cl5-Conf Ion	37.727	324	22639M5	23.116	ng/mL	
112)	Hexachlorobiphenyls	0.000		0	N.D.	d	
113)	Cl6-Conf Ion	0.000		0	N.D.	d	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

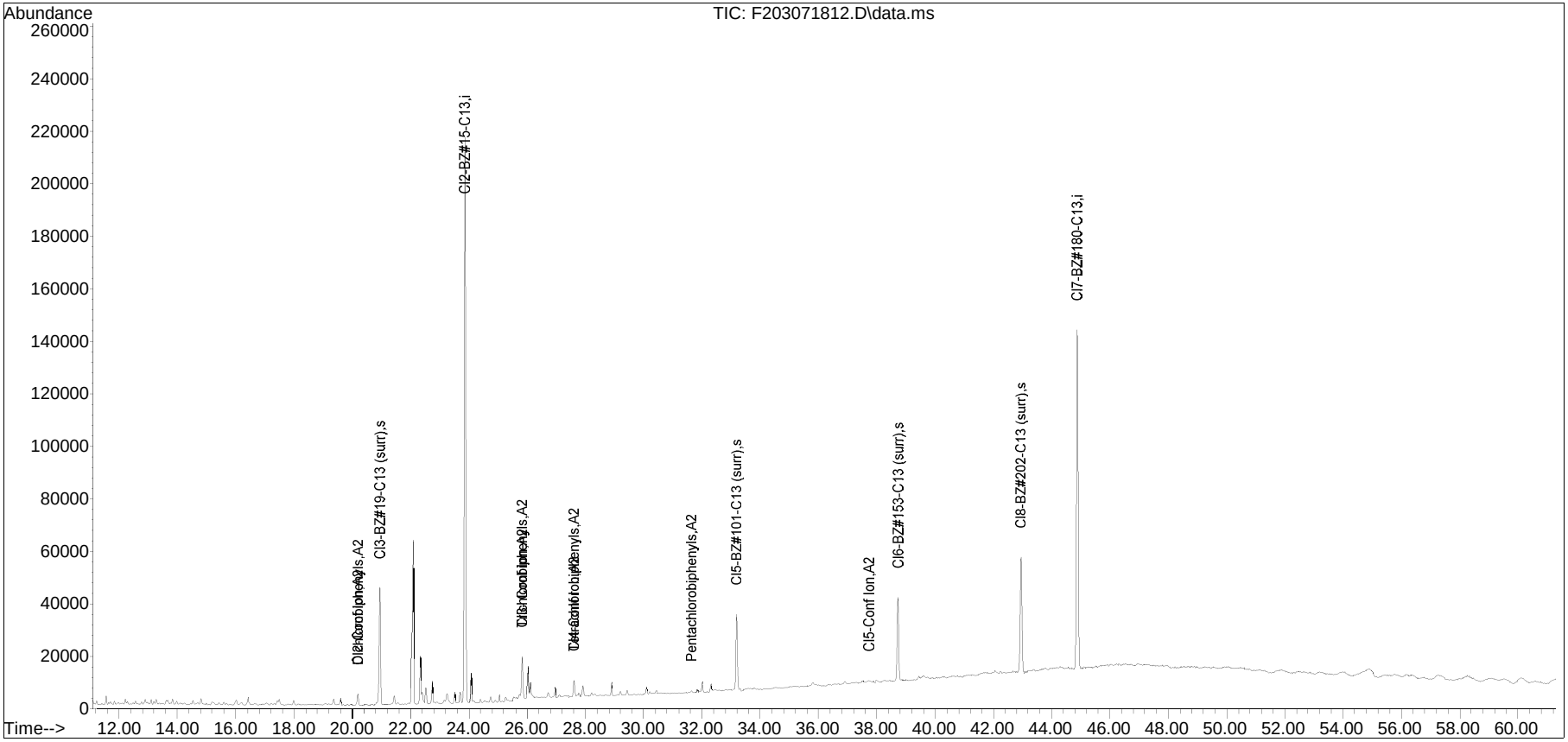
(#) = qualifier out of range (m) = manual integration (+) = signals summed

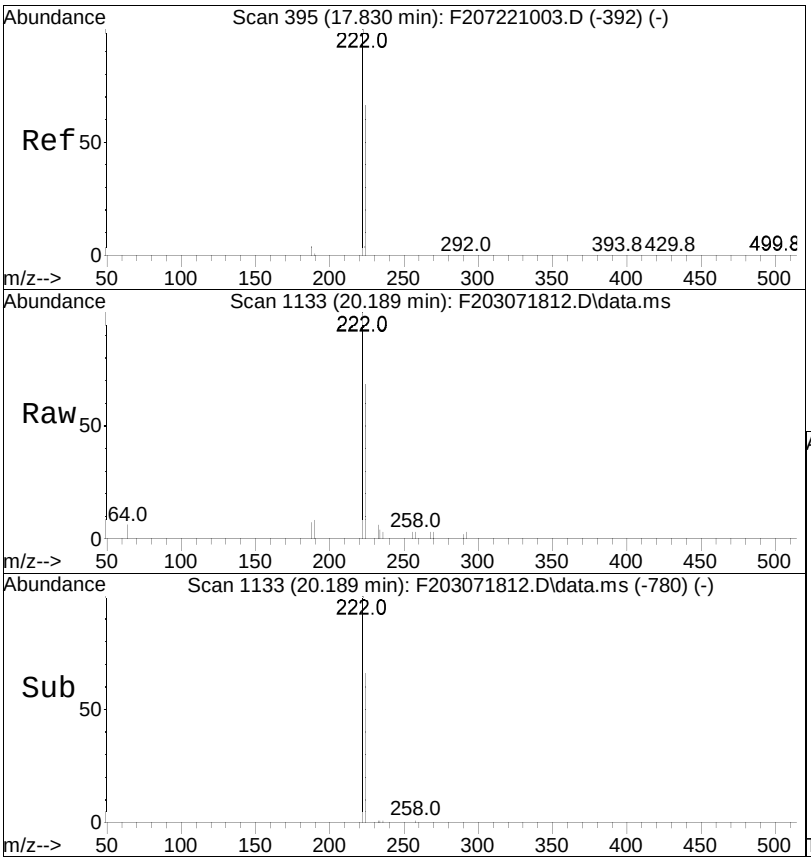
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071812.D
Acq On : 7 Mar 2018 11:52 pm
Operator : BNA2:MJS
Sample : L1806872-02,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 12:48:07 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

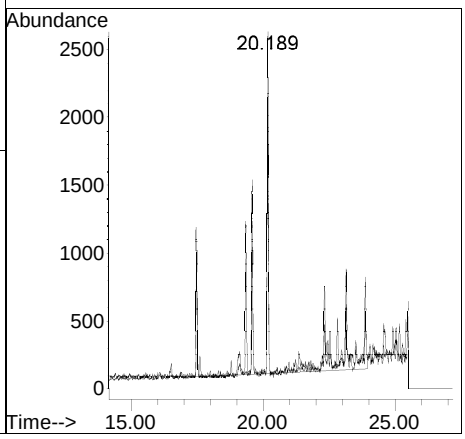


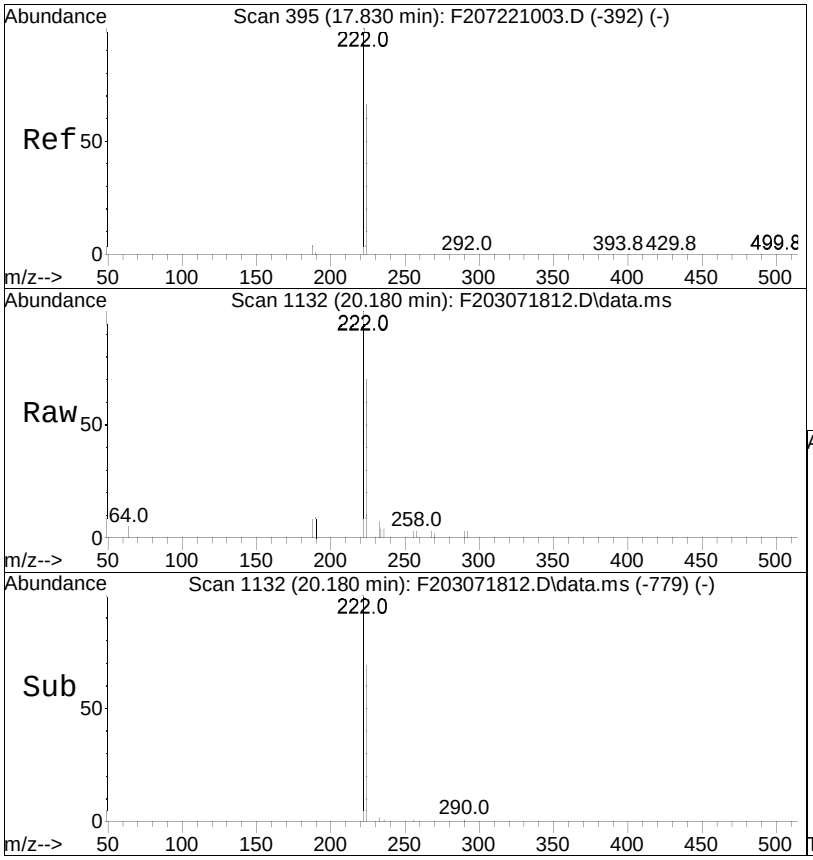


#14
Dichlorobiphenyls
Concen: 25.89 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:222 Resp: 36745

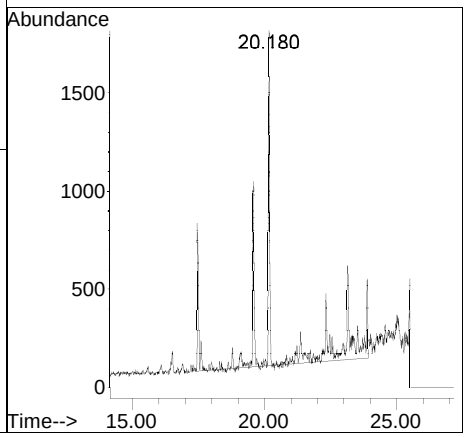
Ion	Ratio	Lower	Upper
222	100		
224	6.4	52.1	78.1#

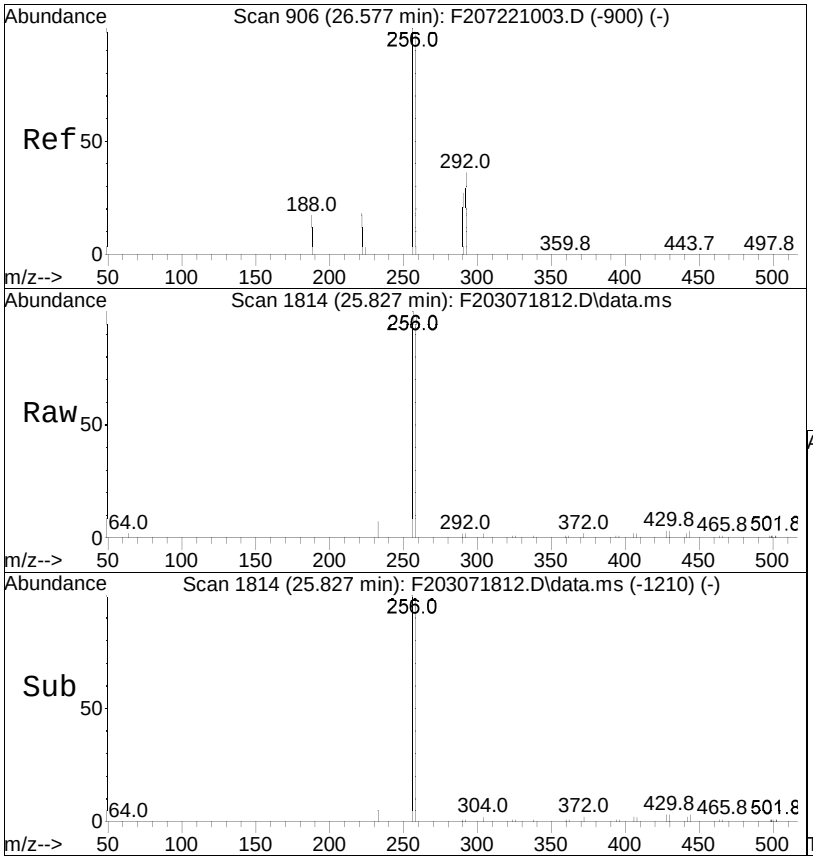




#15
Cl2-Conf Ion
Concen: 17.54 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:224 Resp: 24894

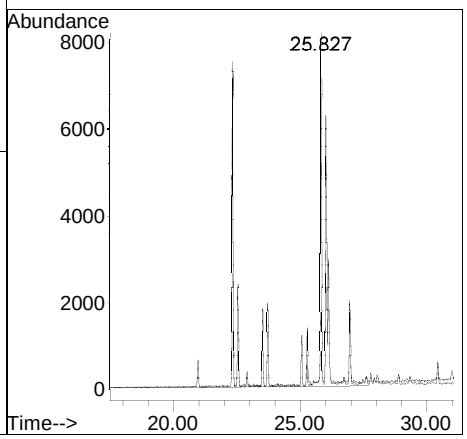


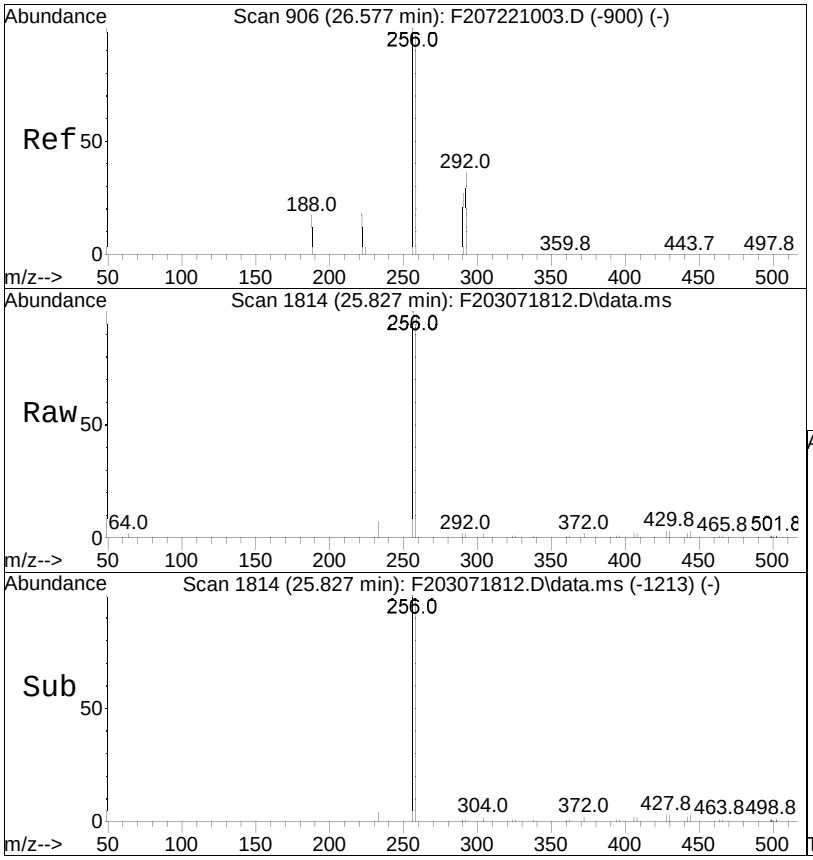


#33
Trichlorobiphenyls
Concen: 99.16 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:256 Resp: 101796

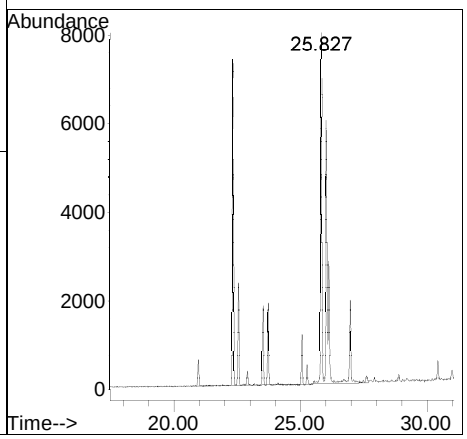
Ion	Ratio	Lower	Upper
256	100		
258	8.8	76.8	115.2#

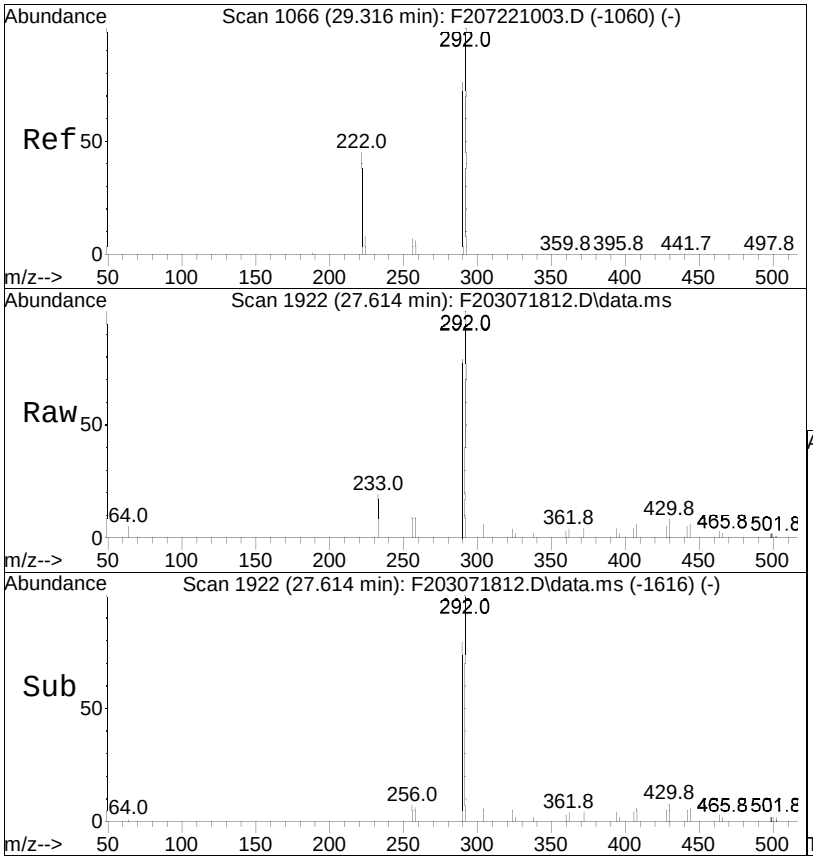




#34
Cl3- Conf Ion
Concen: 87.58 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:258 Resp: 89913

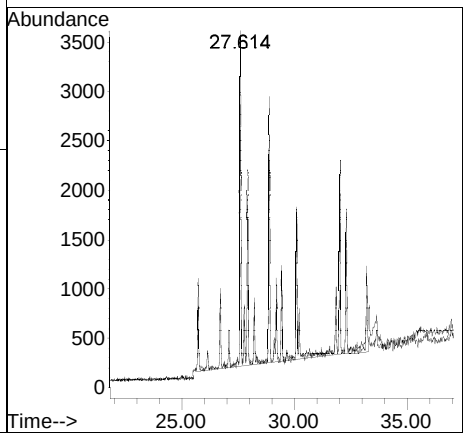


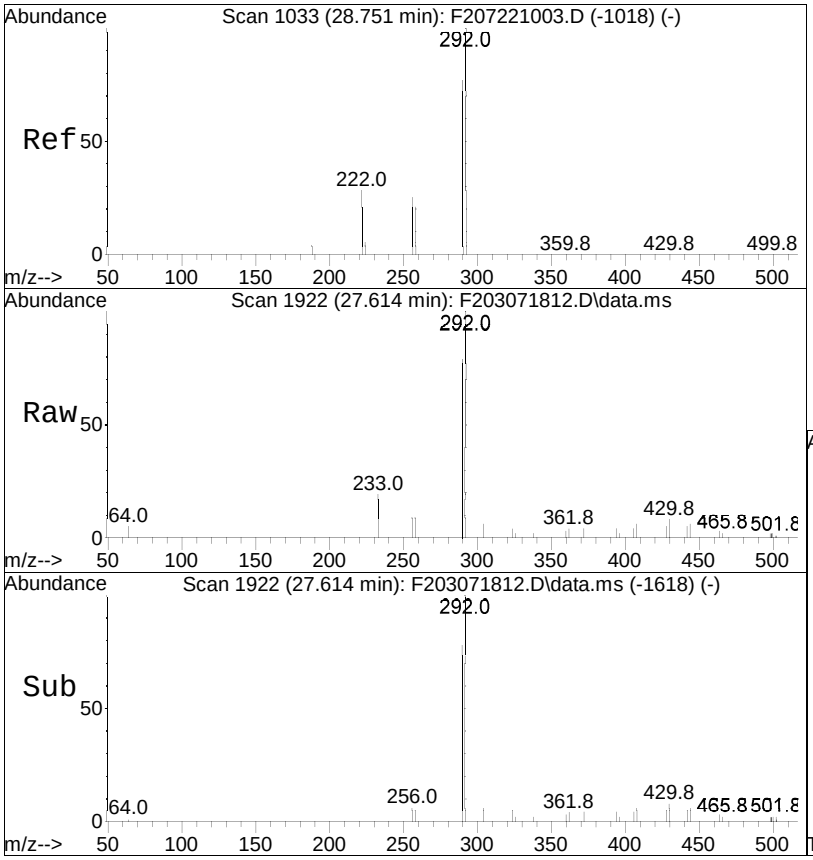


#36
Tetrachlorobiphenyls
Concen: 98.22 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:292 Resp: 77794

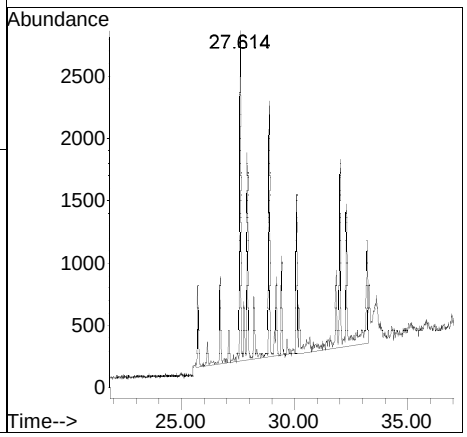
Ion	Ratio	Lower	Upper
292	100		
290	2.3	61.0	91.4#

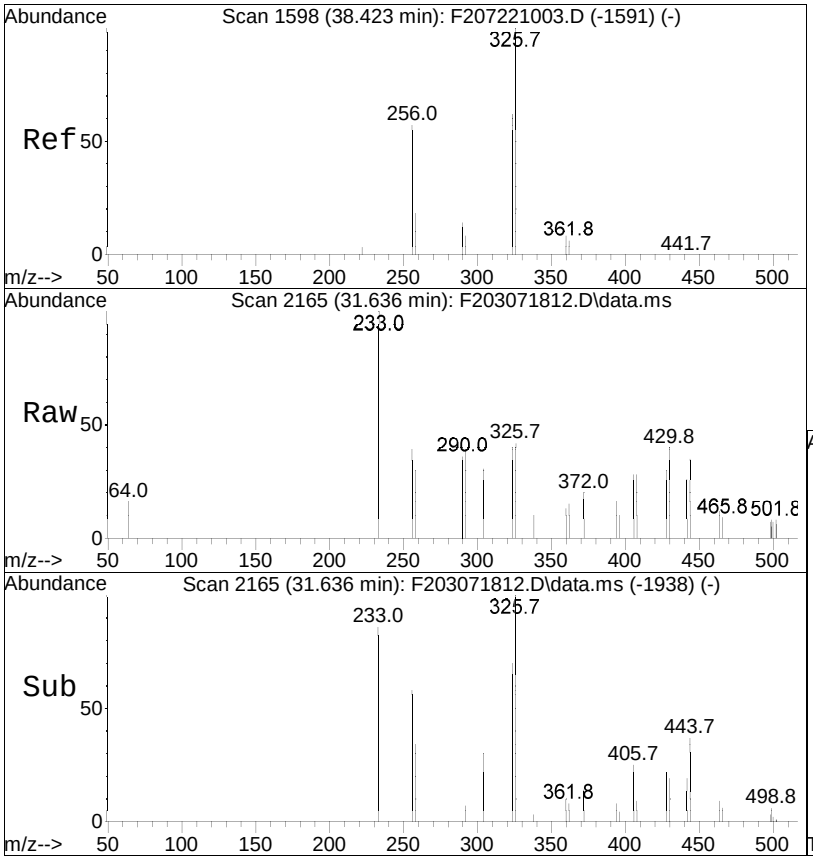




#37
Cl4-Conf Ion
Concen: 85.25 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:290 Resp: 67525

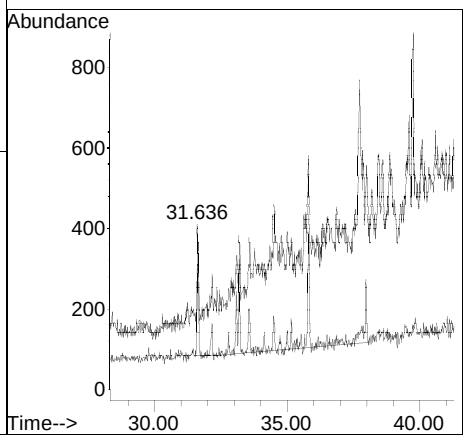


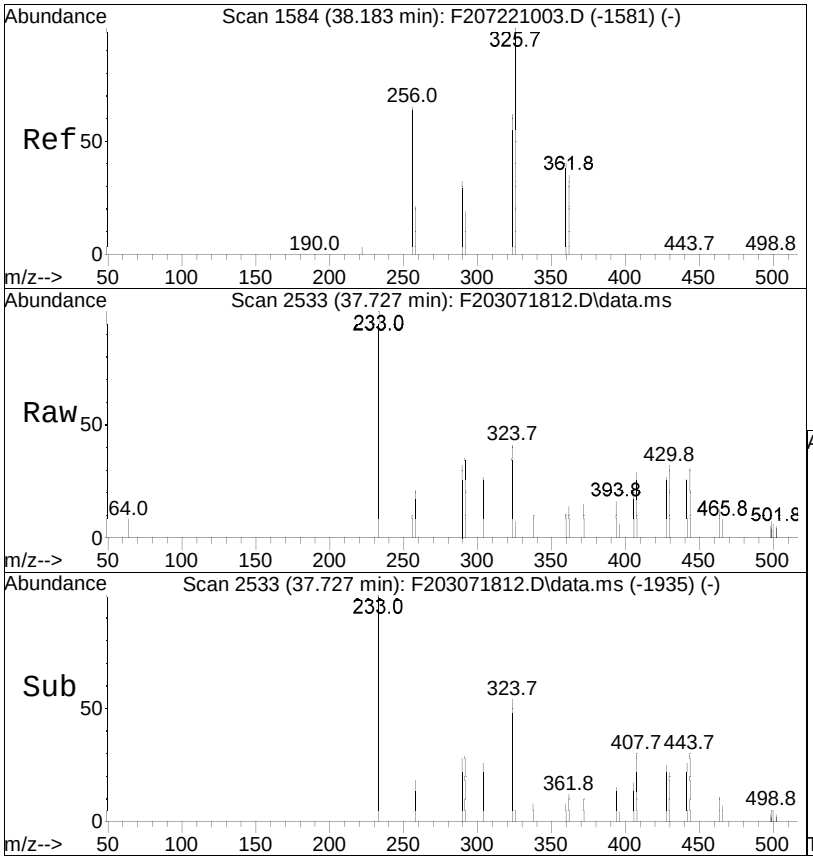


#106
Pentachlorobiphenyls
Concen: 7.29 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:326 Resp: 7143

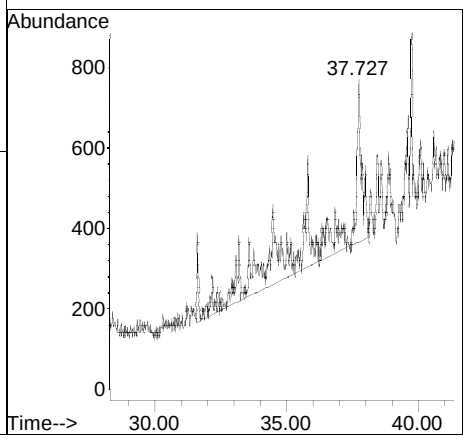
Ion	Ratio	Lower	Upper
326	100		
324	0.0	48.7	73.1#





#107
Cl5-Conf Ion
Concen: 23.12 ng/mL M5
RT: 37.727 min Scan# 2533
Delta R.T. 0.079 min
Lab File: F203071812.D
Acq: 7 Mar 2018 11:52 pm

Tgt Ion:324 Resp: 22639



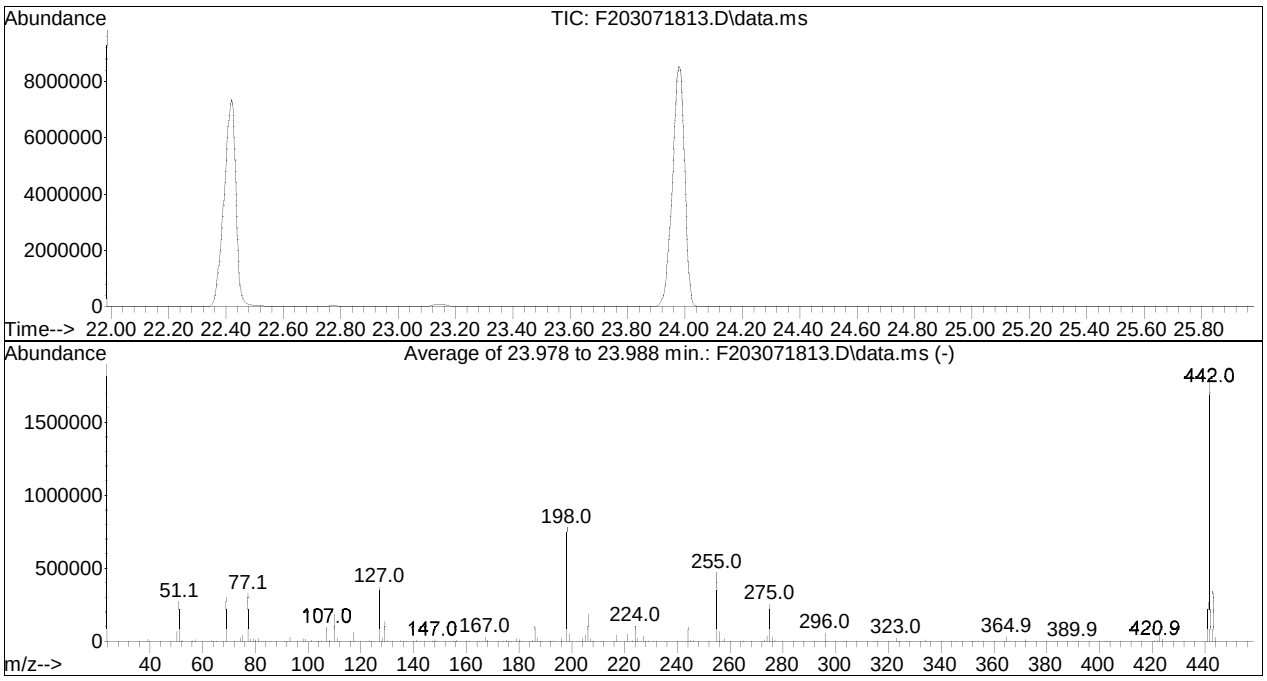
Analytical Event

Continuing Calibration
DFTPP Tune

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071813.D
Acq On : 8 Mar 2018 1:06 am
Operator : BNA2:MJS
Sample : WG1095518-3
Misc : WG1095518,MSAS13 10X
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Title : Method 680 PCB's by GC/MS
Last Update : Thu Mar 08 11:02:39 2018



AutoFind: Scans 2682, 2683, 2684; Background Corrected with Scan 2662

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	0.00	100	34.9	271232	PASS
68	69	0.00	100	0.0	0	PASS
69	198	0.00	100	38.1	295866	PASS
70	69	0.00	100	0.6	1754	PASS
127	198	30	80	47.5	369152	PASS
197	198	0.00	3	0.0	0	PASS
198	442	40	100	43.0	776491	PASS
199	198	5	15	6.7	52075	PASS
275	198	15	50	32.5	252651	PASS
365	198	3	100	4.3	33277	PASS
441	443	0.01	100	78.3	265429	PASS
442	442	100	100	100.0	1805995	PASS
443	442	18	30	18.8	339157	PASS

Continuing Calibration

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Cl2-BZ#15-C13	1.000	1.000	0.0	68	0.00
2	s	Cl3-BZ#19-C13 (surr)	0.352	0.372	-5.7	72	0.00
3	A1	Cl1-BZ#1-Cal/RTW	0.922	0.999	-8.4	74	0.00
4	A2	Monochlorobiphenyls	0.922	0.000#	100.0#	0#	-14.59#
5	A2	Cl1- conf Ion	0.922	0.000#	100.0#	0#	-14.59#
6	T	Cl1-BZ#2	0.970	1.044	-7.6	73	0.00
7	T	Cl1-BZ#3-RTW	0.952	1.031	-8.3	73	0.00
8	T	Cl2-BZ#4/#10-RTW	0.557	0.599	-7.5	72	0.00
9	T	Cl2-BZ#9	0.716	0.771	-7.7	72	0.00
10	T	Cl2-BZ#7	0.698	0.750	-7.4	71	0.00
11	T	Cl2-BZ#6	0.768	0.820	-6.8	72	0.00
12	T	Cl2-BZ#5	0.698	0.739	-5.9	72	0.00
13	A1	Cl2-BZ#8	0.794	0.851	-7.2	72	0.00
14	A2	Dichlorobiphenyls	0.794	0.000#	100.0#	0#	-17.55#
15	A2	Cl2-Conf Ion	0.794	0.000#	100.0#	0#	-17.55#
16	T	Cl3-BZ#19-RTW	0.392	0.408	-4.1	71	0.00
17	T	Cl2-BZ#14	0.766	0.822	-7.3	72	0.00
18	T	Cl3-BZ#30	0.626	0.669	-6.9	72	0.00
19	T	Cl3-BZ#18	0.436	0.453	-3.9	71	0.00
20	T	Cl2-BZ#11	0.822	0.892	-8.5	72	0.00
21	T	Cl3-BZ#17	0.406	0.422	-3.9	70	0.00
22	T	Cl2-BZ#12	0.727	0.787	-8.3	72	0.00
23	T	Cl3-BZ#27	0.562	0.594	-5.7	70	0.00
24	T	Cl2-BZ#13	0.838	0.901	-7.5	72	0.00
25	T	Cl3-BZ#24	0.577	0.610	-5.7	71	0.00
26	T	Cl3-BZ#16	0.354	0.369	-4.2	71	0.00
27	T	Cl3-BZ#32	0.620	0.646	-4.2	71	0.00
28	T	Cl2-BZ#15-RTW	0.849	0.880	-3.7	70	0.00
29	T	Cl3-BZ#34	0.579	0.615	-6.2	71	0.00
30	T	Cl3-BZ#23	0.569	0.607	-6.7	71	0.00
31	T	Cl4-BZ#54-RTW	0.530	0.555	-4.7	70	0.00
32	A1	Cl3-BZ#29-Cal	0.574	0.609	-6.1	71	0.00
33	A2	Trichlorobiphenyls	0.574	0.000#	100.0#	0#	-26.21#
34	A2	Cl3- Conf Ion	0.574	0.000#	100.0#	0#	-26.21#
35	A1	Cl4-BZ#50-Cal	0.443	0.469	-5.9	71	0.00
36	A2	Tetrachlorobiphenyls	0.443	0.000#	100.0#	0#	-28.37#
37	A2	Cl4-Conf Ion	0.443	0.000#	100.0#	0#	-28.36#
38	T	Cl3-BZ#26	0.644	0.675	-4.8	71	0.00
39	T	Cl3-BZ#25	0.627	0.666	-6.2	71	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Cl4-BZ#53	0.489	0.514	-5.1	71	0.02
41	T	Cl3-BZ#-31	0.866	0.907	-4.7	71	0.00
42	T	Cl3-BZ#28	0.853	0.917	-7.5	72	0.00
43	T	Cl3-BZ#33	0.608	0.692	-13.8	73	0.00
44	T	Cl3-BZ#21/#20	0.770	0.817	-6.1	69	0.00
45	T	Cl4-BZ#51	0.539	0.572	-6.1	69	0.02
46	T	Cl4-BZ#45	0.421	0.452	-7.4	71	0.00
47	T	Cl3-BZ#22	0.750	0.818	-9.1	72	0.00
48	T	Cl4-BZ#73/#46	0.563	0.600	-6.6	69	0.02
49	T	Cl4-BZ#69	0.673	0.735	-9.2	72	0.02
50	T	Cl4-BZ#43	0.444	0.463	-4.3	70	0.00
51	T	Cl3-BZ#36	0.835	0.923	-10.5	72	0.02
52	T	Cl4-BZ#52	0.547	0.565	-3.3	70	0.02
53	T	Cl4-BZ#48	0.486	0.525	-8.0	71	0.00
54	T	Cl4-BZ#49	0.523	0.553	-5.7	71	0.00
55	T	Cl5-BZ#104-RTW	0.540	0.582	-7.8	72	0.00
56	T	Cl4-BZ#47	0.564	0.594	-5.3	76	0.00
57	T	Cl4-BZ#65/#75/#62	0.662	0.719	-8.6	69	0.00
58	T	Cl3-BZ#39	0.769	0.819	-6.5	71	0.02
59	T	Cl3-BZ#38	0.742	0.844	-13.7	73	0.00
60	T	Cl4-BZ#44	0.455	0.490	-7.7	72	0.02
61	T	Cl4-BZ#59	0.667	0.705	-5.7	72	0.00
62	T	Cl4-BZ#42	0.432	0.476	-10.2	71	0.02
63	T	Cl4-BZ#71	0.701	0.747	-6.6	72	0.00
64	T	Cl3-BZ#35	0.776	0.857	-10.4	73	0.00
65	T	Cl4-BZ#41	0.426	0.461	-8.2	72	0.00
66	T	Cl4-BZ#72	0.733	0.805	-9.8	70	0.00
67	T	Cl5-BZ#96	0.584	0.629	-7.7	70	0.00
68	T	Cl5-BZ#103	0.451	0.505	-12.0	73	0.00
69	T	Cl4-BZ#68/#64	0.679	0.746	-9.9	71	0.00
70	T	Cl4-BZ#40	0.331	0.355	-7.3	71	0.00
71	T	Cl3-BZ#37-RTW	1.031	1.122	-8.8	71	0.02
72	T	Cl5-BZ#100	0.486	0.531	-9.3	72	0.02
73	T	Cl5-BZ#94	0.359	0.405	-12.8	72	0.00
74	T	Cl4-BZ#57	0.730	0.789	-8.1	69	0.00
75	T	Cl4-BZ#67/#58	0.735	0.813	-10.6	72	0.02
76	T	Cl5-BZ#102	0.517	0.561	-8.5	71	0.00
77	T	Cl4-BZ#61	0.723	0.796	-10.1	72	0.00
78	T	Cl5-BZ#98	0.473	0.514	-8.7	71	0.02

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	T	Cl4-BZ#76	0.764	0.867	-13.5	73	0.00
80	T	Cl5-BZ#93	0.382	0.421	-10.2	72	0.00
81	T	Cl4-BZ#63	0.686	0.706	-2.9	67	0.02
82	T	Cl5-BZ#121/#95/#88	0.507	0.554	-9.3	71	0.00
83	T	Cl4-BZ#74	0.759	0.840	-10.7	73	0.00
84	T	Cl6-BZ#155-RTW	0.562	0.606	-7.8	71	0.00
85	T	Cl4-BZ#70	0.781	0.846	-8.3	71	0.00
86	T	Cl4-BZ#66	0.707	0.785	-11.0	72	0.02
87	T	Cl5-BZ#91	0.447	0.484	-8.3	73	0.00
88	T	Cl4-BZ#80	0.741	0.820	-10.7	73	0.00
89	T	Cl4-BZ#55	0.756	0.834	-10.3	72	0.00
90	T	Cl5-BZ#92	0.436	0.473	-8.5	71	0.00
91	T	Cl5-BZ#89/#84	0.418	0.458	-9.6	72	0.00
92	T	Cl5-BZ#101/#90	0.481	0.494	-2.7	67	0.00
93	s	Cl5-BZ#101-C13 (surr)	0.514	0.557	-8.4	70	0.02
94	T	Cl4-BZ#56	0.748	0.811	-8.4	70	0.00
95	T	Cl5-BZ#113	0.566	0.666	-17.7	78	0.00
96	T	Cl5-BZ#99	0.543	0.603	-11.0	74	0.00
97	T	Cl6-BZ#150	0.602	0.638	-6.0	70	0.02
98	T	Cl4-BZ#60	0.800	0.866	-8.2	71	0.00
99	T	Cl6-BZ#152	0.646	0.713	-10.4	72	0.00
100	T	Cl5-BZ#119	0.658	0.766	-16.4	76	0.00
101	T	Cl5-BZ#83/#125/#112	0.548	0.572	-4.4	68	0.00
102	T	Cl5-BZ#86/#109	0.545	0.620	-13.8	76	0.02
103	T	Cl5-BZ#97	0.406	0.459	-13.1	72	0.00
104	T	Cl5-BZ#116	0.560	0.620	-10.7	73	0.00
105	A1	Cl5-BZ#87/#111	0.548	0.613	-11.9	73	0.00
106	A2	Pentachlorobiphenyls	0.548	0.000#	100.0#	0#	-34.26#
107	A2	Cl5-Conf Ion	0.548	0.000#	100.0#	0#	-37.65#
108	T	Cl6-BZ#145	0.667	0.708	-6.1	70	0.00
109	T	Cl6-BZ#148	0.456	0.498	-9.2	72	0.00
110	T	Cl4-BZ#79	0.736	0.823	-11.8	73	0.00
111	A1	Cl6-BZ#154-Cal	0.527	0.568	-7.8	71	0.02
112	A2	Hexachlorobiphenyls	0.527	0.000#	100.0#	0#	-37.12#
113	A2	Cl6-Conf Ion	0.527	0.000#	100.0#	0#	-37.12#
114	T	Cl4-BZ#78	0.912	1.041	-14.1	74	0.00
115	T	Cl6-BZ#136	0.584	0.624	-6.8	70	0.02
116	T	Cl5-BZ#117	0.693	0.692	0.1	65	0.00
117	T	Cl5-BZ#115	0.687	0.832	-21.1#	80	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
118	T	Cl5-BZ#85	0.429	0.435	-1.4	69	0.00
119	T	Cl5-BZ#120	0.671	0.763	-13.7	75	0.02
120	T	Cl5-BZ#110	0.648	0.702	-8.3	73	0.02
121	T	Cl4-BZ#81	0.739	0.818	-10.7	73	0.00
122	i	Cl7-BZ#180-C13	1.000	1.000	0.0	66	0.00
123	T	Cl6-BZ#151	0.855	0.940	-9.9	72	0.00
124	T	Cl6-BZ#135	0.902	1.015	-12.5	71	0.00
125	T	Cl5-BZ#82	0.771	0.884	-14.7	73	0.02
126	T	Cl6-BZ#144	0.879	0.983	-11.8	72	0.00
127	T	Cl6-BZ#147/#149	0.939	1.046	-11.4	72	0.00
128	T	Cl4-BZ#77-RTW	1.283	1.422	-10.8	71	0.00
129	T	Cl6-BZ#143/#139	0.902	1.013	-12.3	71	0.00
130	T	Cl5-BZ#124	1.213	1.408	-16.1	74	0.00
131	T	Cl5-BZ#108	1.232	1.549	-25.7#	78	0.02
132	T	Cl5-BZ#107/#123	1.314	1.415	-7.7	70	0.00
133	T	Cl6-BZ#140	0.872	0.961	-10.2	71	0.00
134	A1	Cl7-BZ#188-Cal/RTW	1.025	1.135	-10.7	70	0.00
135	A2	Heptachlorobiphenyls	1.025	0.000#	100.0#	0#	-41.10#
136	A2	Cl7-Conf Ion	1.025	0.000#	100.0#	0#	-41.10#
137	T	Cl6-BZ#134	0.743	0.816	-9.8	69	0.00
138	T	Cl5-BZ#106	1.194	1.258	-5.4	62	0.00
139	T	Cl6-BZ#133	1.011	0.991	2.0	60	0.00
140	T	Cl6-BZ#142	0.680	0.877	-29.0#	90	0.00
141	T	Cl5-BZ#118	1.159	1.329	-14.7	74	0.02
142	T	Cl6-BZ#131	0.783	0.876	-11.9	73	0.02
143	T	Cl7-BZ#184	1.013	1.124	-11.0	72	0.02
144	T	Cl6-BZ#165	1.102	1.263	-14.6	73	0.00
145	T	Cl6-BZ#146	0.964	1.068	-10.8	72	0.00
146	T	Cl6-BZ#161	1.227	1.390	-13.3	73	0.00
147	T	Cl5-BZ#122	1.068	1.207	-13.0	73	0.00
148	T	Cl6-BZ#168	1.179	1.452	-23.2#	77	0.02
149	T	Cl5-BZ#114	1.173	1.322	-12.7	72	0.02
150	T	Cl6-BZ#153	1.050	1.006	4.2	65	0.02
151	s	Cl6-BZ#153-C13 (surr)	0.919	0.998	-8.6	70	0.00
152	T	Cl6-BZ#132	0.842	0.933	-10.8	73	0.02
153	T	Cl7-BZ#179	1.046	1.176	-12.4	74	0.00
154	T	Cl6-BZ#141	0.843	0.953	-13.0	74	0.02
155	T	Cl7-BZ#176	0.994	1.090	-9.7	72	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
156	T	Cl5-BZ#105	1.435	1.536	-7.0	71	0.00
157	T	Cl6-BZ#137	0.864	0.989	-14.5	73	0.02
158	T	Cl5-BZ#127	1.574	1.726	-9.7	72	0.02
159	T	Cl7-BZ#186	1.106	1.208	-9.2	70	0.00
160	T	Cl6-BZ#130/#164	1.008	1.129	-12.0	72	0.00
161	T	Cl7-BZ#178	0.758	0.851	-12.3	73	0.00
162	T	Cl6-BZ#138	1.024	1.182	-15.4	76	0.00
163	T	Cl6-BZ#163/#160	1.158	1.325	-14.4	73	0.00
164	T	Cl6-BZ#129/#158	0.966	1.036	-7.2	70	0.00
165	T	Cl7-BZ#182/#175	0.867	0.955	-10.1	70	0.00
166	T	Cl7-BZ#187	0.888	0.977	-10.0	72	0.00
167	T	Cl7-BZ#183	0.854	0.950	-11.2	72	0.00
168	T	Cl6-BZ#166	1.258	1.414	-12.4	73	0.00
169	T	Cl6-BZ#159	1.258	1.448	-15.1	75	0.02
170	T	Cl5-BZ#126-RTW	1.539	1.733	-12.6	72	0.00
171	T	Cl7-BZ#185	0.794	0.853	-7.4	71	0.02
172	T	Cl6-BZ#162	1.166	1.334	-14.4	74	0.02
173	T	Cl7-BZ#174	0.788	0.855	-8.5	70	0.02
174	T	Cl6-BZ#128	0.862	0.950	-10.2	71	0.00
175	T	Cl6-BZ#167	1.547	1.685	-8.9	71	0.00
176	T	Cl8-BZ#202-RTW	0.892	0.969	-8.6	70	0.02
177	s	Cl8-BZ#202-C13 (surr)	0.942	1.014	-7.6	71	0.00
178	T	Cl7-BZ#181	0.886	0.976	-10.2	70	0.00
179	T	Cl7-BZ#177	0.769	0.858	-11.6	73	0.00
180	A1	Cl8-BZ#204/#200-Cal	0.876	0.943	-7.6	70	0.00
181	A2	Octachlorobiphenyls	0.876	0.000#	100.0#	0#	-43.58#
182	A2	Cl8-Conf Ion	0.876	0.000#	100.0#	0#	-43.58#
183	T	Cl7-BZ#171	0.753	0.843	-12.0	73	0.02
184	T	Cl7-BZ#173	0.742	0.809	-9.0	72	0.00
185	T	Cl7-BZ#172	0.797	0.884	-10.9	74	0.00
186	T	Cl7-BZ#192	1.092	1.207	-10.5	72	0.02
187	T	Cl6-BZ#156	1.206	1.330	-10.3	72	0.00
188	T	Cl6-BZ#157	1.246	1.335	-7.1	70	0.00
189	T	Cl7-BZ#180	0.970	1.009	-4.0	69	0.00
190	T	Cl7-BZ#193	0.998	1.050	-5.2	68	0.00
191	T	Cl8-BZ#197	0.894	0.955	-6.8	70	0.00
192	T	Cl7-BZ#191	1.037	1.151	-11.0	73	0.00
193	T	Cl8-BZ#199	0.889	0.955	-7.4	71	0.00
194	T	Cl8-BZ#198	0.754	0.790	-4.8	74	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
195	T	Cl8-BZ#201	0.651	0.712	-9.4	67	0.02
196	T	Cl7-BZ#170	0.751	0.804	-7.1	71	0.00
197	T	Cl7-BZ#190	1.093	1.197	-9.5	71	0.00
198	T	Cl8-BZ#196	0.706	0.809	-14.6	74	0.00
199	T	Cl8-BZ#203	0.763	0.762	0.1	65	0.00
200	T	Cl6-BZ#169-RTW	1.332	1.468	-10.2	73	0.02
201	T	Cl9-BZ#208-RTW	0.943	0.975	-3.4	71	0.02
202	T	Cl9-BZ#207	0.921	0.986	-7.1	70	0.02
203	T	Cl7-BZ#189-RTW	0.995	1.079	-8.4	72	0.02
204	T	Cl8-BZ#195	0.694	0.728	-4.9	71	0.02
205	T	Cl8-BZ#194	0.743	0.786	-5.8	71	0.00
206	T	Cl8-BZ#205-RTW	0.910	0.959	-5.4	71	0.02
207	A1	Cl9-BZ#206-Cal/RTW	0.759	0.804	-5.9	71	0.02
208	A2	Nonachlorobiphenyls	0.759	0.000#	100.0#	0#	-49.49#
209	A2	Cl9-Conf Ion	0.759	0.000#	100.0#	0#	-49.49#
210	A1	Cl10-BZ#209-Cal/RTW	0.753	0.791	-5.0	70	0.00
211	A2	Decachlorobiphenyl	0.753	0.000#	100.0#	0#	-56.30#
212	A2	Cl10-Conf Ion	0.753	0.000#	100.0#	0#	-56.30#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.864	234	391222	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	205053	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	36372	52.870	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 52.87%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	54480	54.180	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 54.18%			
151) Cl6-BZ#153-C13 (surr)	38.720	372	51180	54.304	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 54.30%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	51988	53.834	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 53.83%			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.543	188	97700	54.188	ng/mL	99
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.626	188	102130	53.836	ng/mL	100
7) Cl1-BZ#3-RTW	17.084	188	100873	54.160	ng/mL	97
8) Cl2-BZ#4/#10-RTW	17.511	222	117140	107.550	ng/mL	99
9) Cl2-BZ#9	19.071	222	75363	53.803	ng/mL	100
10) Cl2-BZ#7	19.159	222	73379	53.763	ng/mL	98
11) Cl2-BZ#6	19.593	222	80233	53.388	ng/mL	98
12) Cl2-BZ#5	20.036	222	72255	52.921	ng/mL	100
13) Cl2-BZ#8	20.180	222	83191	53.587	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	20.969	256	39858	51.978	ng/mL	98
17) Cl2-BZ#14	21.105	222	80418	53.672	ng/mL	97
18) Cl3-BZ#30	21.523	256	65458	53.482	ng/mL	100
19) Cl3-BZ#18	22.336	256	44275	51.973	ng/mL	98
20) Cl2-BZ#11	22.456	222	87233	54.247	ng/mL	99
21) Cl3-BZ#17	22.537	256	41273	52.032	ng/mL	99
22) Cl2-BZ#12	22.850	222	76992	54.124	ng/mL	98
23) Cl3-BZ#27	22.899	256	58074	52.858	ng/mL	99
24) Cl2-BZ#13	23.148	222	88122	53.766	ng/mL	99
25) Cl3-BZ#24	23.172	256	59709	52.865	ng/mL	99
26) Cl3-BZ#16	23.518	256	36086	52.066	ng/mL	96
27) Cl3-BZ#32	23.719	256	63231	52.134	ng/mL	97
28) Cl2-BZ#15-RTW	23.880	222	86112	51.851	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.105	256	60155	53.071	ng/mL	99
30) Cl3-BZ#23	24.290	256	59354	53.361	ng/mL	100
31) Cl4-BZ#54-RTW	24.298	292	54237	52.305	ng/mL	99
32) Cl3-BZ#29-Cal	24.515	256	59577	53.055	ng/mL	98
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.022	292	45885	52.963	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.046	256	65989	52.392	ng/mL	97
39) Cl3-BZ#25	25.255	256	65096	53.089	ng/mL	99
40) Cl4-BZ#53	25.744	292	50308	52.639	ng/mL	100
41) Cl3-BZ#-31	25.827	256	88671	52.362	ng/mL	97
42) Cl3-BZ#28	26.025	256	89675	53.759	ng/mL	99
43) Cl3-BZ#33	26.108	256	67715M4	56.948	ng/mL	
44) Cl3-BZ#21/#20	26.158	256	159789M4	106.107	ng/mL	
45) Cl4-BZ#51	26.158	292	55903	52.988	ng/mL	99
46) Cl4-BZ#45	26.720	292	44189	53.635	ng/mL	99
47) Cl3-BZ#22	26.952	256	80003	54.529	ng/mL	100
48) Cl4-BZ#73/#46	27.101	292	117385	106.613	ng/mL	100
49) Cl4-BZ#69	27.382	292	71854	54.612	ng/mL	99
50) Cl4-BZ#43	27.465	292	45311	52.146	ng/mL	98
51) Cl3-BZ#36	27.515	256	90243	55.283	ng/mL	98
52) Cl4-BZ#52	27.614	292	55260	51.652	ng/mL	98
53) Cl4-BZ#48	27.780	292	51384	54.054	ng/mL	100
54) Cl4-BZ#49	27.929	292	54040	52.849	ng/mL	98
55) Cl5-BZ#104-RTW	28.144	326	56966	53.955	ng/mL	99
56) Cl4-BZ#47	28.226	292	58101M4	52.690	ng/mL	
57) Cl4-BZ#65/#75/#62	28.326	292	210832	162.739	ng/mL	99
58) Cl3-BZ#39	28.375	256	80057	53.211	ng/mL	99
59) Cl3-BZ#38	28.491	256	82539	56.885	ng/mL	98
60) Cl4-BZ#44	28.888	292	47877	53.786	ng/mL	98
61) Cl4-BZ#59	29.104	292	68935	52.808	ng/mL	98
62) Cl4-BZ#42	29.203	292	46566	55.066	ng/mL	95
63) Cl4-BZ#71	29.435	292	73100	53.322	ng/mL	100
64) Cl3-BZ#35	29.551	256	83853	55.262	ng/mL	100
65) Cl4-BZ#41	29.666	292	45074	54.145	ng/mL	99
66) Cl4-BZ#72	29.782	292	78727	54.876	ng/mL	98
67) Cl5-BZ#96	29.799	326	61494	53.863	ng/mL	96
68) Cl5-BZ#103	29.931	326	49377	55.946	ng/mL	96
69) Cl4-BZ#68/#64	30.097	292	145835	109.775	ng/mL	98

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70)	Cl4-BZ#40	30.213	292	34727	53.678	ng/mL	98
71)	Cl3-BZ#37-RTW	30.428	256	109765	54.411	ng/mL	99
72)	Cl5-BZ#100	30.428	326	51911	54.582	ng/mL	98
73)	Cl5-BZ#94	30.527	326	39583	56.375	ng/mL	98
74)	Cl4-BZ#57	30.626	292	77142	54.033	ng/mL	98
75)	Cl4-BZ#67/#58	30.957	292	159015	110.669	ng/mL	99
76)	Cl5-BZ#102	31.007	326	54890	54.297	ng/mL	100
77)	Cl4-BZ#61	31.305	292	77848	55.011	ng/mL	98
78)	Cl5-BZ#98	31.338	326	50314	54.327	ng/mL	98
79)	Cl4-BZ#76	31.470	292	84774	56.689	ng/mL	99
80)	Cl5-BZ#93	31.454	326	41158	55.091	ng/mL	99
81)	Cl4-BZ#63	31.570	292	69066M4	51.479	ng/mL	
82)	Cl5-BZ#121/#95/#88	31.619	326	162661	164.055	ng/mL	99
83)	Cl4-BZ#74	31.834	292	82118	55.336	ng/mL	98
84)	Cl6-BZ#155-RTW	31.967	360	59266	53.921	ng/mL	100
85)	Cl4-BZ#70	32.000	292	82782	54.161	ng/mL	97
86)	Cl4-BZ#66	32.298	292	76768	55.481	ng/mL	98
87)	Cl5-BZ#91	32.166	326	47373	54.204	ng/mL	100
88)	Cl4-BZ#80	32.563	292	80213	55.364	ng/mL	100
89)	Cl4-BZ#55	32.745	292	81543	55.119	ng/mL	98
90)	Cl5-BZ#92	32.794	326	46241	54.236	ng/mL	97
91)	Cl5-BZ#89/#84	33.076	326	89516	109.562	ng/mL	95
92)	Cl5-BZ#101/#90	33.208	326	96668M4	102.701	ng/mL	
94)	Cl4-BZ#56	33.208	292	79302	54.183	ng/mL	99
95)	Cl5-BZ#113	33.308	326	65182	58.910	ng/mL	98
96)	Cl5-BZ#99	33.572	326	59000	55.509	ng/mL	98
97)	Cl6-BZ#150	33.639	360	62396	52.946	ng/mL	100
98)	Cl4-BZ#60	33.639	292	84657	54.131	ng/mL	98
99)	Cl6-BZ#152	33.986	360	69769	55.221	ng/mL	100
100)	Cl5-BZ#119	34.069	326	74959	58.224	ng/mL	97
101)	Cl5-BZ#83/#125/#112	34.218	326	167976M4	156.787	ng/mL	
102)	Cl5-BZ#86/#109	34.400	326	121325M4	113.902	ng/mL	
103)	Cl5-BZ#97	34.499	326	44861	56.495	ng/mL	97
104)	Cl5-BZ#116	34.963	326	60639	55.336	ng/mL	98
105)	Cl5-BZ#87/#111	35.260	326	119901M4	111.926	ng/mL	
106)	Pentachlorobiphenyls	0.000		0	N.D.	d	
107)	Cl5-Conf Ion	0.000		0	N.D.	d	
108)	Cl6-BZ#145	34.433	360	69217	53.066	ng/mL	99
109)	Cl6-BZ#148	34.632	360	48732	54.684	ng/mL	98
110)	Cl4-BZ#79	34.747	292	80526	55.896	ng/mL	99
111)	Cl6-BZ#154-Cal	35.178	360	55583	53.968	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
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Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.227	292	101827M4	57.103	ng/mL	
115) Cl6-BZ#136	35.310	360	61032	53.454	ng/mL	98
116) Cl5-BZ#117	35.360	326	67714M4	49.944	ng/mL	
117) Cl5-BZ#115	35.443	326	81406M4	60.589	ng/mL	
118) Cl5-BZ#85	35.525	326	42552	50.706	ng/mL	100
119) Cl5-BZ#120	35.674	326	74592	56.794	ng/mL	100
120) Cl5-BZ#110	35.823	326	68656	54.158	ng/mL	99
121) Cl4-BZ#81	36.187	292	80053	55.352	ng/mL	99
123) Cl6-BZ#151	36.204	360	48195	54.979	ng/mL	97
124) Cl6-BZ#135	36.336	360	52055	56.297	ng/mL	100
125) Cl5-BZ#82	36.518	326	45337	57.321	ng/mL	98
126) Cl6-BZ#144	36.535	360	50380	55.889	ng/mL	99
127) Cl6-BZ#147/#149	36.849	360	107196	111.379	ng/mL	98
128) Cl4-BZ#77-RTW	36.949	292	72912M4	55.436	ng/mL	
129) Cl6-BZ#143/#139	37.081	360	103881	112.310	ng/mL	99
130) Cl5-BZ#124	37.230	326	72184	58.045	ng/mL	100
131) Cl5-BZ#108	37.528	326	79419	62.871	ng/mL	100
132) Cl5-BZ#107/#123	37.611	326	145067M4	107.711	ng/mL	
133) Cl6-BZ#140	37.263	360	49289	55.138	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.627	394	58200	55.364	ng/mL	100
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.710	360	41818	54.889	ng/mL	92
138) Cl5-BZ#106	37.743	326	64491	52.662	ng/mL	97
139) Cl6-BZ#133	37.826	360	50823M4	49.012	ng/mL	
140) Cl6-BZ#142	37.842	360	44950M4	64.503	ng/mL	
141) Cl5-BZ#118	37.991	326	68145	57.330	ng/mL	98
142) Cl6-BZ#131	37.991	360	44894	55.918	ng/mL	99
143) Cl7-BZ#184	38.124	394	57606	55.449	ng/mL	98
144) Cl6-BZ#165	38.173	360	64741	57.316	ng/mL	97
145) Cl6-BZ#146	38.289	360	54743	55.362	ng/mL	99
146) Cl6-BZ#161	38.455	360	71251	56.638	ng/mL	99
147) Cl5-BZ#122	38.438	326	61874	56.502	ng/mL	99
148) Cl6-BZ#168	38.686	360	74410	61.555	ng/mL	99
149) Cl5-BZ#114	38.736	326	67760	56.348	ng/mL	100
150) Cl6-BZ#153	38.753	360	51568	47.914	ng/mL	97
152) Cl6-BZ#132	39.017	360	47808	55.349	ng/mL	98
153) Cl7-BZ#179	39.266	394	60301	56.220	ng/mL	100
154) Cl6-BZ#141	39.580	360	48869	56.554	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.762	394	55896	54.870	ng/mL	99
156) Cl5-BZ#105	39.828	326	78748	53.512	ng/mL#	75
157) Cl6-BZ#137	40.011	360	50709	57.252	ng/mL	98
158) Cl5-BZ#127	40.160	326	88479	54.812	ng/mL#	74
159) Cl7-BZ#186	40.093	394	61920	54.619	ng/mL	99
160) Cl6-BZ#130/#164	40.342	360	115779	112.057	ng/mL	98
161) Cl7-BZ#178	40.639	394	43620	56.150	ng/mL	98
162) Cl6-BZ#138	40.706	360	60614	57.712	ng/mL	99
163) Cl6-BZ#163/#160	40.805	360	135867M4	114.392	ng/mL	
164) Cl6-BZ#129/#158	41.004	360	106199M4	107.262	ng/mL	
165) Cl7-BZ#182/#175	41.037	394	97909	110.104	ng/mL	100
166) Cl7-BZ#187	41.219	394	50090	54.998	ng/mL	96
167) Cl7-BZ#183	41.599	394	48677	55.610	ng/mL	98
168) Cl6-BZ#166	41.964	360	72494	56.188	ng/mL	99
169) Cl6-BZ#159	42.228	360	74217	57.523	ng/mL	99
170) Cl5-BZ#126-RTW	42.427	326	88839	56.306	ng/mL	89
171) Cl7-BZ#185	42.477	394	43721	53.698	ng/mL	99
172) Cl6-BZ#162	42.559	360	68362	57.174	ng/mL	98
173) Cl7-BZ#174	42.708	394	43817	54.204	ng/mL	100
174) Cl6-BZ#128	42.708	360	48721	55.097	ng/mL	99
175) Cl6-BZ#167	43.006	360	86370	54.438	ng/mL	93
176) Cl8-BZ#202-RTW	42.957	428	49678	54.306	ng/mL	100
178) Cl7-BZ#181	43.089	394	50057	55.078	ng/mL	97
179) Cl7-BZ#177	43.420	394	44000	55.838	ng/mL	98
180) Cl8-BZ#204/#200-Cal	43.519	428	96658	107.598	ng/mL	99
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.734	394	43200	55.975	ng/mL	99
184) Cl7-BZ#173	43.950	394	41449	54.509	ng/mL	100
185) Cl7-BZ#172	44.396	394	45307	55.416	ng/mL	97
186) Cl7-BZ#192	44.612	394	61868	55.250	ng/mL	99
187) Cl6-BZ#156	44.612	360	68187	55.154	ng/mL	99
188) Cl6-BZ#157	44.860	360	68427	53.582	ng/mL	97
189) Cl7-BZ#180	44.893	394	51744	52.023	ng/mL	96
190) Cl7-BZ#193	44.992	394	53820	52.579	ng/mL	99
191) Cl8-BZ#197	44.032	428	48940	53.374	ng/mL	98
192) Cl7-BZ#191	45.323	394	59011	55.519	ng/mL	98
193) Cl8-BZ#199	45.141	428	48946	53.719	ng/mL	98
194) Cl8-BZ#198	46.680	428	40493	52.365	ng/mL	99
195) Cl8-BZ#201	46.780	428	36481	54.663	ng/mL	98
196) Cl7-BZ#170	46.896	394	41221	53.528	ng/mL	96

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.227	394	61377	54.758	ng/mL	96
198) Cl8-BZ#196	47.227	428	41467	57.295	ng/mL	100
199) Cl8-BZ#203	47.309	428	39047	49.936	ng/mL	99
200) Cl6-BZ#169-RTW	47.607	360	75259	55.112	ng/mL	99
201) Cl9-BZ#208-RTW	48.749	464	49987	51.693	ng/mL	99
202) Cl9-BZ#207	49.428	464	50547	53.558	ng/mL	96
203) Cl7-BZ#189-RTW	49.593	394	55304	54.201	ng/mL	98
204) Cl8-BZ#195	49.742	428	37308	52.454	ng/mL	97
205) Cl8-BZ#194	51.414	428	40306	52.933	ng/mL	97
206) Cl8-BZ#205-RTW	52.010	428	49179	52.701	ng/mL	99
207) Cl9-BZ#206-Cal/RTW	54.029	464	41209	52.962	ng/mL	100
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.296	498	40525	52.513	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

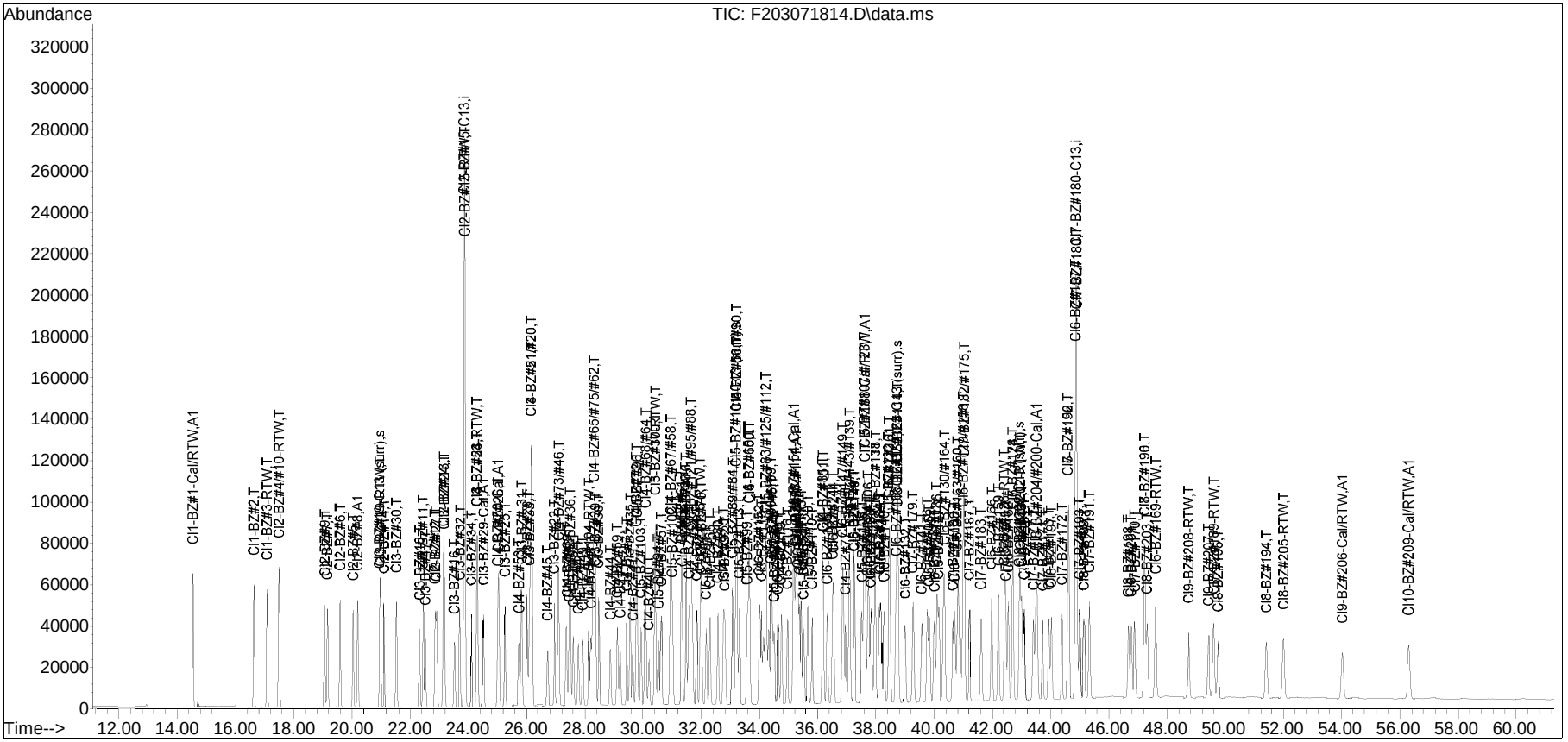
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071814.D
Acq On : 8 Mar 2018 2:10 am
Operator : BNA2:MJS
Sample : WG1095518-4
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:51:12 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed



Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Cl2-BZ#15-C13	1.000	1.000	0.0	55	0.00
2	s	Cl3-BZ#19-C13 (surr)	0.352	0.377	-7.1	59	0.00
3	A1	Cl1-BZ#1-Cal/RTW	0.922	1.025	-11.2	61	0.00
4	A2	Monochlorobiphenyls	0.922	0.000#	100.0#	0#	-14.59#
5	A2	Cl1- conf Ion	0.922	0.000#	100.0#	0#	-14.59#
6	T	Cl1-BZ#2	0.970	1.052	-8.5	60	0.00
7	T	Cl1-BZ#3-RTW	0.952	1.037	-8.9	60	0.00
8	T	Cl2-BZ#4/#10-RTW	0.557	0.615	-10.4	60	0.00
9	T	Cl2-BZ#9	0.716	0.770	-7.5	59	0.00
10	T	Cl2-BZ#7	0.698	0.760	-8.9	59	0.00
11	T	Cl2-BZ#6	0.768	0.826	-7.6	59	0.00
12	T	Cl2-BZ#5	0.698	0.743	-6.4	59	0.00
13	A1	Cl2-BZ#8	0.794	0.854	-7.6	59	0.00
14	A2	Dichlorobiphenyls	0.794	0.000#	100.0#	0#	-17.55#
15	A2	Cl2-Conf Ion	0.794	0.000#	100.0#	0#	-17.55#
16	T	Cl3-BZ#19-RTW	0.392	0.420	-7.1	59	0.00
17	T	Cl2-BZ#14	0.766	0.816	-6.5	58	0.00
18	T	Cl3-BZ#30	0.626	0.670	-7.0	59	0.00
19	T	Cl3-BZ#18	0.436	0.453	-3.9	58	0.00
20	T	Cl2-BZ#11	0.822	0.874	-6.3	57	0.00
21	T	Cl3-BZ#17	0.406	0.428	-5.4	58	0.00
22	T	Cl2-BZ#12	0.727	0.774	-6.5	58	0.00
23	T	Cl3-BZ#27	0.562	0.600	-6.8	58	0.00
24	T	Cl2-BZ#13	0.838	0.892	-6.4	58	0.00
25	T	Cl3-BZ#24	0.577	0.619	-7.3	58	0.00
26	T	Cl3-BZ#16	0.354	0.369	-4.2	58	0.00
27	T	Cl3-BZ#32	0.620	0.652	-5.2	58	0.00
28	T	Cl2-BZ#15-RTW	0.849	0.878	-3.4	57	0.00
29	T	Cl3-BZ#34	0.579	0.616	-6.4	58	0.00
30	T	Cl3-BZ#23	0.569	0.608	-6.9	58	0.00
31	T	Cl4-BZ#54-RTW	0.530	0.571	-7.7	58	0.00
32	A1	Cl3-BZ#29-Cal	0.574	0.605	-5.4	57	0.00
33	A2	Trichlorobiphenyls	0.574	0.000#	100.0#	0#	-26.21#
34	A2	Cl3- Conf Ion	0.574	0.000#	100.0#	0#	-26.21#
35	A1	Cl4-BZ#50-Cal	0.443	0.465	-5.0	57	0.00
36	A2	Tetrachlorobiphenyls	0.443	0.000#	100.0#	0#	-28.37#
37	A2	Cl4-Conf Ion	0.443	0.000#	100.0#	0#	-28.36#
38	T	Cl3-BZ#26	0.644	0.670	-4.0	57	0.00
39	T	Cl3-BZ#25	0.627	0.652	-4.0	57	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	T	Cl4-BZ#53	0.489	0.509	-4.1	57	0.00
41	T	Cl3-BZ#-31	0.866	0.883	-2.0	56	0.00
42	T	Cl3-BZ#28	0.853	0.838	1.8	54	0.00
43	T	Cl3-BZ#33	0.608	0.757	-24.5#	65	0.00
44	T	Cl3-BZ#21/#20	0.770	0.800	-3.9	55	0.00
45	T	Cl4-BZ#51	0.539	0.584	-8.3	57	0.02
46	T	Cl4-BZ#45	0.421	0.443	-5.2	57	0.00
47	T	Cl3-BZ#22	0.750	0.800	-6.7	57	0.00
48	T	Cl4-BZ#73/#46	0.563	0.604	-7.3	57	0.00
49	T	Cl4-BZ#69	0.673	0.685	-1.8	55	0.00
50	T	Cl4-BZ#43	0.444	0.488	-9.9	60	0.00
51	T	Cl3-BZ#36	0.835	0.910	-9.0	58	0.00
52	T	Cl4-BZ#52	0.547	0.569	-4.0	57	0.02
53	T	Cl4-BZ#48	0.486	0.519	-6.8	57	0.00
54	T	Cl4-BZ#49	0.523	0.542	-3.6	57	0.00
55	T	Cl5-BZ#104-RTW	0.540	0.584	-8.1	59	0.00
56	T	Cl4-BZ#47	0.564	0.596	-5.7	62	0.00
57	T	Cl4-BZ#65/#75/#62	0.662	0.713	-7.7	56	0.00
58	T	Cl3-BZ#39	0.769	0.816	-6.1	57	0.00
59	T	Cl3-BZ#38	0.742	0.816	-10.0	58	0.00
60	T	Cl4-BZ#44	0.455	0.471	-3.5	57	0.00
61	T	Cl4-BZ#59	0.667	0.693	-3.9	58	0.00
62	T	Cl4-BZ#42	0.432	0.465	-7.6	56	0.02
63	T	Cl4-BZ#71	0.701	0.735	-4.9	57	0.00
64	T	Cl3-BZ#35	0.776	0.826	-6.4	57	0.00
65	T	Cl4-BZ#41	0.426	0.453	-6.3	57	0.00
66	T	Cl4-BZ#72	0.733	0.795	-8.5	57	0.00
67	T	Cl5-BZ#96	0.584	0.643	-10.1	59	0.00
68	T	Cl5-BZ#103	0.451	0.496	-10.0	59	0.00
69	T	Cl4-BZ#68/#64	0.679	0.735	-8.2	57	0.00
70	T	Cl4-BZ#40	0.331	0.345	-4.2	56	0.00
71	T	Cl3-BZ#37-RTW	1.031	1.083	-5.0	56	0.02
72	T	Cl5-BZ#100	0.486	0.539	-10.9	59	0.02
73	T	Cl5-BZ#94	0.359	0.402	-12.0	59	0.00
74	T	Cl4-BZ#57	0.730	0.766	-4.9	55	0.00
75	T	Cl4-BZ#67/#58	0.735	0.796	-8.3	57	0.02
76	T	Cl5-BZ#102	0.517	0.570	-10.3	59	0.00
77	T	Cl4-BZ#61	0.723	0.758	-4.8	56	0.00
78	T	Cl5-BZ#98	0.473	0.518	-9.5	58	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	T	Cl4-BZ#76	0.764	0.867	-13.5	60	0.00
80	T	Cl5-BZ#93	0.382	0.421	-10.2	59	0.00
81	T	Cl4-BZ#63	0.686	0.698	-1.7	54	0.00
82	T	Cl5-BZ#121/#95/#88	0.507	0.563	-11.0	58	0.00
83	T	Cl4-BZ#74	0.759	0.804	-5.9	57	0.00
84	T	Cl6-BZ#155-RTW	0.562	0.596	-6.0	57	0.00
85	T	Cl4-BZ#70	0.781	0.834	-6.8	57	0.00
86	T	Cl4-BZ#66	0.707	0.760	-7.5	57	0.02
87	T	Cl5-BZ#91	0.447	0.478	-6.9	59	0.00
88	T	Cl4-BZ#80	0.741	0.790	-6.6	57	0.00
89	T	Cl4-BZ#55	0.756	0.794	-5.0	56	0.00
90	T	Cl5-BZ#92	0.436	0.475	-8.9	58	0.00
91	T	Cl5-BZ#89/#84	0.418	0.449	-7.4	58	0.00
92	T	Cl5-BZ#101/#90	0.481	0.520	-8.1	57	0.00
93	s	Cl5-BZ#101-C13 (surr)	0.514	0.554	-7.8	57	0.02
94	T	Cl4-BZ#56	0.748	0.802	-7.2	57	0.00
95	T	Cl5-BZ#113	0.566	0.651	-15.0	62	0.00
96	T	Cl5-BZ#99	0.543	0.581	-7.0	58	0.00
97	T	Cl6-BZ#150	0.602	0.655	-8.8	58	0.00
98	T	Cl4-BZ#60	0.800	0.847	-5.9	56	0.00
99	T	Cl6-BZ#152	0.646	0.701	-8.5	58	0.00
100	T	Cl5-BZ#119	0.658	0.772	-17.3	62	0.00
101	T	Cl5-BZ#83/#125/#112	0.548	0.575	-4.9	56	0.00
102	T	Cl5-BZ#86/#109	0.545	0.608	-11.6	60	0.00
103	T	Cl5-BZ#97	0.406	0.454	-11.8	58	0.00
104	T	Cl5-BZ#116	0.560	0.604	-7.9	58	0.00
105	A1	Cl5-BZ#87/#111	0.548	0.615	-12.2	59	0.00
106	A2	Pentachlorobiphenyls	0.548	0.000#	100.0#	0#	-34.26#
107	A2	Cl5-Conf Ion	0.548	0.000#	100.0#	0#	-37.65#
108	T	Cl6-BZ#145	0.667	0.724	-8.5	58	0.00
109	T	Cl6-BZ#148	0.456	0.492	-7.9	58	0.00
110	T	Cl4-BZ#79	0.736	0.783	-6.4	57	0.00
111	A1	Cl6-BZ#154-Cal	0.527	0.564	-7.0	57	0.00
112	A2	Hexachlorobiphenyls	0.527	0.000#	100.0#	0#	-37.12#
113	A2	Cl6-Conf Ion	0.527	0.000#	100.0#	0#	-37.12#
114	T	Cl4-BZ#78	0.912	0.970	-6.4	56	0.00
115	T	Cl6-BZ#136	0.584	0.640	-9.6	58	0.00
116	T	Cl5-BZ#117	0.693	0.704	-1.6	54	0.00
117	T	Cl5-BZ#115	0.687	0.818	-19.1	64	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
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Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
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ALS Vial : 2 Sample Multiplier: 1

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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
118	T	Cl5-BZ#85	0.429	0.422	1.6	55	0.00
119	T	Cl5-BZ#120	0.671	0.746	-11.2	60	0.00
120	T	Cl5-BZ#110	0.648	0.685	-5.7	58	0.00
121	T	Cl4-BZ#81	0.739	0.777	-5.1	57	0.00
122	i	Cl7-BZ#180-C13	1.000	1.000	0.0	56	0.00
123	T	Cl6-BZ#151	0.855	0.906	-6.0	59	0.00
124	T	Cl6-BZ#135	0.902	0.972	-7.8	58	0.00
125	T	Cl5-BZ#82	0.771	0.839	-8.8	59	0.02
126	T	Cl6-BZ#144	0.879	0.943	-7.3	58	0.00
127	T	Cl6-BZ#147/#149	0.939	0.988	-5.2	58	0.00
128	T	Cl4-BZ#77-RTW	1.283	1.281	0.2	54	0.00
129	T	Cl6-BZ#143/#139	0.902	0.983	-9.0	58	0.00
130	T	Cl5-BZ#124	1.213	1.307	-7.7	58	0.00
131	T	Cl5-BZ#108	1.232	1.247	-1.2	53	0.00
132	T	Cl5-BZ#107/#123	1.314	1.456	-10.8	61	0.00
133	T	Cl6-BZ#140	0.872	0.924	-6.0	58	0.00
134	A1	Cl7-BZ#188-Cal/RTW	1.025	1.114	-8.7	58	0.00
135	A2	Heptachlorobiphenyls	1.025	0.000#	100.0#	0#	-41.10#
136	A2	Cl7-Conf Ion	1.025	0.000#	100.0#	0#	-41.10#
137	T	Cl6-BZ#134	0.743	0.786	-5.8	56	0.00
138	T	Cl5-BZ#106	1.194	1.203	-0.8	50	0.00
139	T	Cl6-BZ#133	1.011	1.019	-0.8	52	0.00
140	T	Cl6-BZ#142	0.680	0.791	-16.3	68	0.00
141	T	Cl5-BZ#118	1.159	1.266	-9.2	59	0.00
142	T	Cl6-BZ#131	0.783	0.836	-6.8	59	0.00
143	T	Cl7-BZ#184	1.013	1.073	-5.9	58	0.00
144	T	Cl6-BZ#165	1.102	1.167	-5.9	57	0.00
145	T	Cl6-BZ#146	0.964	1.046	-8.5	60	0.00
146	T	Cl6-BZ#161	1.227	1.305	-6.4	57	0.00
147	T	Cl5-BZ#122	1.068	1.150	-7.7	58	0.00
148	T	Cl6-BZ#168	1.179	1.187	-0.7	53	0.00
149	T	Cl5-BZ#114	1.173	1.270	-8.3	58	0.00
150	T	Cl6-BZ#153	1.050	1.176	-12.0	64	0.00
151	s	Cl6-BZ#153-C13 (surr)	0.919	0.976	-6.2	57	0.00
152	T	Cl6-BZ#132	0.842	0.884	-5.0	58	0.00
153	T	Cl7-BZ#179	1.046	1.100	-5.2	58	0.00
154	T	Cl6-BZ#141	0.843	0.889	-5.5	58	0.00
155	T	Cl7-BZ#176	0.994	1.042	-4.8	58	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
156	T	Cl5-BZ#105	1.435	1.437	-0.1	56	0.00
157	T	Cl6-BZ#137	0.864	0.931	-7.8	58	0.02
158	T	Cl5-BZ#127	1.574	1.631	-3.6	57	0.00
159	T	Cl7-BZ#186	1.106	1.169	-5.7	57	0.00
160	T	Cl6-BZ#130/#164	1.008	1.068	-6.0	58	0.00
161	T	Cl7-BZ#178	0.758	0.796	-5.0	58	0.00
162	T	Cl6-BZ#138	1.024	1.159	-13.2	62	0.00
163	T	Cl6-BZ#163/#160	1.158	1.176	-1.6	54	0.00
164	T	Cl6-BZ#129/#158	0.966	1.057	-9.4	61	0.00
165	T	Cl7-BZ#182/#175	0.867	0.948	-9.3	58	0.00
166	T	Cl7-BZ#187	0.888	0.926	-4.3	57	0.00
167	T	Cl7-BZ#183	0.854	0.899	-5.3	58	0.00
168	T	Cl6-BZ#166	1.258	1.327	-5.5	58	0.00
169	T	Cl6-BZ#159	1.258	1.305	-3.7	57	0.00
170	T	Cl5-BZ#126-RTW	1.539	1.608	-4.5	57	0.00
171	T	Cl7-BZ#185	0.794	0.827	-4.2	58	0.00
172	T	Cl6-BZ#162	1.166	1.239	-6.3	58	0.02
173	T	Cl7-BZ#174	0.788	0.829	-5.2	58	0.02
174	T	Cl6-BZ#128	0.862	0.919	-6.6	58	0.00
175	T	Cl6-BZ#167	1.547	1.674	-8.2	59	0.00
176	T	Cl8-BZ#202-RTW	0.892	0.955	-7.1	58	0.00
177	s	Cl8-BZ#202-C13 (surr)	0.942	0.978	-3.8	58	0.00
178	T	Cl7-BZ#181	0.886	0.951	-7.3	58	0.00
179	T	Cl7-BZ#177	0.769	0.816	-6.1	58	0.00
180	A1	Cl8-BZ#204/#200-Cal	0.876	0.919	-4.9	57	0.00
181	A2	Octachlorobiphenyls	0.876	0.000#	100.0#	0#	-43.58#
182	A2	Cl8-Conf Ion	0.876	0.000#	100.0#	0#	-43.58#
183	T	Cl7-BZ#171	0.753	0.786	-4.4	57	0.02
184	T	Cl7-BZ#173	0.742	0.776	-4.6	58	0.00
185	T	Cl7-BZ#172	0.797	0.819	-2.8	58	0.00
186	T	Cl7-BZ#192	1.092	1.145	-4.9	57	0.00
187	T	Cl6-BZ#156	1.206	1.260	-4.5	58	0.00
188	T	Cl6-BZ#157	1.246	1.288	-3.4	57	0.00
189	T	Cl7-BZ#180	0.970	1.026	-5.8	59	0.00
190	T	Cl7-BZ#193	0.998	0.996	0.2	54	0.00
191	T	Cl8-BZ#197	0.894	0.932	-4.3	57	0.00
192	T	Cl7-BZ#191	1.037	1.076	-3.8	57	0.00
193	T	Cl8-BZ#199	0.889	0.912	-2.6	57	0.00
194	T	Cl8-BZ#198	0.754	0.774	-2.7	61	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
195 T	Cl8-BZ#201	0.651	0.666	-2.3	53	0.02
196 T	Cl7-BZ#170	0.751	0.772	-2.8	58	0.00
197 T	Cl7-BZ#190	1.093	1.151	-5.3	58	0.00
198 T	Cl8-BZ#196	0.706	0.700	0.8	54	0.00
199 T	Cl8-BZ#203	0.763	0.809	-6.0	58	0.00
200 T	Cl6-BZ#169-RTW	1.332	1.340	-0.6	56	0.00
201 T	Cl9-BZ#208-RTW	0.943	0.934	1.0	57	0.02
202 T	Cl9-BZ#207	0.921	0.951	-3.3	57	0.00
203 T	Cl7-BZ#189-RTW	0.995	1.024	-2.9	58	0.02
204 T	Cl8-BZ#195	0.694	0.694	0.0	57	0.02
205 T	Cl8-BZ#194	0.743	0.744	-0.1	57	0.00
206 T	Cl8-BZ#205-RTW	0.910	0.897	1.4	56	0.00
207 A1	Cl9-BZ#206-Cal/RTW	0.759	0.762	-0.4	57	0.00
208 A2	Nonachlorobiphenyls	0.759	0.000#	100.0#	0#	-49.49#
209 A2	Cl9-Conf Ion	0.759	0.000#	100.0#	0#	-49.49#
210 A1	Cl10-BZ#209-Cal/RTW	0.753	0.744	1.2	55	-0.02
211 A2	Decachlorobiphenyl	0.753	0.000#	100.0#	0#	-56.30#
212 A2	Cl10-Conf Ion	0.753	0.000#	100.0#	0#	-56.30#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.864	234	318587	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	173051	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	30045	53.630	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 53.63%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	44148	53.914	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 53.91%			
151) Cl6-BZ#153-C13 (surr)	38.720	372	42232	53.096	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 53.10%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	42324	51.931	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 51.93%			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.543	188	81646	55.609	ng/mL	100
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.626	188	83795	54.242	ng/mL	99
7) Cl1-BZ#3-RTW	17.084	188	82593	54.456	ng/mL	98
8) Cl2-BZ#4/#10-RTW	17.503	222	97981	110.470	ng/mL	99
9) Cl2-BZ#9	19.063	222	61367	53.799	ng/mL	99
10) Cl2-BZ#7	19.159	222	60524	54.454	ng/mL	98
11) Cl2-BZ#6	19.585	222	65784	53.754	ng/mL	99
12) Cl2-BZ#5	20.036	222	59214	53.257	ng/mL	100
13) Cl2-BZ#8	20.180	222	67988	53.779	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	20.969	256	33414	53.509	ng/mL	99
17) Cl2-BZ#14	21.105	222	64982	53.257	ng/mL	97
18) Cl3-BZ#30	21.515	256	53359	53.536	ng/mL	99
19) Cl3-BZ#18	22.328	256	36111	52.053	ng/mL	97
20) Cl2-BZ#11	22.456	222	69602	53.151	ng/mL	99
21) Cl3-BZ#17	22.537	256	34094	52.781	ng/mL	99
22) Cl2-BZ#12	22.850	222	61609	53.184	ng/mL	98
23) Cl3-BZ#27	22.899	256	47802	53.429	ng/mL	98
24) Cl2-BZ#13	23.148	222	71033	53.221	ng/mL	98
25) Cl3-BZ#24	23.172	256	49326	53.629	ng/mL	99
26) Cl3-BZ#16	23.510	256	29391	52.074	ng/mL	97
27) Cl3-BZ#32	23.711	256	51957	52.606	ng/mL	98
28) Cl2-BZ#15-RTW	23.880	222	69897	51.683	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.105	256	49037	53.126	ng/mL	99
30) Cl3-BZ#23	24.290	256	48419	53.454	ng/mL	100
31) Cl4-BZ#54-RTW	24.298	292	45515	53.901	ng/mL	99
32) Cl3-BZ#29-Cal	24.515	256	48158	52.664	ng/mL	99
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.022	292	37053	52.519	ng/mL	99
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.046	256	53354	52.019	ng/mL	99
39) Cl3-BZ#25	25.255	256	51915	51.992	ng/mL	100
40) Cl4-BZ#53	25.727	292	40501	52.040	ng/mL	98
41) Cl3-BZ#-31	25.827	256	70329	50.999	ng/mL	98
42) Cl3-BZ#28	26.025	256	66762	49.148	ng/mL	100
43) Cl3-BZ#33	26.108	256	60255M3	62.228	ng/mL	
44) Cl3-BZ#21/#20	26.158	256	127369M3	103.862	ng/mL	
45) Cl4-BZ#51	26.158	292	46476	54.096	ng/mL	98
46) Cl4-BZ#45	26.720	292	35257	52.551	ng/mL	99
47) Cl3-BZ#22	26.952	256	63690	53.308	ng/mL	99
48) Cl4-BZ#73/#46	27.084	292	96280	107.381	ng/mL	100
49) Cl4-BZ#69	27.366	292	54596	50.956	ng/mL	98
50) Cl4-BZ#43	27.465	292	38858	54.916	ng/mL	97
51) Cl3-BZ#36	27.498	256	72453	54.504	ng/mL	98
52) Cl4-BZ#52	27.614	292	45320	52.019	ng/mL	99
53) Cl4-BZ#48	27.780	292	41320	53.377	ng/mL	98
54) Cl4-BZ#49	27.929	292	43151	51.821	ng/mL	100
55) Cl5-BZ#104-RTW	28.144	326	46515	54.101	ng/mL	100
56) Cl4-BZ#47	28.226	292	47484M2	52.879	ng/mL	
57) Cl4-BZ#65/#75/#62	28.326	292	170394	161.512	ng/mL	99
58) Cl3-BZ#39	28.359	256	65016	53.066	ng/mL	99
59) Cl3-BZ#38	28.491	256	65006	55.016	ng/mL	98
60) Cl4-BZ#44	28.872	292	37514	51.752	ng/mL	97
61) Cl4-BZ#59	29.104	292	55187	51.915	ng/mL	98
62) Cl4-BZ#42	29.203	292	37040	53.788	ng/mL	95
63) Cl4-BZ#71	29.435	292	58535	52.433	ng/mL	100
64) Cl3-BZ#35	29.551	256	65761	53.219	ng/mL	100
65) Cl4-BZ#41	29.666	292	36071	53.209	ng/mL	100
66) Cl4-BZ#72	29.782	292	63323	54.202	ng/mL	100
67) Cl5-BZ#96	29.799	326	51248	55.123	ng/mL	96
68) Cl5-BZ#103	29.931	326	39533	55.005	ng/mL	98
69) Cl4-BZ#68/#64	30.097	292	117088	108.230	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.213	292	27479	52.158	ng/mL	99
71) Cl3-BZ#37-RTW	30.428	256	86264	52.510	ng/mL	99
72) Cl5-BZ#100	30.428	326	42897	55.388	ng/mL	99
73) Cl5-BZ#94	30.527	326	31989	55.947	ng/mL	99
74) Cl4-BZ#57	30.626	292	61009	52.476	ng/mL	99
75) Cl4-BZ#67/#58	30.957	292	126826	108.390	ng/mL	100
76) Cl5-BZ#102	31.007	326	45377	55.120	ng/mL	100
77) Cl4-BZ#61	31.305	292	60340	52.360	ng/mL	98
78) Cl5-BZ#98	31.321	326	41221	54.656	ng/mL	98
79) Cl4-BZ#76	31.470	292	69029	56.684	ng/mL	99
80) Cl5-BZ#93	31.454	326	33514	55.087	ng/mL	99
81) Cl4-BZ#63	31.553	292	55561M4	50.854	ng/mL	
82) Cl5-BZ#121/#95/#88	31.619	326	134579	166.678	ng/mL	100
83) Cl4-BZ#74	31.835	292	64065	53.013	ng/mL	99
84) Cl6-BZ#155-RTW	31.967	360	47482	53.049	ng/mL	98
85) Cl4-BZ#70	32.000	292	66387	53.337	ng/mL	98
86) Cl4-BZ#66	32.298	292	60558	53.744	ng/mL	98
87) Cl5-BZ#91	32.166	326	38109	53.545	ng/mL	100
88) Cl4-BZ#80	32.563	292	62891	53.305	ng/mL	98
89) Cl4-BZ#55	32.745	292	63242	52.495	ng/mL	99
90) Cl5-BZ#92	32.794	326	37804	54.450	ng/mL	98
91) Cl5-BZ#89/#84	33.076	326	71531	107.510	ng/mL	98
92) Cl5-BZ#101/#90	33.208	326	82897M4	108.150	ng/mL	
94) Cl4-BZ#56	33.208	292	63907	53.619	ng/mL	99
95) Cl5-BZ#113	33.308	326	51848	57.543	ng/mL	99
96) Cl5-BZ#99	33.572	326	46262	53.448	ng/mL	99
97) Cl6-BZ#150	33.622	360	52147	54.338	ng/mL	97
98) Cl4-BZ#60	33.639	292	67486	52.990	ng/mL	99
99) Cl6-BZ#152	33.986	360	55818	54.252	ng/mL	100
100) Cl5-BZ#119	34.069	326	61490	58.651	ng/mL	97
101) Cl5-BZ#83/#125/#112	34.218	326	137508M4	157.611	ng/mL	
102) Cl5-BZ#86/#109	34.383	326	96882M4	111.691	ng/mL	
103) Cl5-BZ#97	34.499	326	36144	55.895	ng/mL	97
104) Cl5-BZ#116	34.963	326	48133	53.938	ng/mL	97
105) Cl5-BZ#87/#111	35.261	326	97897M4	112.221	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.433	360	57646	54.271	ng/mL	99
109) Cl6-BZ#148	34.632	360	39217	54.040	ng/mL	99
110) Cl4-BZ#79	34.747	292	62349	53.146	ng/mL	99
111) Cl6-BZ#154-Cal	35.161	360	44928	53.568	ng/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
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Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.227	292	77274M4	53.214	ng/mL	
115) Cl6-BZ#136	35.294	360	50981	54.831	ng/mL	99
116) Cl5-BZ#117	35.360	326	56063M4	50.778	ng/mL	
117) Cl5-BZ#115	35.443	326	65117M4	59.515	ng/mL	
118) Cl5-BZ#85	35.525	326	33595	49.160	ng/mL	99
119) Cl5-BZ#120	35.658	326	59377	55.517	ng/mL	99
120) Cl5-BZ#110	35.807	326	54550	52.841	ng/mL	99
121) Cl4-BZ#81	36.187	292	61874	52.537	ng/mL	99
123) Cl6-BZ#151	36.204	360	39193	52.978	ng/mL	98
124) Cl6-BZ#135	36.336	360	42047	53.883	ng/mL	100
125) Cl5-BZ#82	36.518	326	36317	54.408	ng/mL	97
126) Cl6-BZ#144	36.535	360	40796	53.626	ng/mL	99
127) Cl6-BZ#147/#149	36.849	360	85513	105.281	ng/mL	97
128) Cl4-BZ#77-RTW	36.949	292	55423M4	49.931	ng/mL	
129) Cl6-BZ#143/#139	37.081	360	85042	108.945	ng/mL	99
130) Cl5-BZ#124	37.230	326	56555	53.888	ng/mL	99
131) Cl5-BZ#108	37.511	326	53949	50.606	ng/mL	99
132) Cl5-BZ#107/#123	37.611	326	125940M4	110.802	ng/mL	
133) Cl6-BZ#140	37.263	360	39981	52.997	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.627	394	48204	54.335	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.710	360	34001	52.881	ng/mL	94
138) Cl5-BZ#106	37.743	326	52047	50.360	ng/mL	99
139) Cl6-BZ#133	37.826	360	44101M3	50.394	ng/mL	
140) Cl6-BZ#142	37.842	360	34210M3	58.169	ng/mL	
141) Cl5-BZ#118	37.975	326	54770	54.599	ng/mL	97
142) Cl6-BZ#131	37.975	360	36172	53.386	ng/mL	100
143) Cl7-BZ#184	38.107	394	46433	52.960	ng/mL	98
144) Cl6-BZ#165	38.173	360	50508	52.984	ng/mL	97
145) Cl6-BZ#146	38.289	360	45264	54.241	ng/mL	100
146) Cl6-BZ#161	38.455	360	56437	53.159	ng/mL	100
147) Cl5-BZ#122	38.438	326	49767	53.851	ng/mL	100
148) Cl6-BZ#168	38.670	360	51368	50.352	ng/mL	98
149) Cl5-BZ#114	38.720	326	54933	54.129	ng/mL	100
150) Cl6-BZ#153	38.736	360	50897	56.036	ng/mL	83
152) Cl6-BZ#132	39.001	360	38260	52.486	ng/mL	98
153) Cl7-BZ#179	39.266	394	47577	52.560	ng/mL	99
154) Cl6-BZ#141	39.564	360	38459	52.737	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.762	394	45092	52.450	ng/mL	98
156) Cl5-BZ#105	39.828	326	62172	50.060	ng/mL#	80
157) Cl6-BZ#137	40.011	360	40256	53.855	ng/mL	98
158) Cl5-BZ#127	40.143	326	70556	51.792	ng/mL#	73
159) Cl7-BZ#186	40.093	394	50565	52.851	ng/mL	100
160) Cl6-BZ#130/#164	40.342	360	92449	106.024	ng/mL	99
161) Cl7-BZ#178	40.639	394	34456	52.556	ng/mL	99
162) Cl6-BZ#138	40.706	360	50151	56.581	ng/mL	97
163) Cl6-BZ#163/#160	40.805	360	101779M4	101.539	ng/mL	
164) Cl6-BZ#129/#158	41.004	360	91445M4	109.440	ng/mL	
165) Cl7-BZ#182/#175	41.037	394	82035	109.313	ng/mL	100
166) Cl7-BZ#187	41.219	394	40044	52.098	ng/mL	96
167) Cl7-BZ#183	41.599	394	38893	52.650	ng/mL	99
168) Cl6-BZ#166	41.964	360	57405	52.721	ng/mL	97
169) Cl6-BZ#159	42.212	360	56459	51.852	ng/mL	99
170) Cl5-BZ#126-RTW	42.427	326	69571	52.248	ng/mL	88
171) Cl7-BZ#185	42.460	394	35771	52.058	ng/mL	98
172) Cl6-BZ#162	42.559	360	53593	53.111	ng/mL	98
173) Cl7-BZ#174	42.708	394	35862	52.567	ng/mL	99
174) Cl6-BZ#128	42.708	360	39780	53.305	ng/mL	99
175) Cl6-BZ#167	43.006	360	72403M4	54.074	ng/mL	
176) Cl8-BZ#202-RTW	42.940	428	41322	53.525	ng/mL	99
178) Cl7-BZ#181	43.089	394	41160	53.664	ng/mL	97
179) Cl7-BZ#177	43.420	394	35285	53.059	ng/mL	100
180) Cl8-BZ#204/#200-Cal	43.519	428	79520	104.890	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.734	394	34014	52.223	ng/mL	98
184) Cl7-BZ#173	43.950	394	33584	52.333	ng/mL	100
185) Cl7-BZ#172	44.397	394	35414	51.326	ng/mL	97
186) Cl7-BZ#192	44.595	394	49555	52.438	ng/mL	99
187) Cl6-BZ#156	44.612	360	54521	52.256	ng/mL	100
188) Cl6-BZ#157	44.860	360	55732	51.711	ng/mL	98
189) Cl7-BZ#180	44.893	394	44398	52.893	ng/mL	97
190) Cl7-BZ#193	44.992	394	43086	49.876	ng/mL	98
191) Cl8-BZ#197	44.032	428	40341	52.132	ng/mL	100
192) Cl7-BZ#191	45.323	394	46530	51.872	ng/mL	97
193) Cl8-BZ#199	45.141	428	39467	51.326	ng/mL	99
194) Cl8-BZ#198	46.680	428	33489	51.317	ng/mL	99
195) Cl8-BZ#201	46.780	428	28804	51.141	ng/mL	100
196) Cl7-BZ#170	46.896	394	33405	51.400	ng/mL	96

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.227	394	49817	52.664	ng/mL	98
198) Cl8-BZ#196	47.227	428	30264	49.549	ng/mL	84
199) Cl8-BZ#203	47.309	428	35016	53.062	ng/mL	86
200) Cl6-BZ#169-RTW	47.591	360	57991	50.320	ng/mL	98
201) Cl9-BZ#208-RTW	48.749	464	40419	49.528	ng/mL	98
202) Cl9-BZ#207	49.411	464	41123	51.631	ng/mL	95
203) Cl7-BZ#189-RTW	49.593	394	44302	51.448	ng/mL	100
204) Cl8-BZ#195	49.742	428	30007	49.991	ng/mL	96
205) Cl8-BZ#194	51.414	428	32183	50.081	ng/mL	97
206) Cl8-BZ#205-RTW	51.993	428	38786	49.250	ng/mL	99
207) Cl9-BZ#206-Cal/RTW	54.012	464	32971	50.211	ng/mL	98
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.280	498	32197	49.437	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

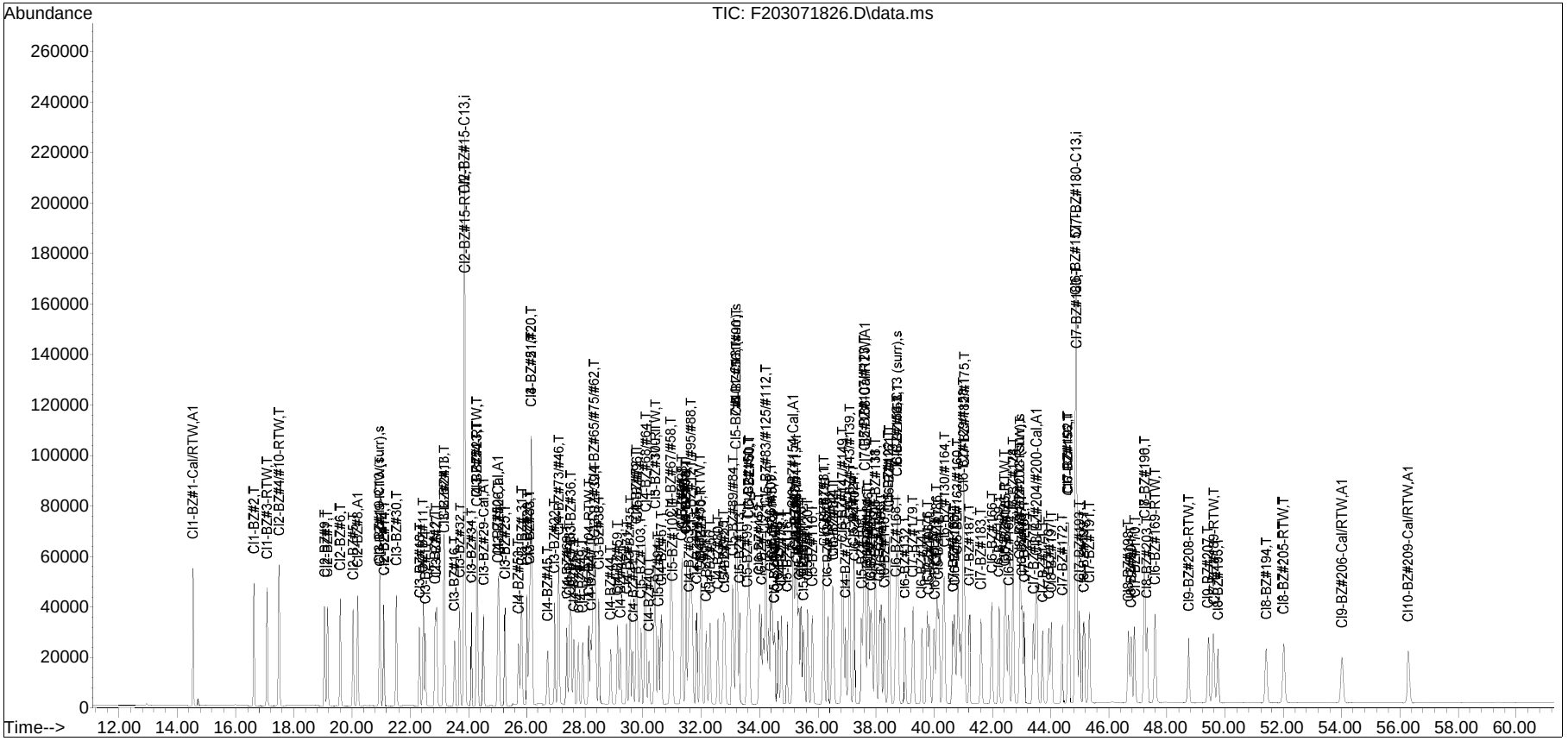
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071826.D
Acq On : 8 Mar 2018 4:50 pm
Operator : BNA2:MJS
Sample : WG1095518-6
Misc : WG1095518,MSAT57,ICAL14481
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 14:11:57 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed



Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071815.D
Acq On : 8 Mar 2018 3:24 am
Operator : BNA2:MJS
Sample : L1806872-03,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 12:59:54 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.863	234	377674M5	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	199103	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.952	268	53166	80.054	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 80.05%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	83195	85.704	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 85.70%			
151)	Cl6-BZ#153-C13 (surr)	38.719	372	85204	93.107	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 93.11%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	78254	83.454	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 83.45%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.188	222	41742M5	27.853	ng/mL	
15)	Cl2-Conf Ion	20.188	224	26691M5	17.810	ng/mL	
33)	Trichlorobiphenyls	25.826	256	113347M5	104.560	ng/mL	
34)	Cl3- Conf Ion	25.826	258	102167M5	94.246	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	79249M5	94.755	ng/mL	
37)	Cl4-Conf Ion	27.614	290	61717M5	73.792	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	8492M5	8.212	ng/mL	
107)	Cl5-Conf Ion	31.652	324	6505M5	6.290	ng/mL	
112)	Hexachlorobiphenyls	39.597	360	1897M5	1.908	ng/mL	
113)	Cl6-Conf Ion	36.882	362	1247M5	1.254	ng/mL	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

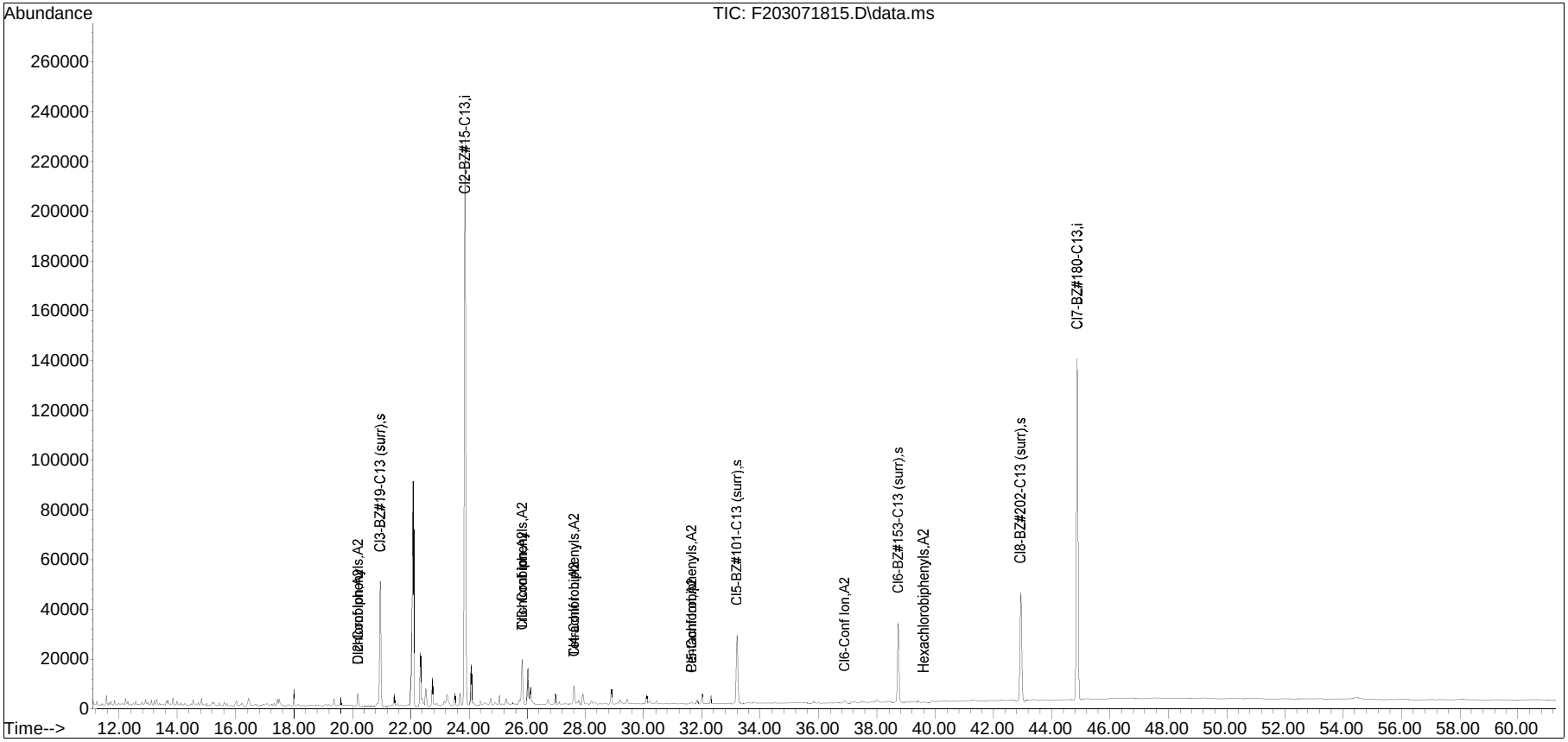
(#) = qualifier out of range (m) = manual integration (+) = signals summed

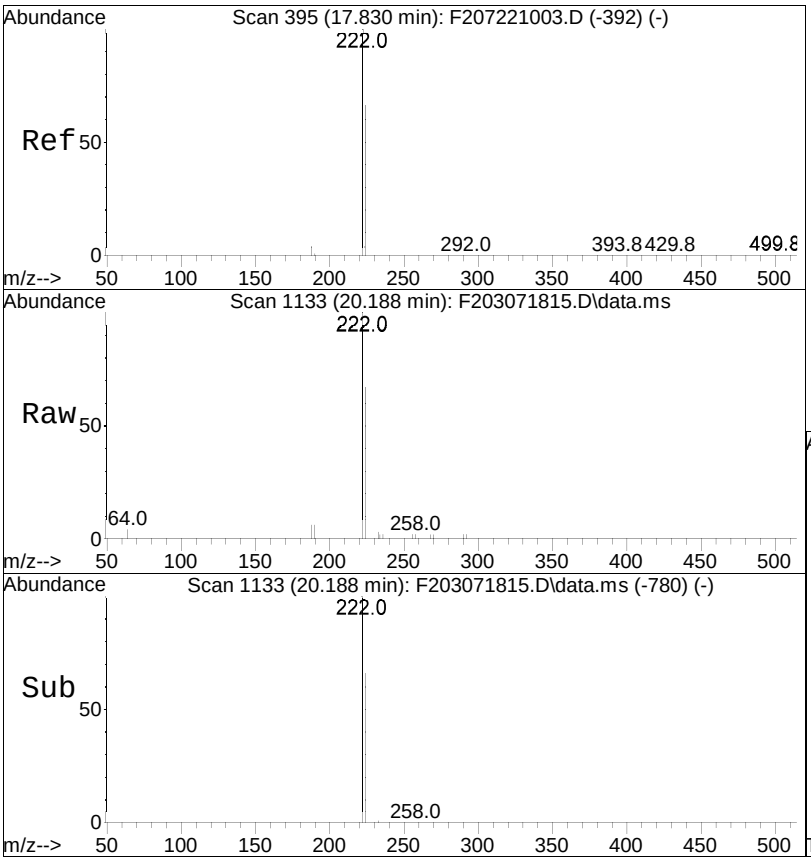
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071815.D
Acq On : 8 Mar 2018 3:24 am
Operator : BNA2:MJS
Sample : L1806872-03,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 12:59:54 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

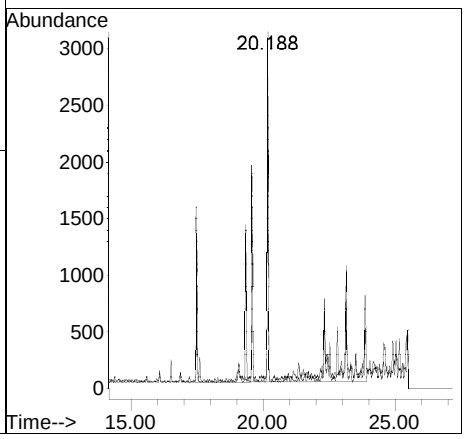


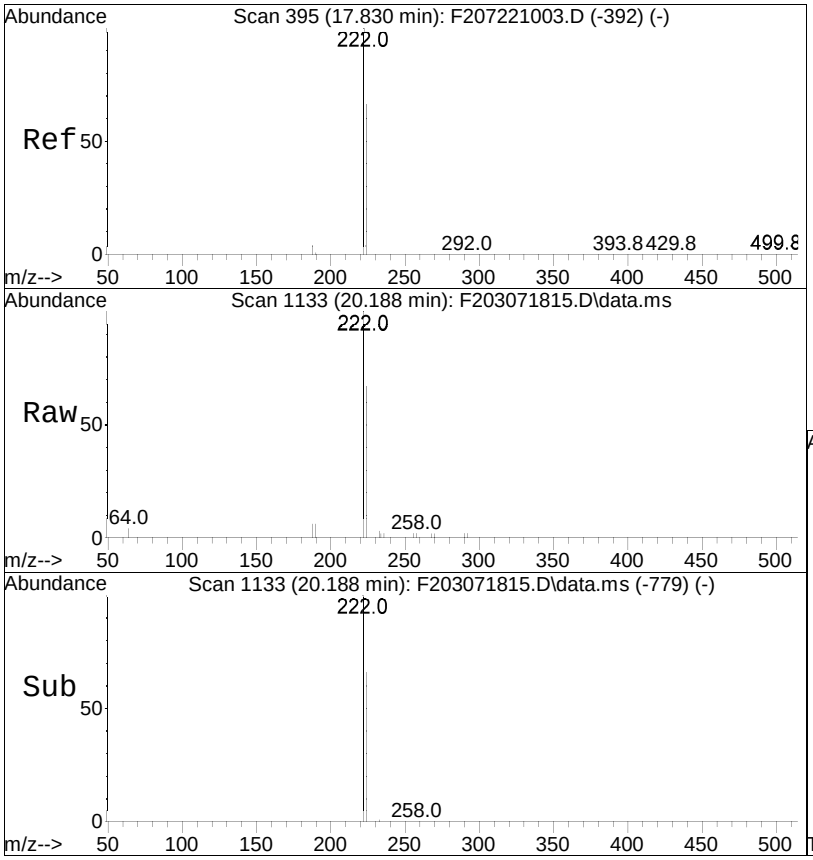


#14
Dichlorobiphenyls
Concen: 27.85 ng/mL M5
RT: 20.188 min Scan# 1133
Delta R.T. 2.636 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:222 Resp: 41742

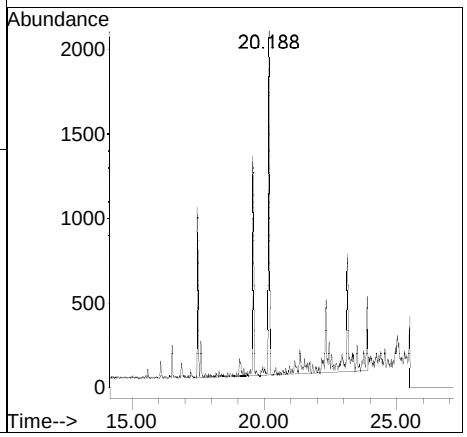
Ion	Ratio	Lower	Upper
222	100		
224	6.2	52.1	78.1#

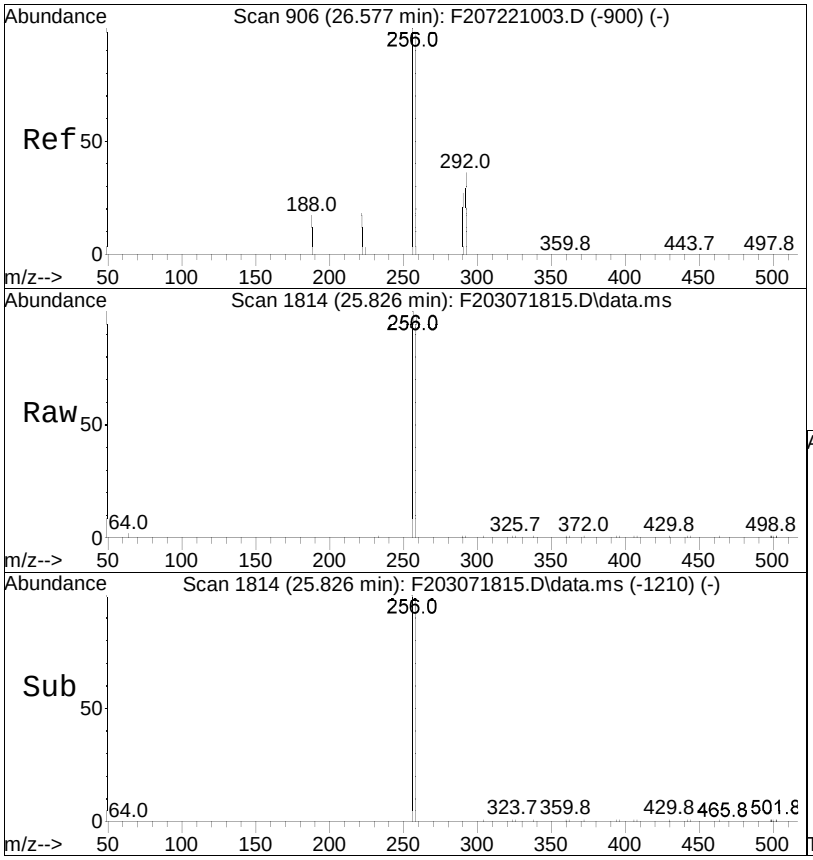




#15
Cl2-Conf Ion
Concen: 17.81 ng/mL M5
RT: 20.188 min Scan# 1133
Delta R.T. 2.636 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:224 Resp: 26691

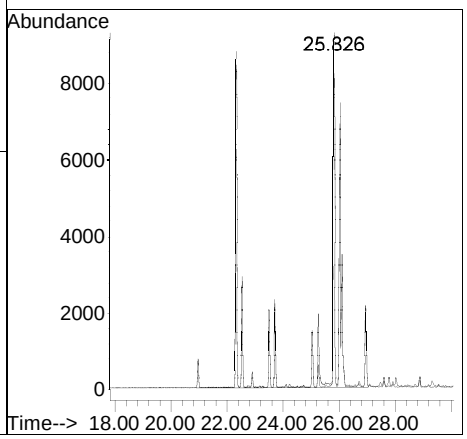


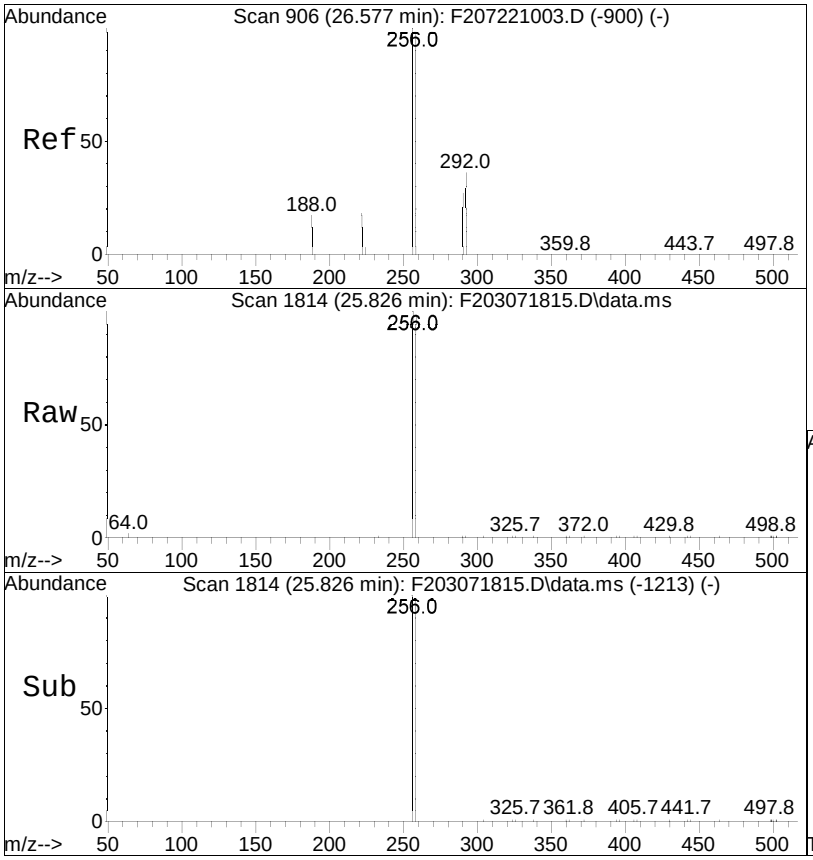


#33
Trichlorobiphenyls
Concen: 104.56 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:256 Resp: 113347

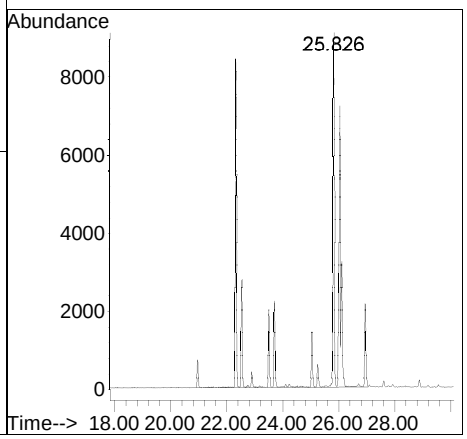
Ion	Ratio	Lower	Upper
256	100		
258	8.9	76.8	115.2#

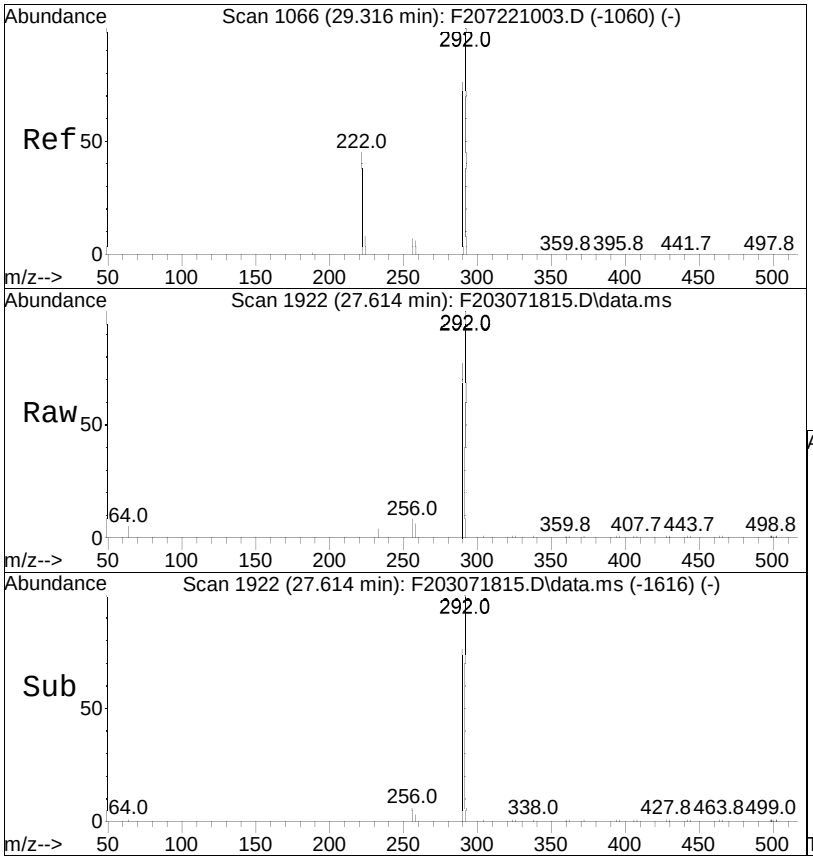




#34
Cl3- Conf Ion
Concen: 94.25 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:258 Resp: 102167

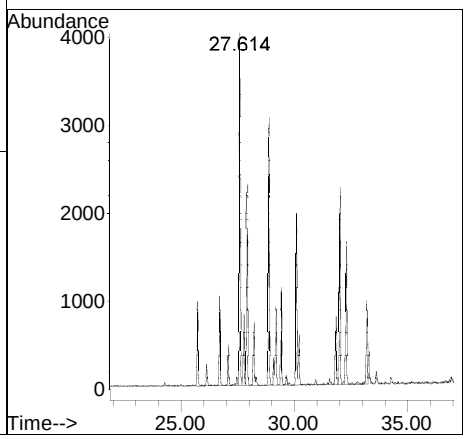


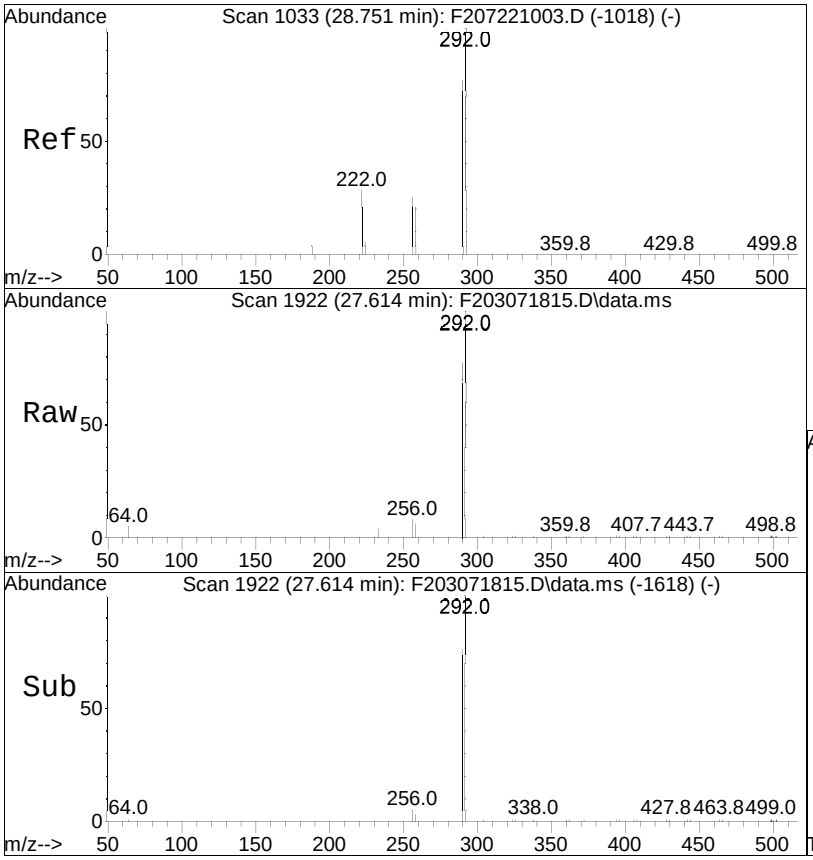


#36
Tetrachlorobiphenyls
Concen: 94.75 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:292 Resp: 79249

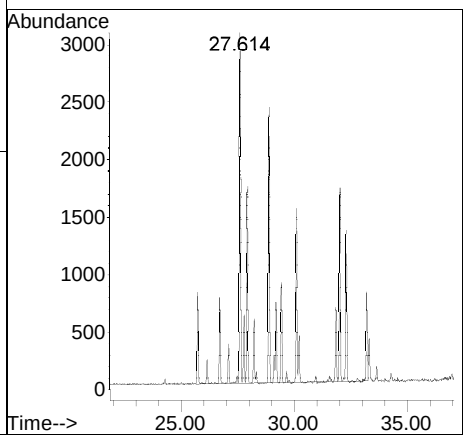
Ion	Ratio	Lower	Upper
292	100		
290	0.3	61.0	91.4#

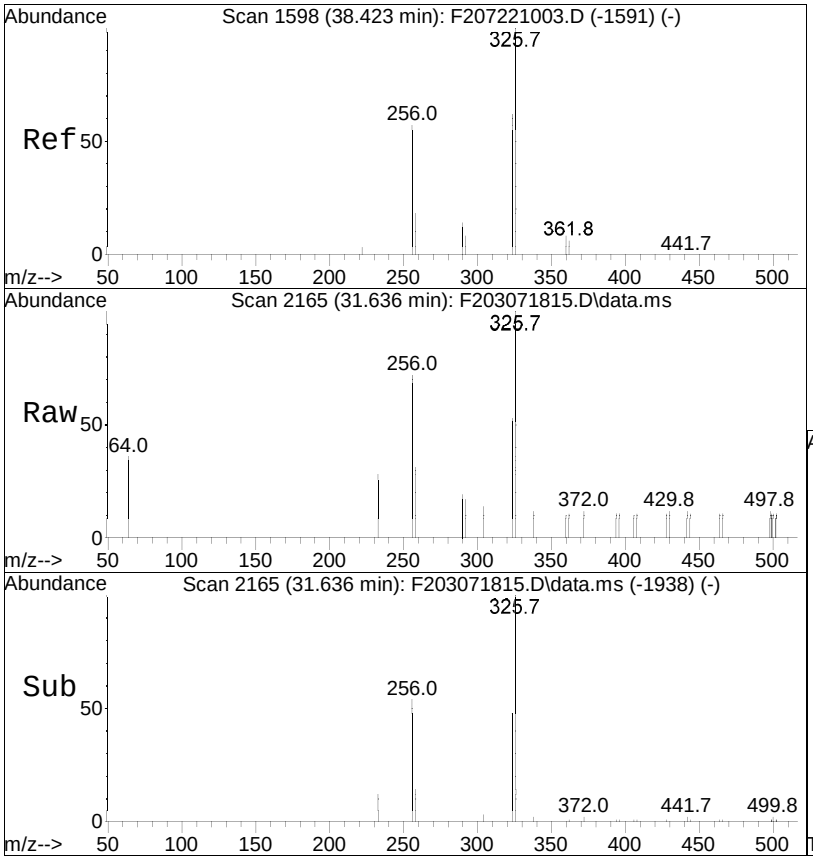




#37
Cl4-Conf Ion
Concen: 73.79 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:290 Resp: 61717

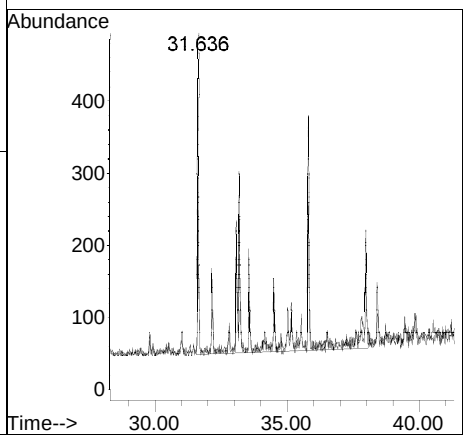


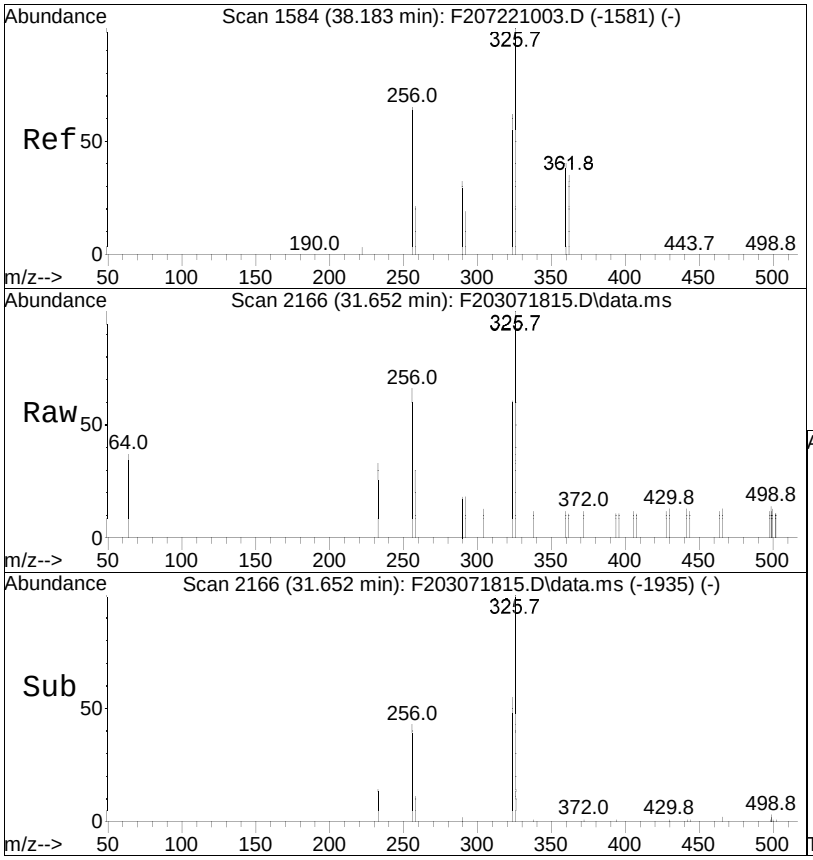


#106
Pentachlorobiphenyls
Concen: 8.21 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:326 Resp: 8492

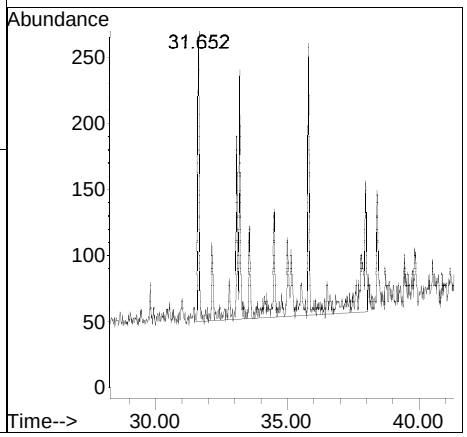
Ion	Ratio	Lower	Upper
326	100		
324	1.0	48.7	73.1#

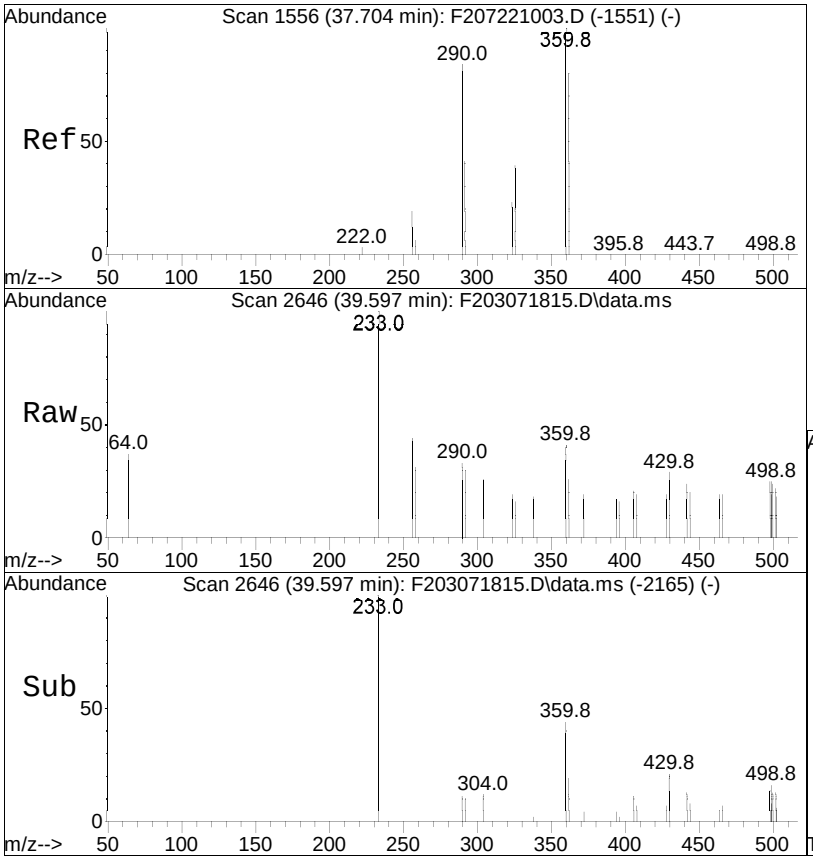




#107
Cl5-Conf Ion
Concen: 6.29 ng/mL M5
RT: 31.652 min Scan# 2166
Delta R.T. -5.996 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:324 Resp: 6505

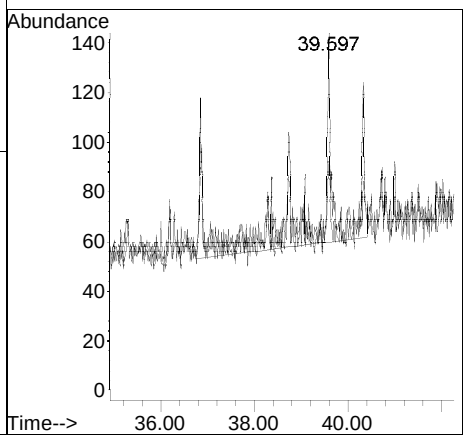


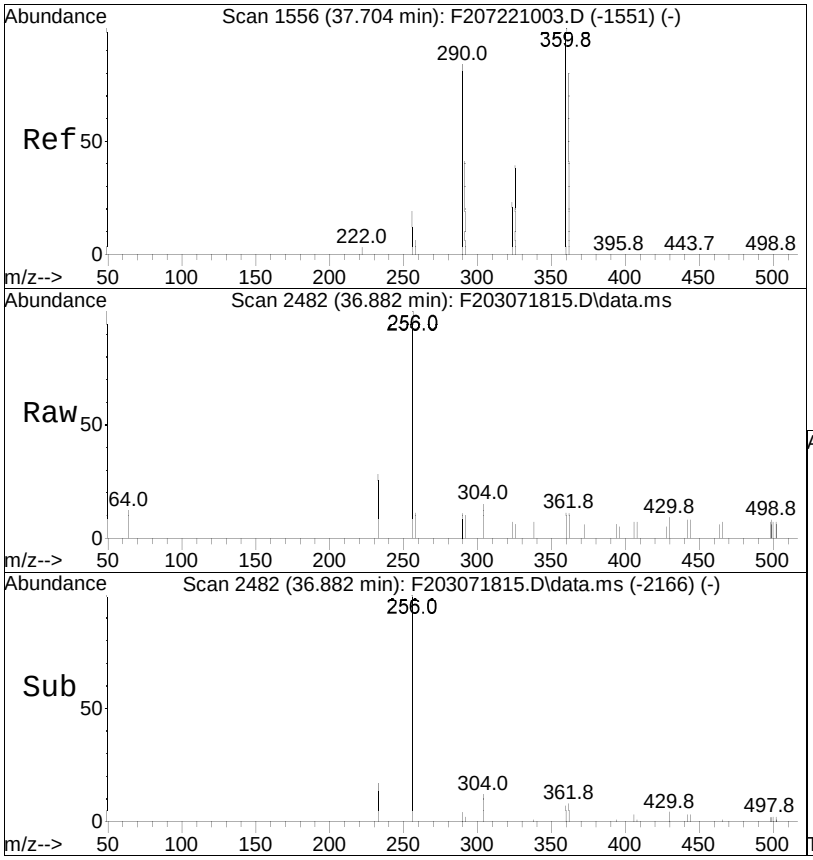


#112
Hexachlorobiphenyls
Concen: 1.91 ng/mL M5
RT: 39.597 min Scan# 2646
Delta R.T. 2.477 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:360 Resp: 1897

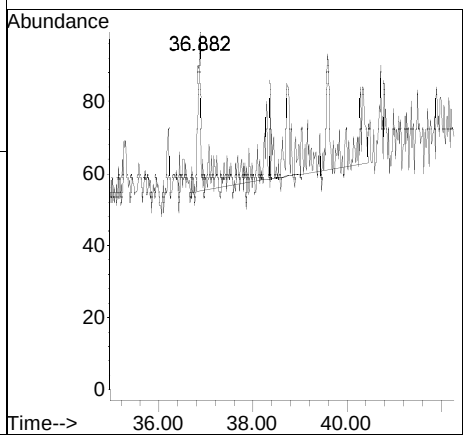
Ion	Ratio	Lower	Upper
360	100		
362	1.5	63.7	95.5#





#113
Cl6-Conf Ion
Concen: 1.25 ng/mL M5
RT: 36.882 min Scan# 2482
Delta R.T. -0.238 min
Lab File: F203071815.D
Acq: 8 Mar 2018 3:24 am

Tgt Ion:362 Resp: 1247



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071816.D
Acq On : 8 Mar 2018 4:39 am
Operator : BNA2:MJS
Sample : L1806872-04,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 09 13:03:46 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.864	234	372970	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	195368	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	57578	87.790	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 87.79%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	89897	93.776	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 93.78%			
151) Cl6-BZ#153-C13 (surr)	38.720	372	90336	100.602	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 100.60%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	81537	88.618	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 88.62%			
Target Compounds						Qvalue
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
14) Dichlorobiphenyls	20.180	222	32617M5	22.038	ng/mL	
15) Cl2-Conf Ion	20.189	224	25809M5	17.438	ng/mL	
33) Trichlorobiphenyls	25.827	256	89816M5	83.898	ng/mL	
34) Cl3- Conf Ion	25.827	258	81861M5	76.467	ng/mL	
36) Tetrachlorobiphenyls	27.598	292	99558M5	120.539	ng/mL	
37) Cl4-Conf Ion	27.598	290	80858M5	97.898	ng/mL	
106) Pentachlorobiphenyls	35.807	326	15670M5	15.344	ng/mL	
107) Cl5-Conf Ion	35.807	324	14085M5	13.792	ng/mL	
112) Hexachlorobiphenyls	38.753	360	5278M5	5.375	ng/mL	
113) Cl6-Conf Ion	38.753	362	3920M5	3.992	ng/mL	
135) Heptachlorobiphenyls	44.893	394	2628M5	2.624	ng/mL	
136) Cl7-Conf Ion	44.893	396	1965M5	1.962	ng/mL	
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

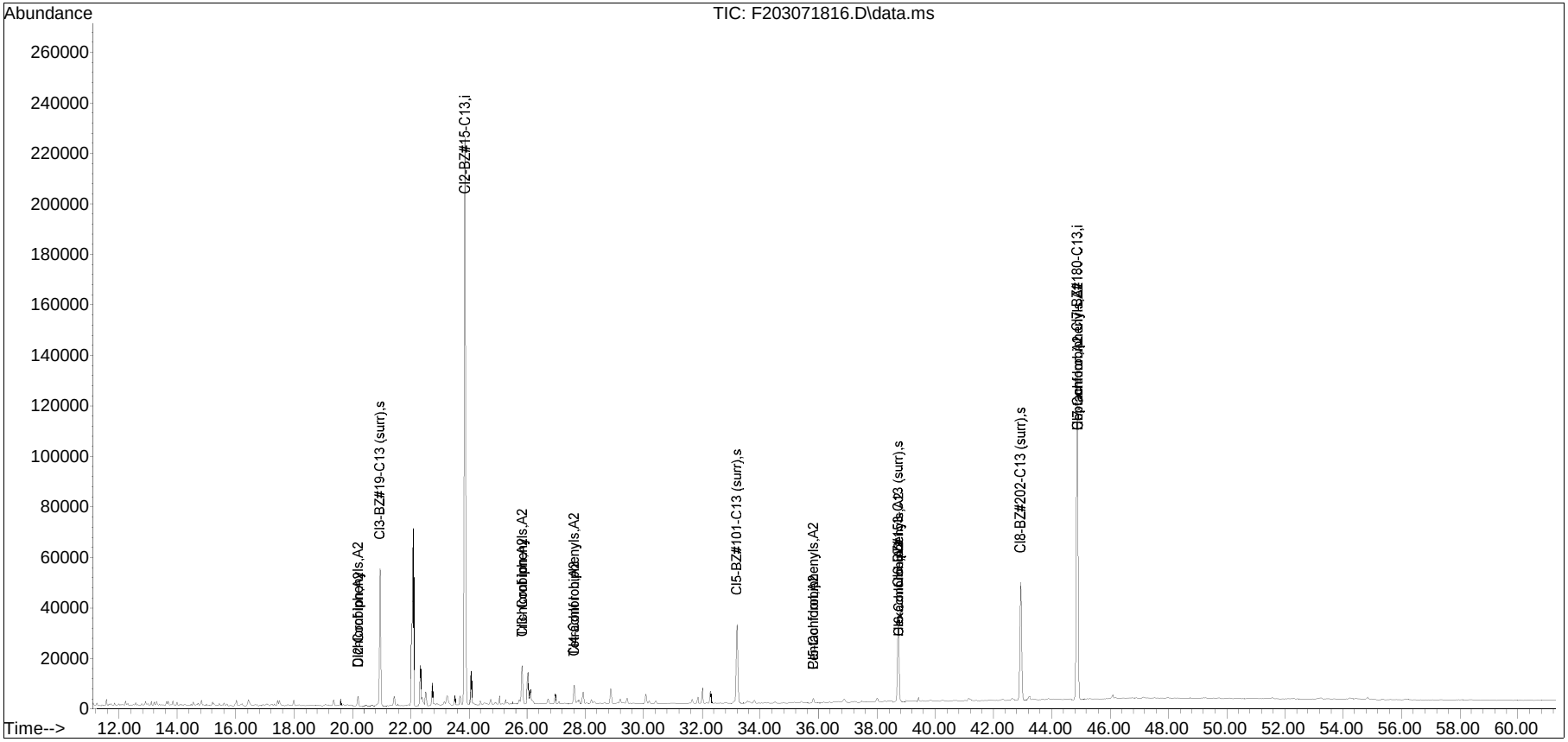
(#) = qualifier out of range (m) = manual integration (+) = signals summed

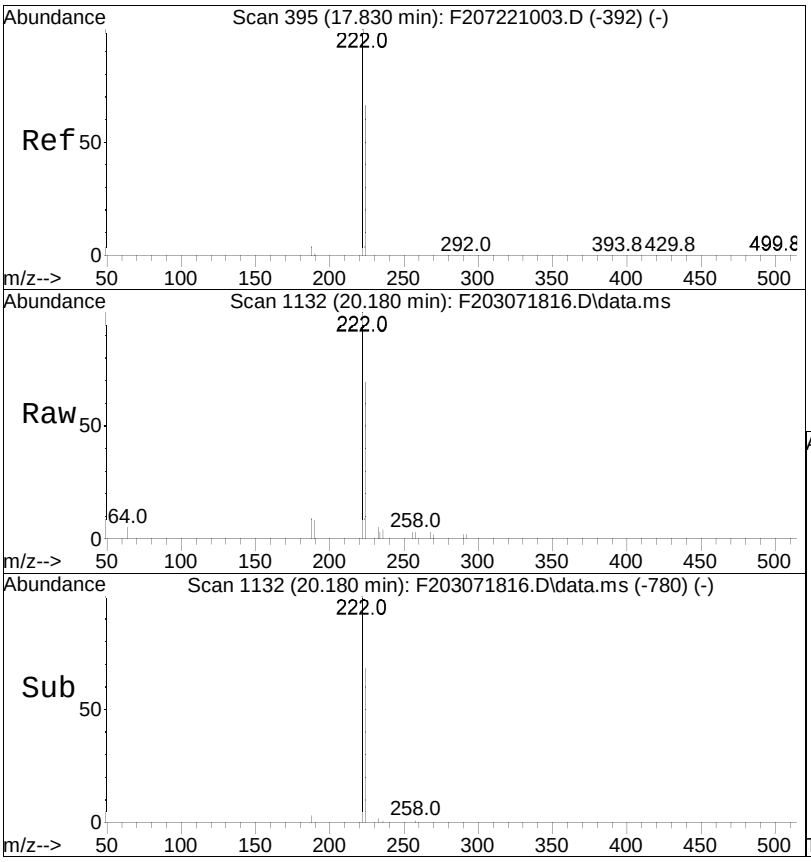
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071816.D
Acq On : 8 Mar 2018 4:39 am
Operator : BNA2:MJS
Sample : L1806872-04,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 09 13:03:46 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

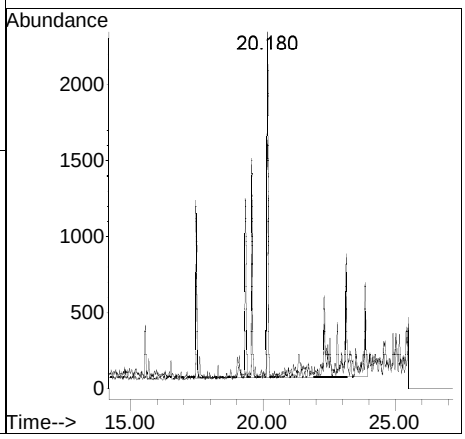


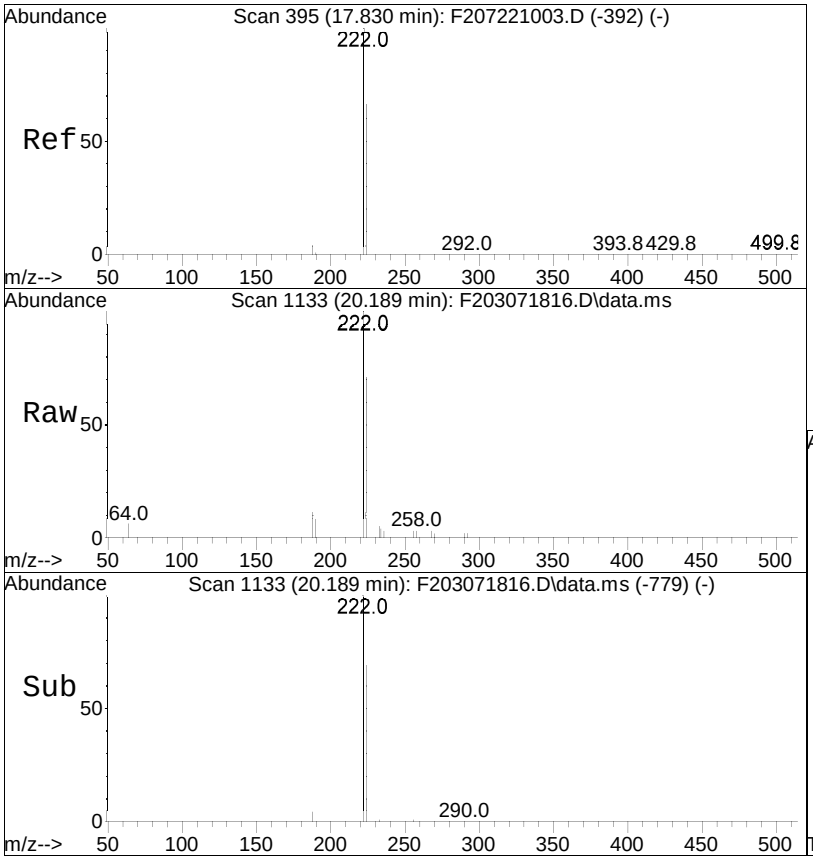


#14
Dichlorobiphenyls
Concen: 22.04 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:222 Resp: 32617

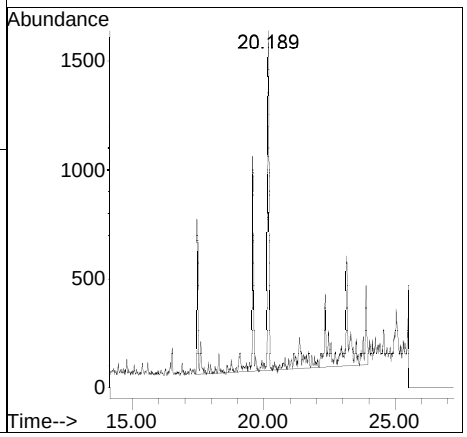
Ion	Ratio	Lower	Upper
222	100		
224	6.1	52.1	78.1#

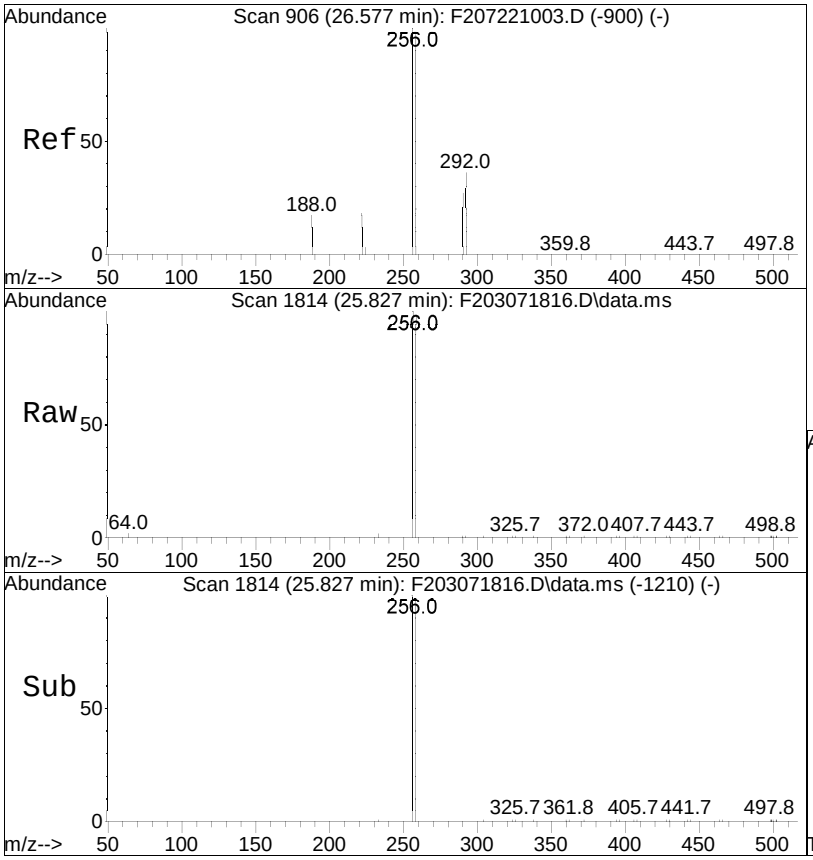




#15
Cl2-Conf Ion
Concen: 17.44 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:224 Resp: 25809

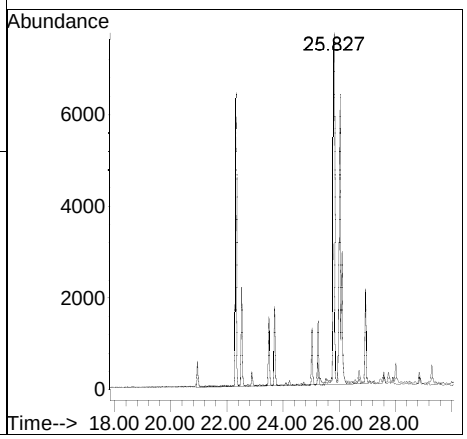


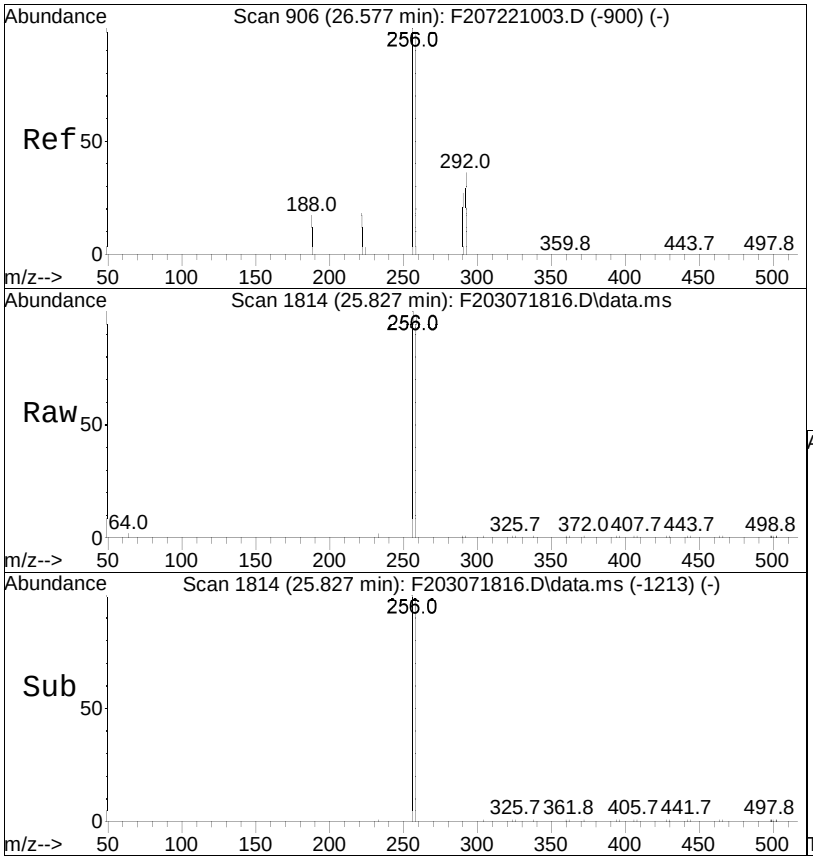


#33
Trichlorobiphenyls
Concen: 83.90 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:256 Resp: 89816

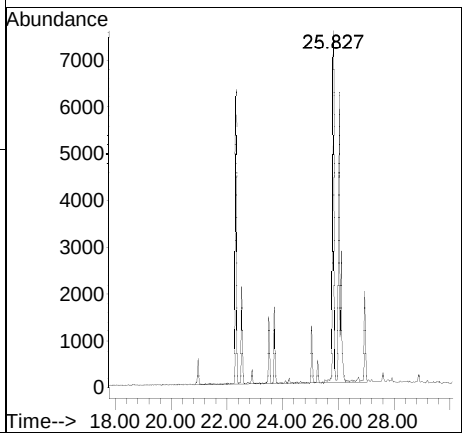
Ion	Ratio	Lower	Upper
256	100		
258	9.6	76.8	115.2#

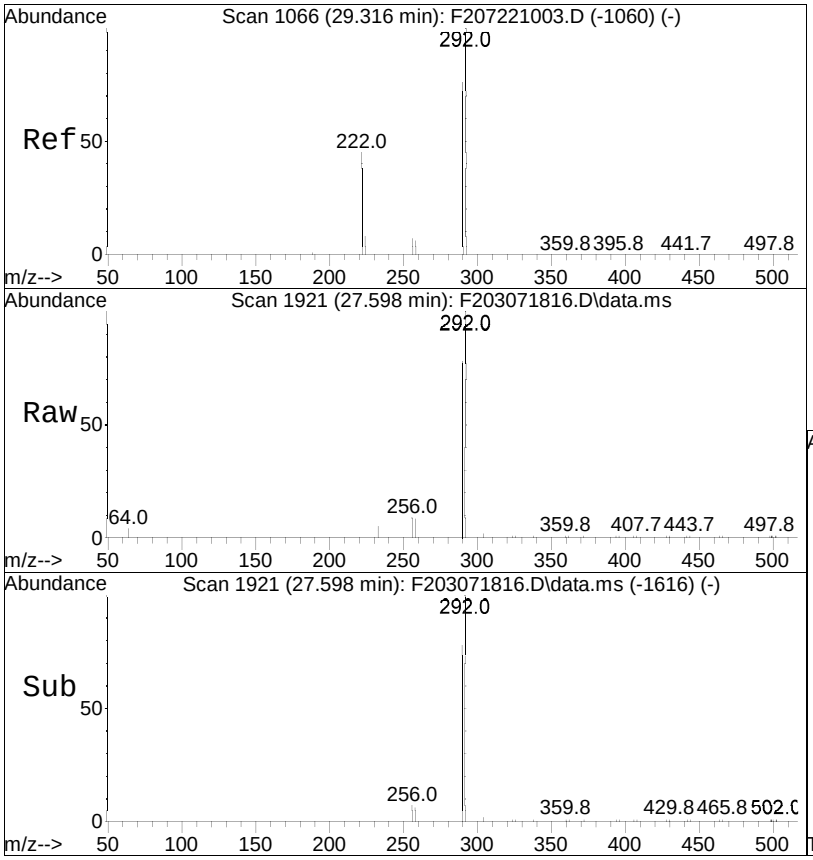




#34
Cl3- Conf Ion
Concen: 76.47 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:258 Resp: 81861

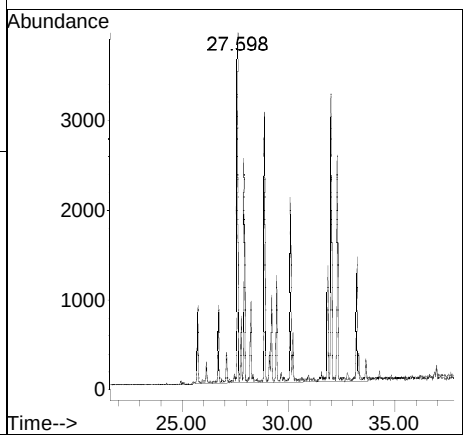


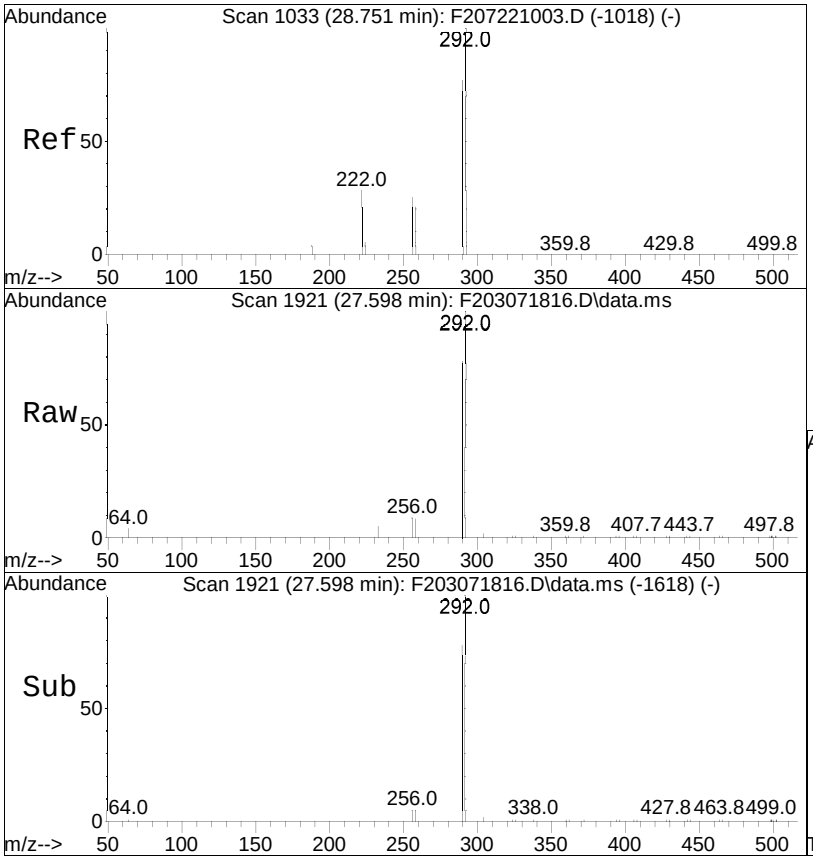


#36
Tetrachlorobiphenyls
Concen: 120.54 ng/mL M5
RT: 27.598 min Scan# 1921
Delta R.T. -0.774 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:292 Resp: 99558

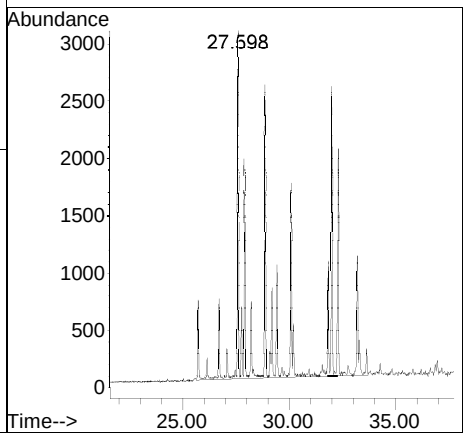
Ion	Ratio	Lower	Upper
292	100		
290	2.2	61.0	91.4#

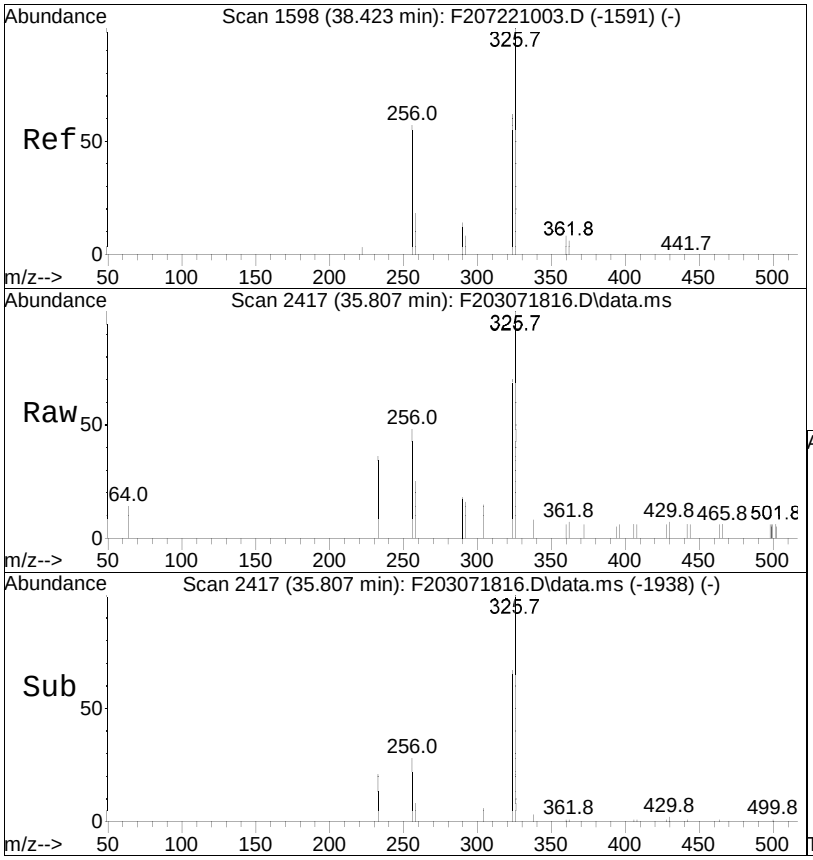




#37
Cl4-Conf Ion
Concen: 97.90 ng/mL M5
RT: 27.598 min Scan# 1921
Delta R.T. -0.757 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:290 Resp: 80858

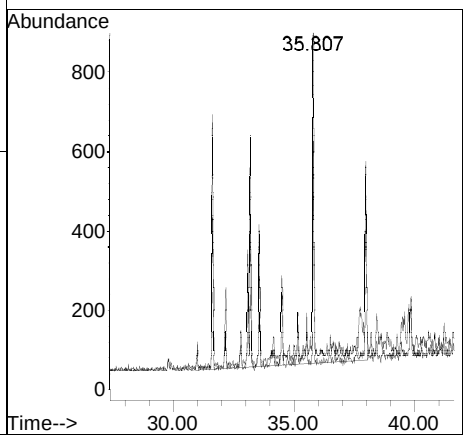


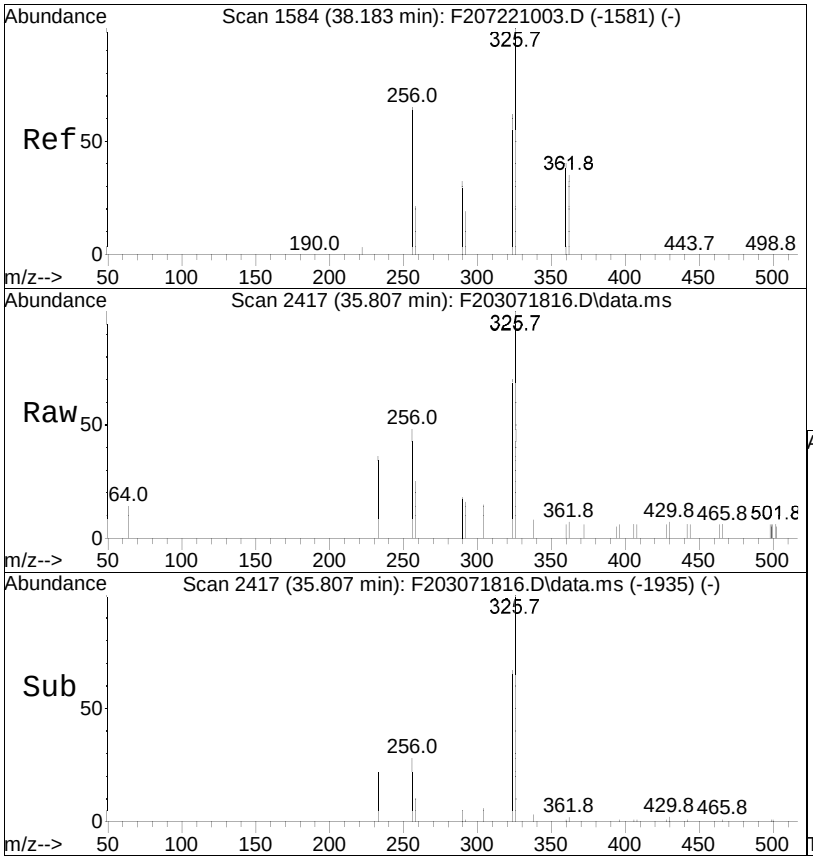


#106
Pentachlorobiphenyls
Concen: 15.34 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. 1.543 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:326 Resp: 15670

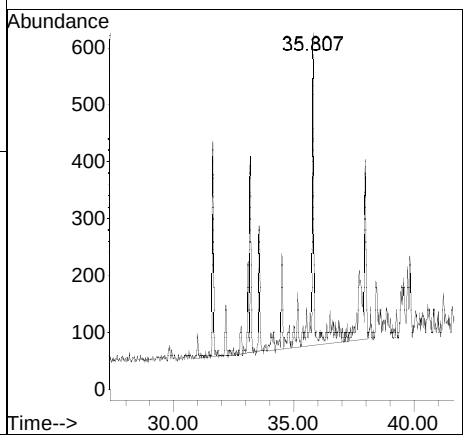
Ion	Ratio	Lower	Upper
326	100		
324	4.1	48.7	73.1#

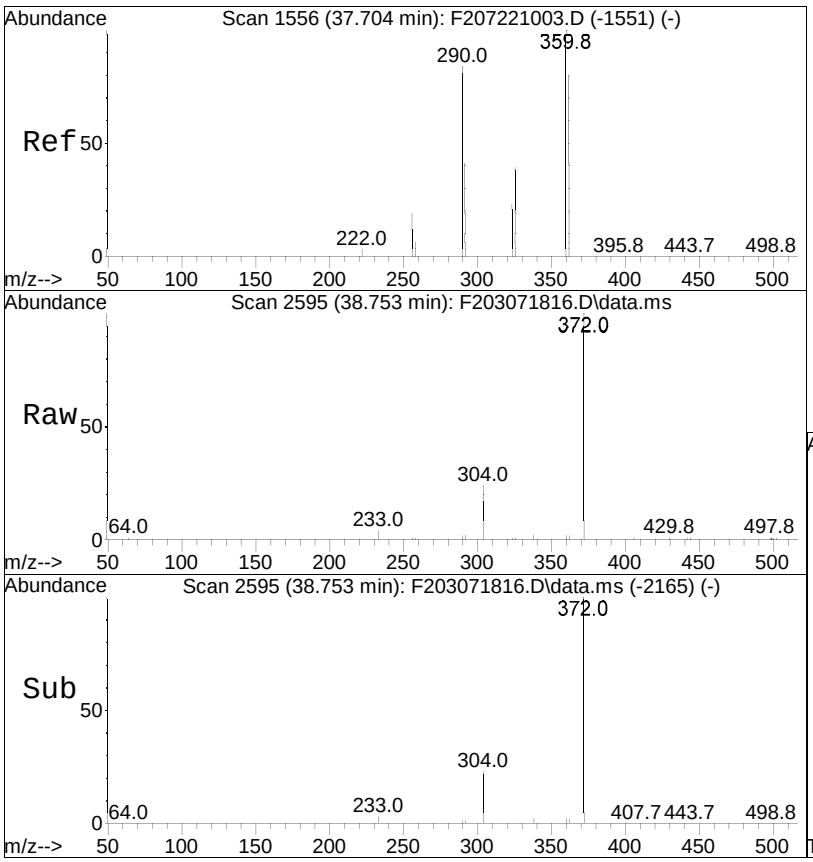




#107
Cl5-Conf Ion
Concen: 13.79 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. -1.841 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:324 Resp: 14085

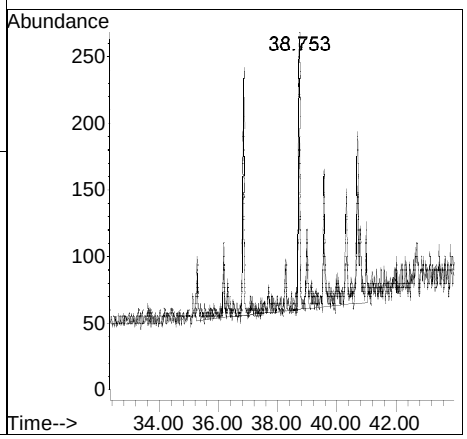


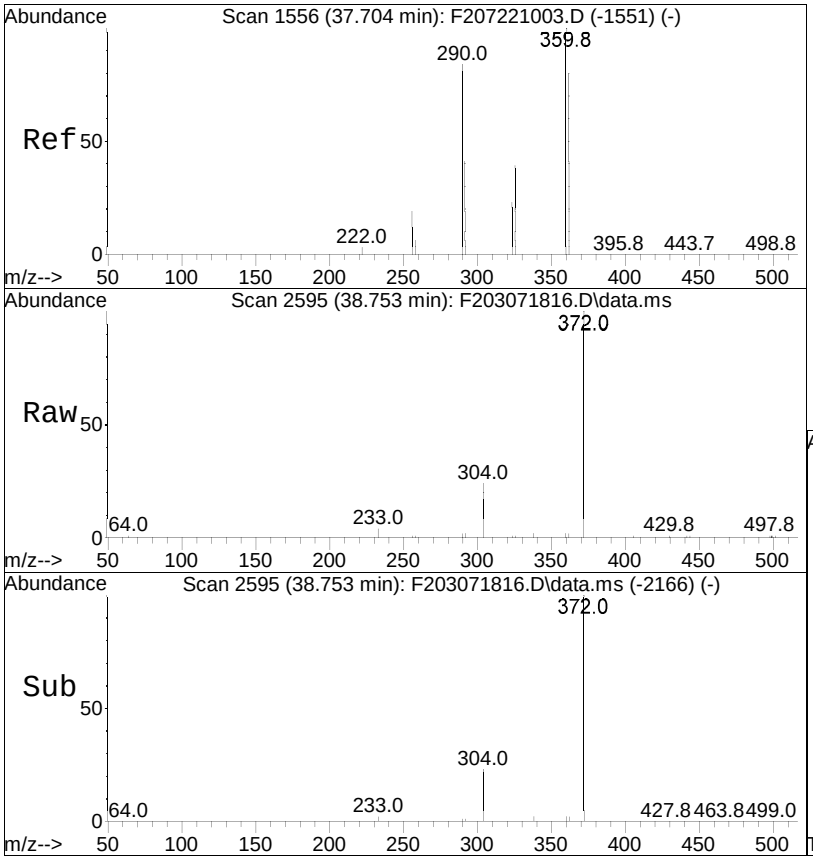


#112
Hexachlorobiphenyls
Concen: 5.38 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:360 Resp: 5278

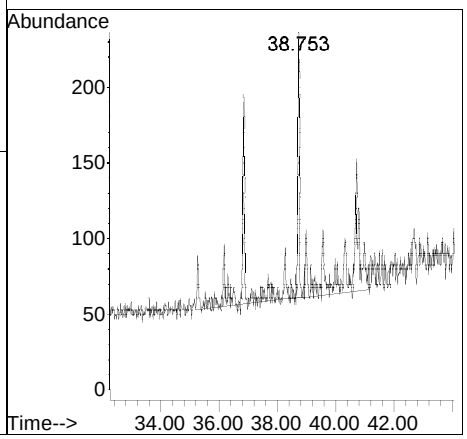
Ion	Ratio	Lower	Upper
360	100		
362	0.5	63.7	95.5#

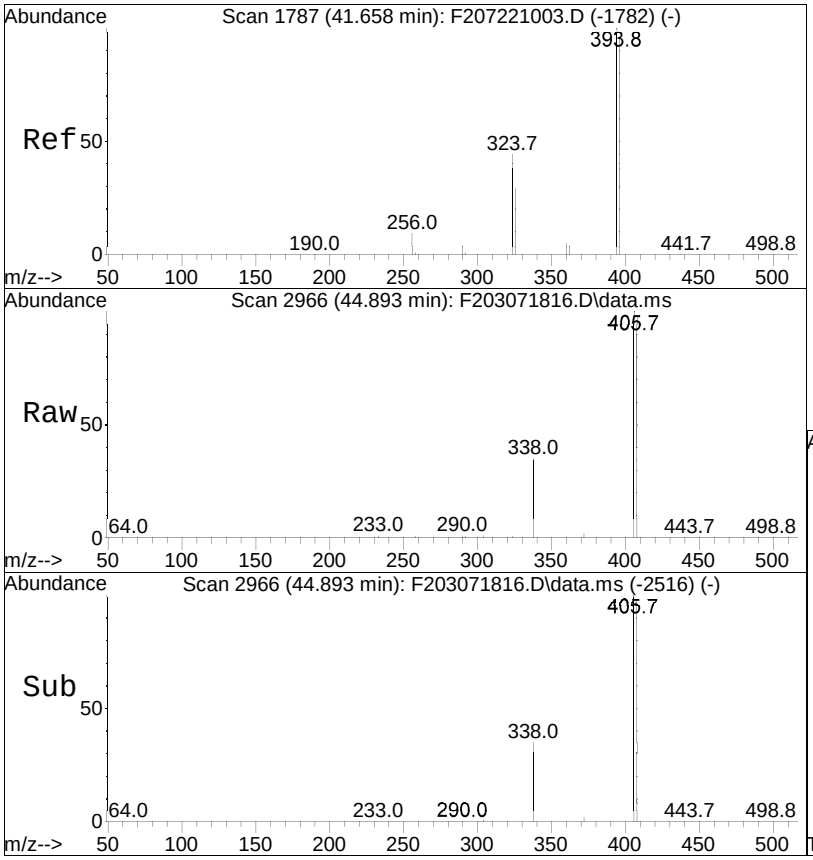




#113
Cl6-Conf Ion
Concen: 3.99 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:362 Resp: 3920

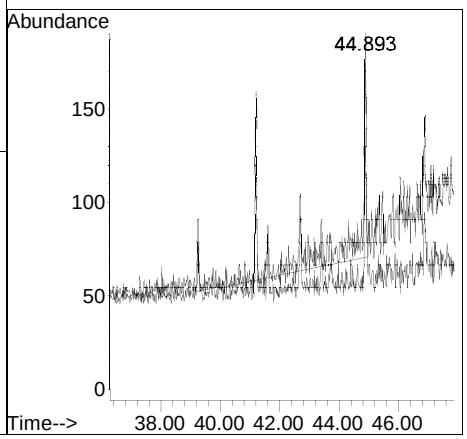


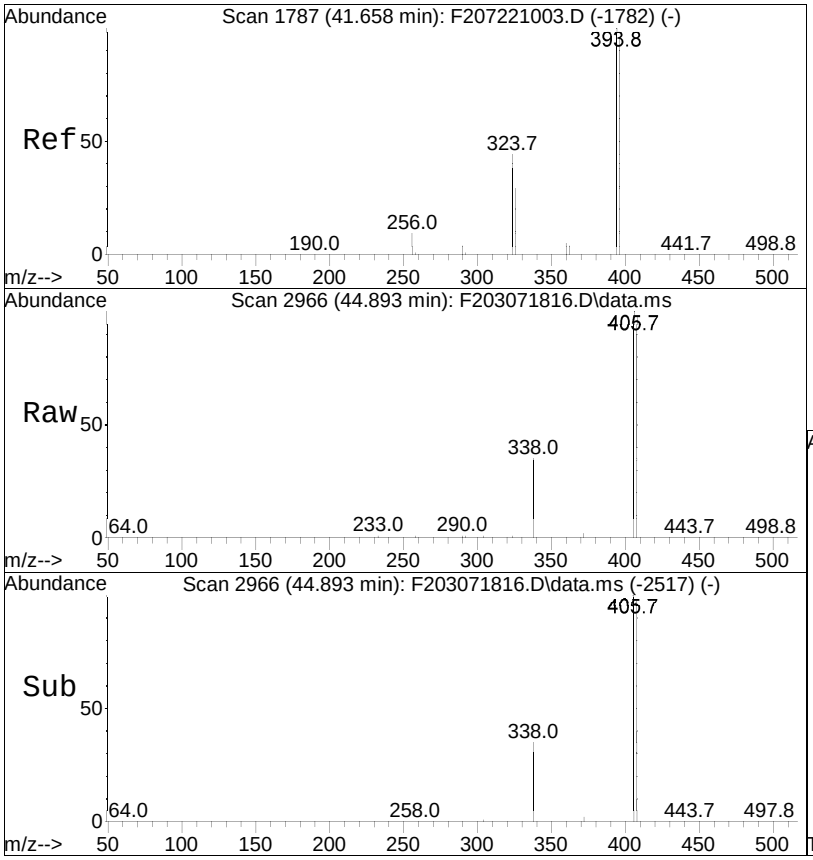


#135
Heptachlorobiphenyls
Concen: 2.62 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:394 Resp: 2628

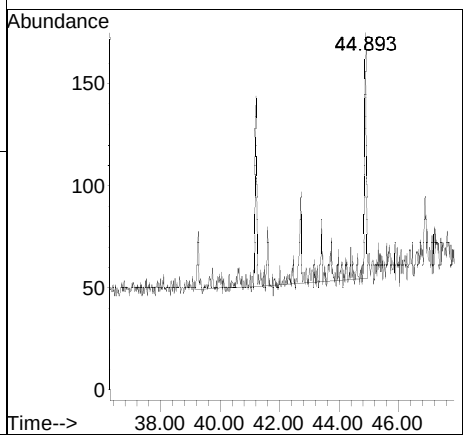
Ion	Ratio	Lower	Upper
394	100		
396	12.3	78.6	118.0#





#136
Cl7-Conf Ion
Concen: 1.96 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071816.D
Acq: 8 Mar 2018 4:39 am

Tgt Ion:396 Resp: 1965



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071817.D
Acq On : 8 Mar 2018 5:53 am
Operator : BNA2:MJS
Sample : L1806872-05,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 13:06:25 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.863	234	380007	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	200766	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	51683	77.343	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 77.34%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	79035	80.919	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 80.92%			
151)	Cl6-BZ#153-C13 (surr)	38.719	372	80346	87.071	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 87.07%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	73820	78.073	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 78.07%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.188	222	35198M5	23.342	ng/mL	
15)	Cl2-Conf Ion	20.180	224	24475M5	16.231	ng/mL	
33)	Trichlorobiphenyls	25.826	256	101258M5	92.834	ng/mL	
34)	Cl3- Conf Ion	25.826	258	87987M5	80.667	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	68352M5	81.224	ng/mL	
37)	Cl4-Conf Ion	27.597	290	55893M5	66.419	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	7535M5	7.241	ng/mL	
107)	Cl5-Conf Ion	31.636	324	5338M5	5.130	ng/mL	
112)	Hexachlorobiphenyls	39.580	360	1497M5	1.496	ng/mL	
113)	Cl6-Conf Ion	38.769	362	831M5	0.831	ng/mL	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

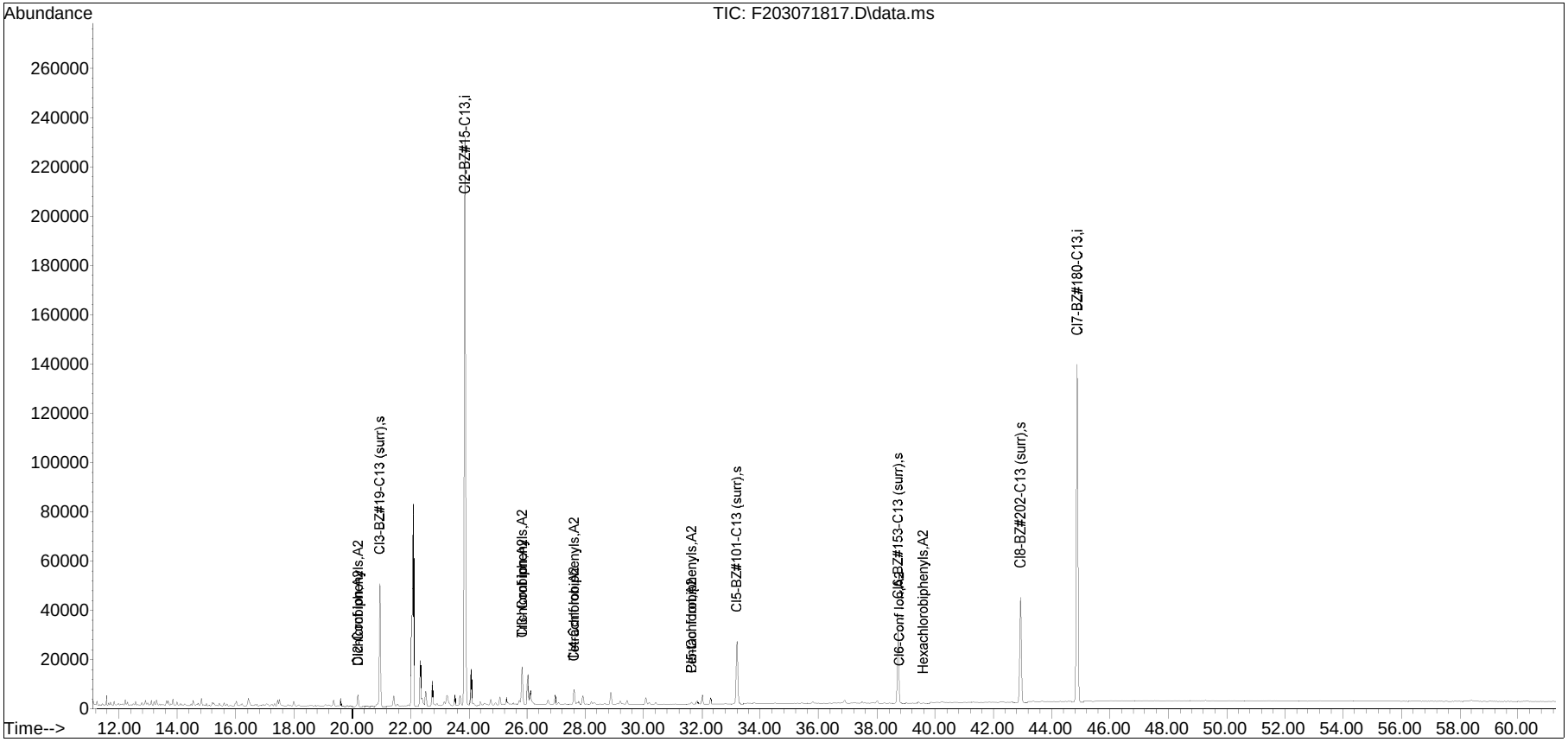
(#) = qualifier out of range (m) = manual integration (+) = signals summed

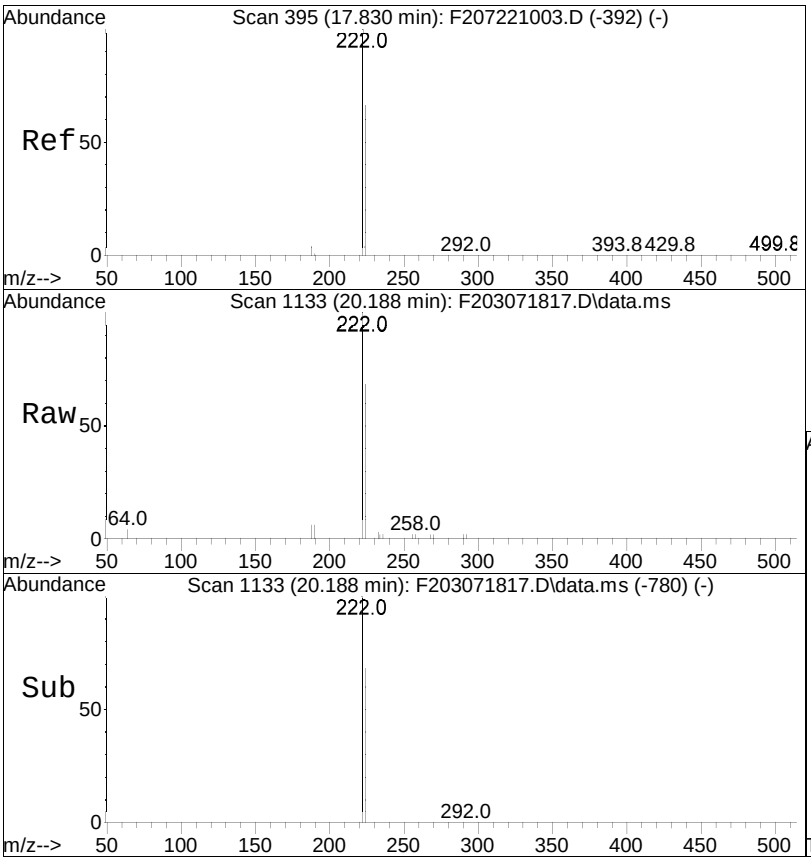
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071817.D
Acq On : 8 Mar 2018 5:53 am
Operator : BNA2:MJS
Sample : L1806872-05,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 13:06:25 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

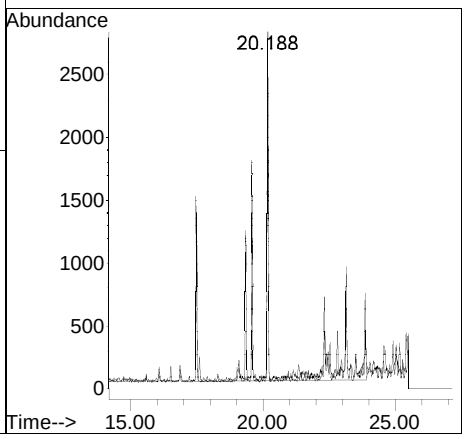


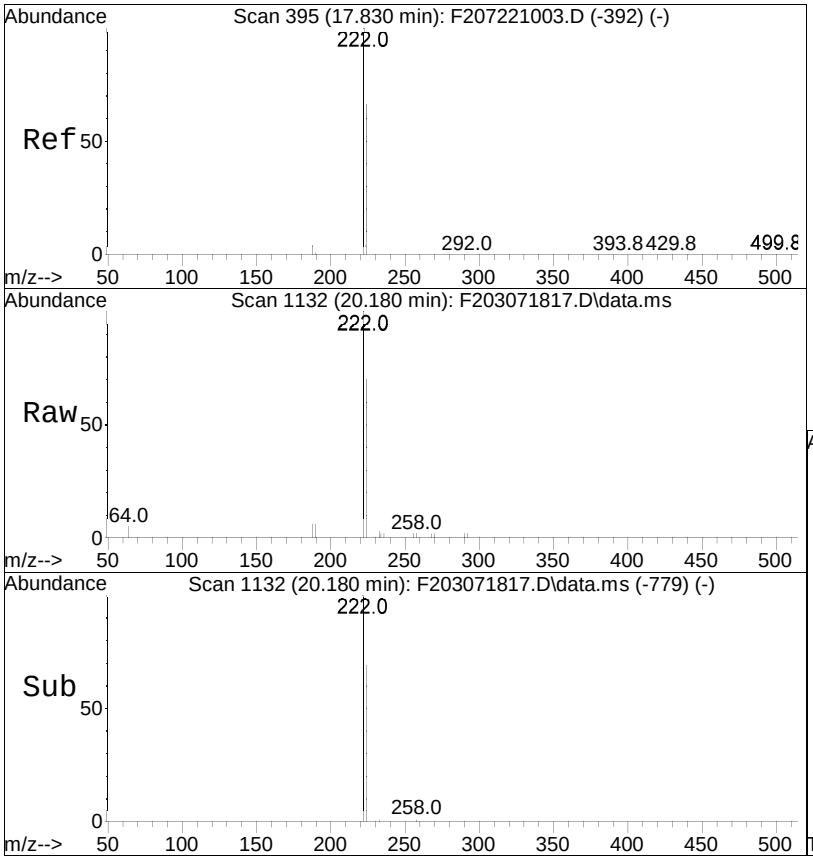


#14
Dichlorobiphenyls
Concen: 23.34 ng/mL M5
RT: 20.188 min Scan# 1133
Delta R.T. 2.636 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:222 Resp: 35198

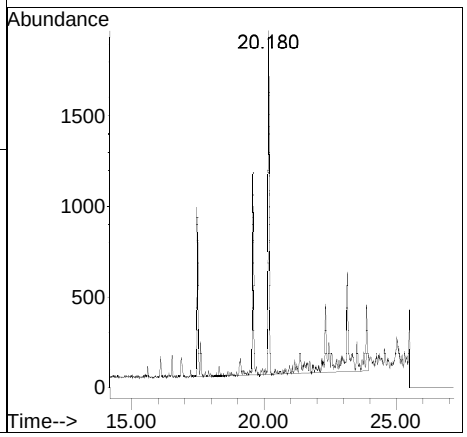
Ion	Ratio	Lower	Upper
222	100		
224	6.6	52.1	78.1#

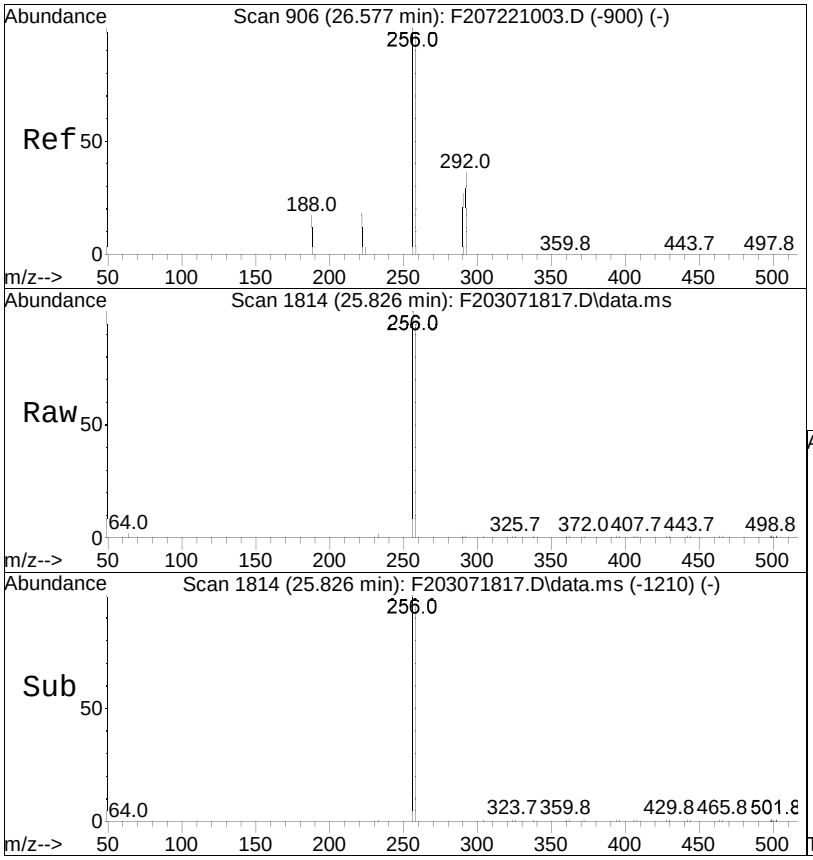




#15
Cl2-Conf Ion
Concen: 16.23 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:224 Resp: 24475

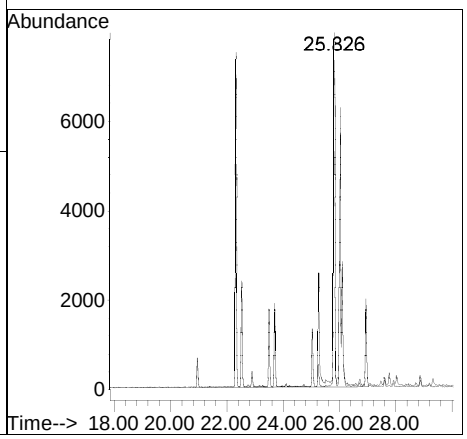


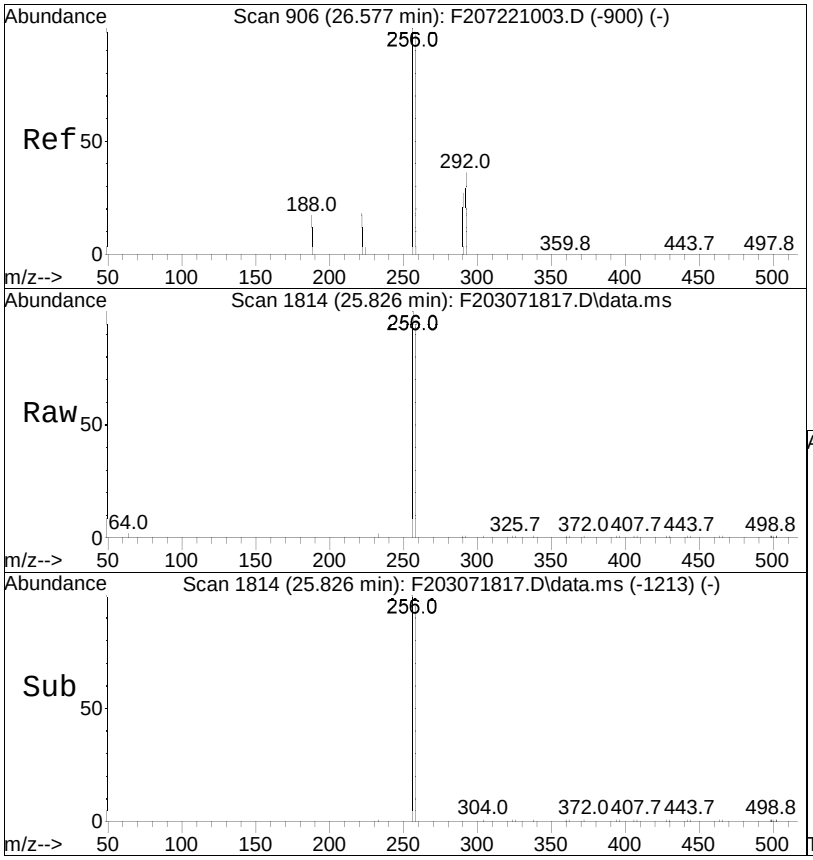


#33
Trichlorobiphenyls
Concen: 92.83 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:256 Resp: 101258

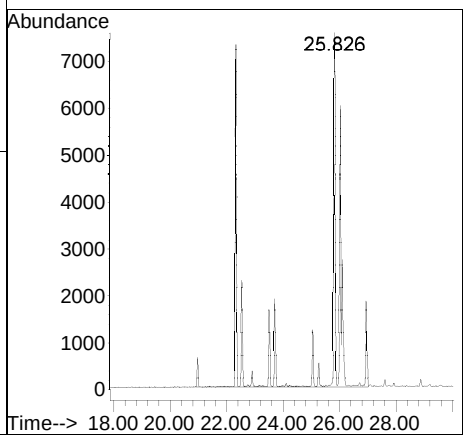
Ion	Ratio	Lower	Upper
256	100		
258	8.2	76.8	115.2#

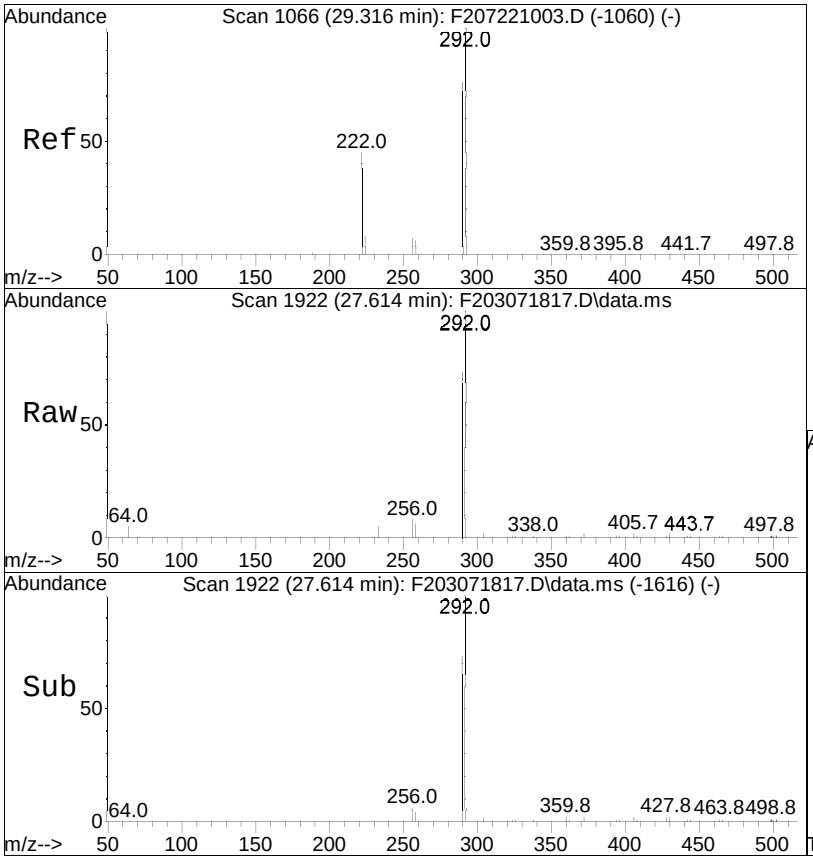




#34
Cl3- Conf Ion
Concen: 80.67 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:258 Resp: 87987

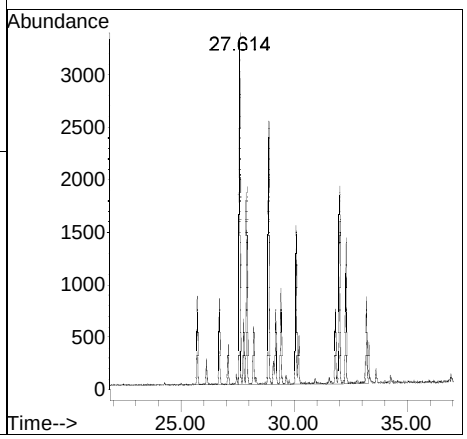


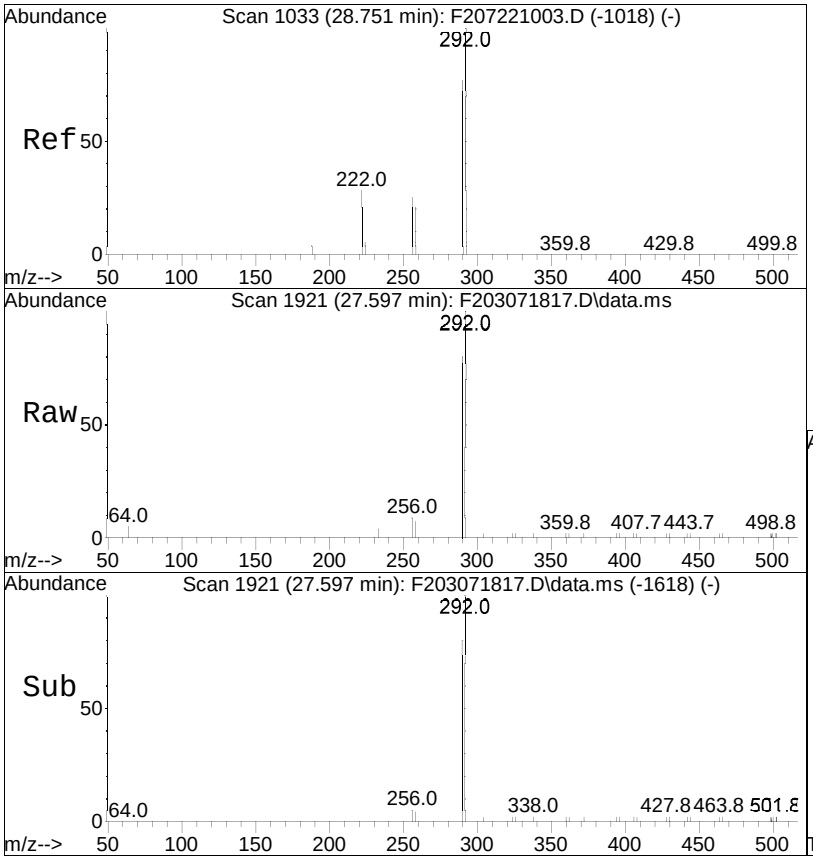


#36
Tetrachlorobiphenyls
Concen: 81.22 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:292 Resp: 68352

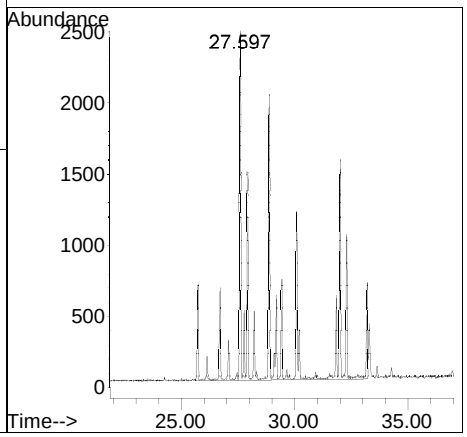
Ion	Ratio	Lower	Upper
292	100		
290	2.5	61.0	91.4#

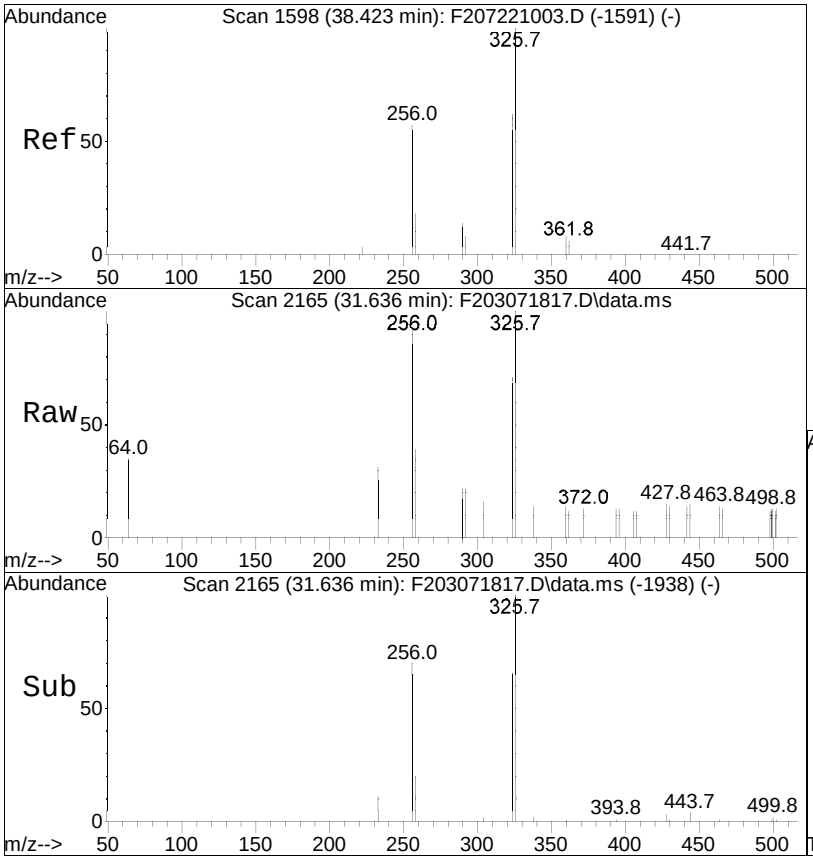




#37
Cl4-Conf Ion
Concen: 66.42 ng/mL M5
RT: 27.597 min Scan# 1921
Delta R.T. -0.758 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:290 Resp: 55893

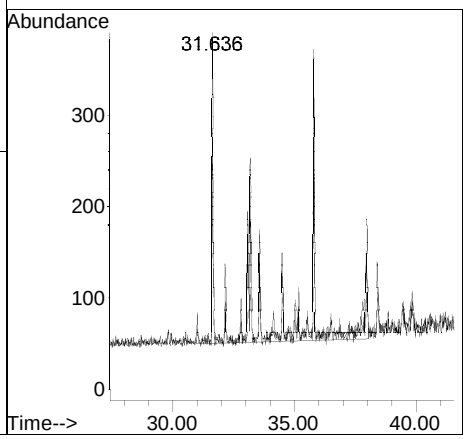


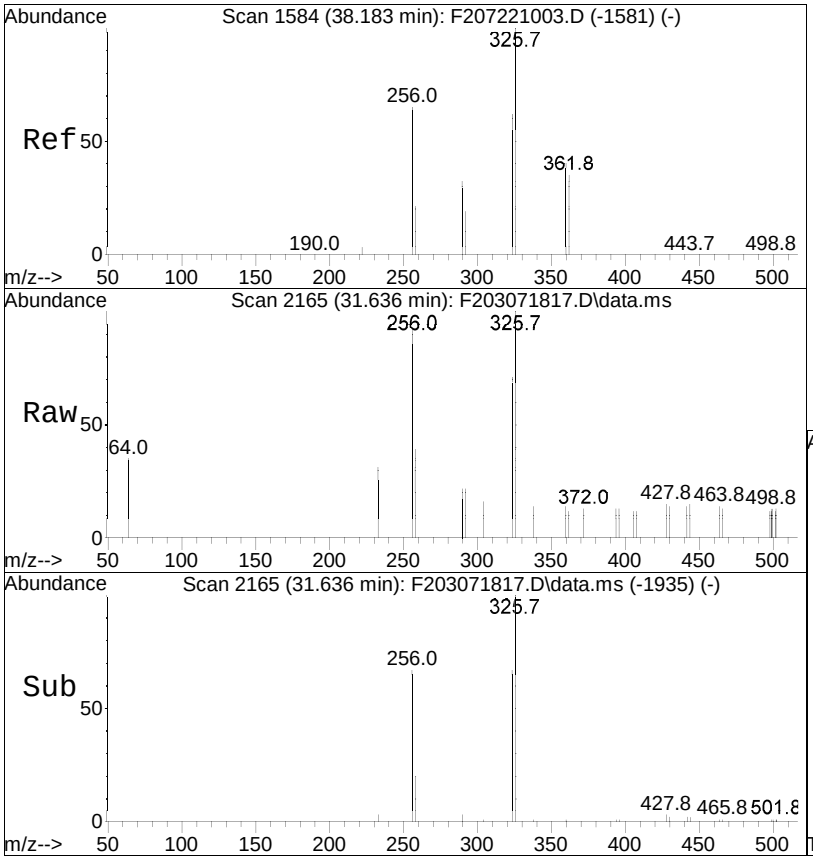


#106
Pentachlorobiphenyls
Concen: 7.24 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:326 Resp: 7535

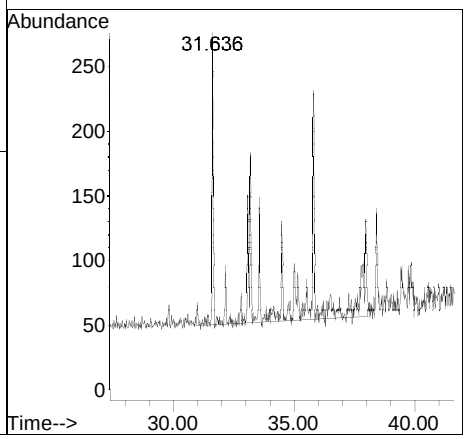
Ion	Ratio	Lower	Upper
326	100		
324	3.5	48.7	73.1#

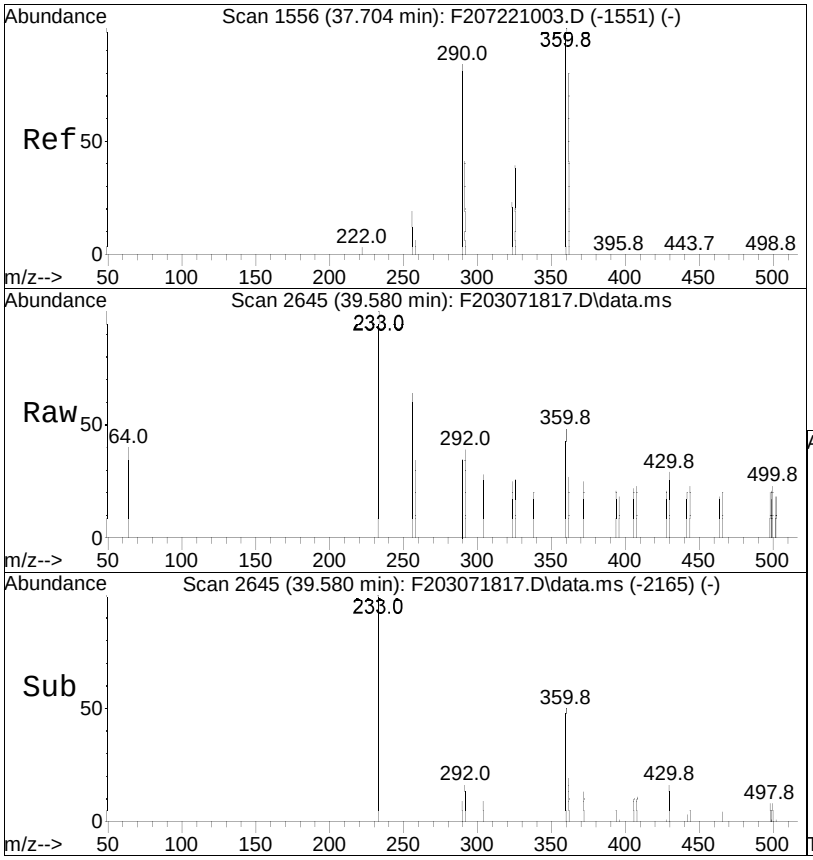




#107
Cl5-Conf Ion
Concen: 5.13 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -6.012 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:324 Resp: 5338

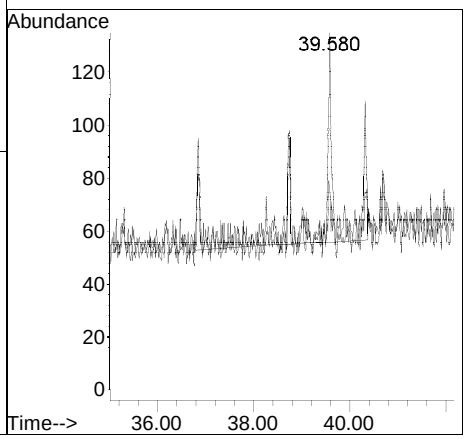


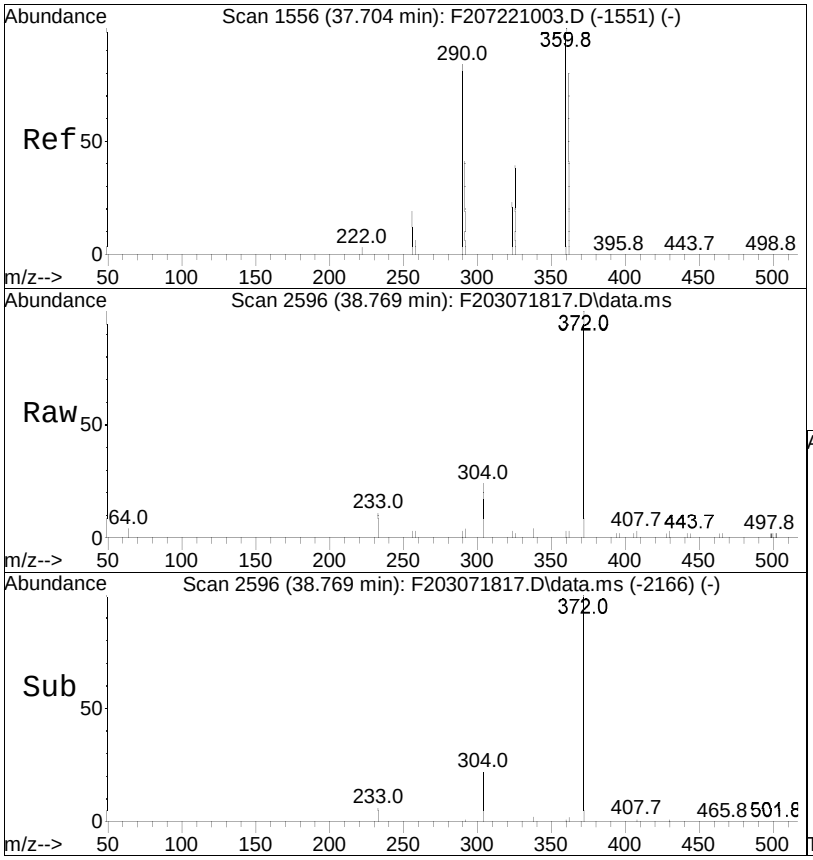


#112
Hexachlorobiphenyls
Concen: 1.50 ng/mL M5
RT: 39.580 min Scan# 2645
Delta R.T. 2.460 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:360 Resp: 1497

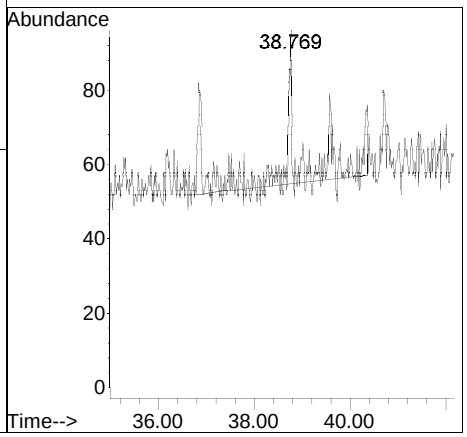
Ion	Ratio	Lower	Upper
360	100		
362	9.0	63.7	95.5#





#113
Cl6-Conf Ion
Concen: 0.83 ng/mL M5
RT: 38.769 min Scan# 2596
Delta R.T. 1.649 min
Lab File: F203071817.D
Acq: 8 Mar 2018 5:53 am

Tgt Ion:362 Resp: 831



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071818.D
Acq On : 8 Mar 2018 7:07 am
Operator : BNA2:MJS
Sample : L1806872-06,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 13:09:06 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.864	234	313478	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	169876	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	44433	80.605	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 80.61%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	69047	85.696	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 85.70%			
151)	Cl6-BZ#153-C13 (surr)	38.720	372	70122	89.809	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 89.81%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	63988	79.981	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 79.98%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.180	222	30950M5	24.881	ng/mL	
15)	Cl2-Conf Ion	20.180	224	21658M5	17.411	ng/mL	
33)	Trichlorobiphenyls	25.827	256	75818M5	84.263	ng/mL	
34)	Cl3- Conf Ion	25.827	258	71408M5	79.362	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	54626M5	78.689	ng/mL	
37)	Cl4-Conf Ion	27.597	290	44879M5	64.649	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	6390M5	7.444	ng/mL	
107)	Cl5-Conf Ion	35.807	324	4788M5	5.578	ng/mL	
112)	Hexachlorobiphenyls	38.736	360	1068M5	1.294	ng/mL	
113)	Cl6-Conf Ion	38.736	362	1028M5	1.246	ng/mL	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

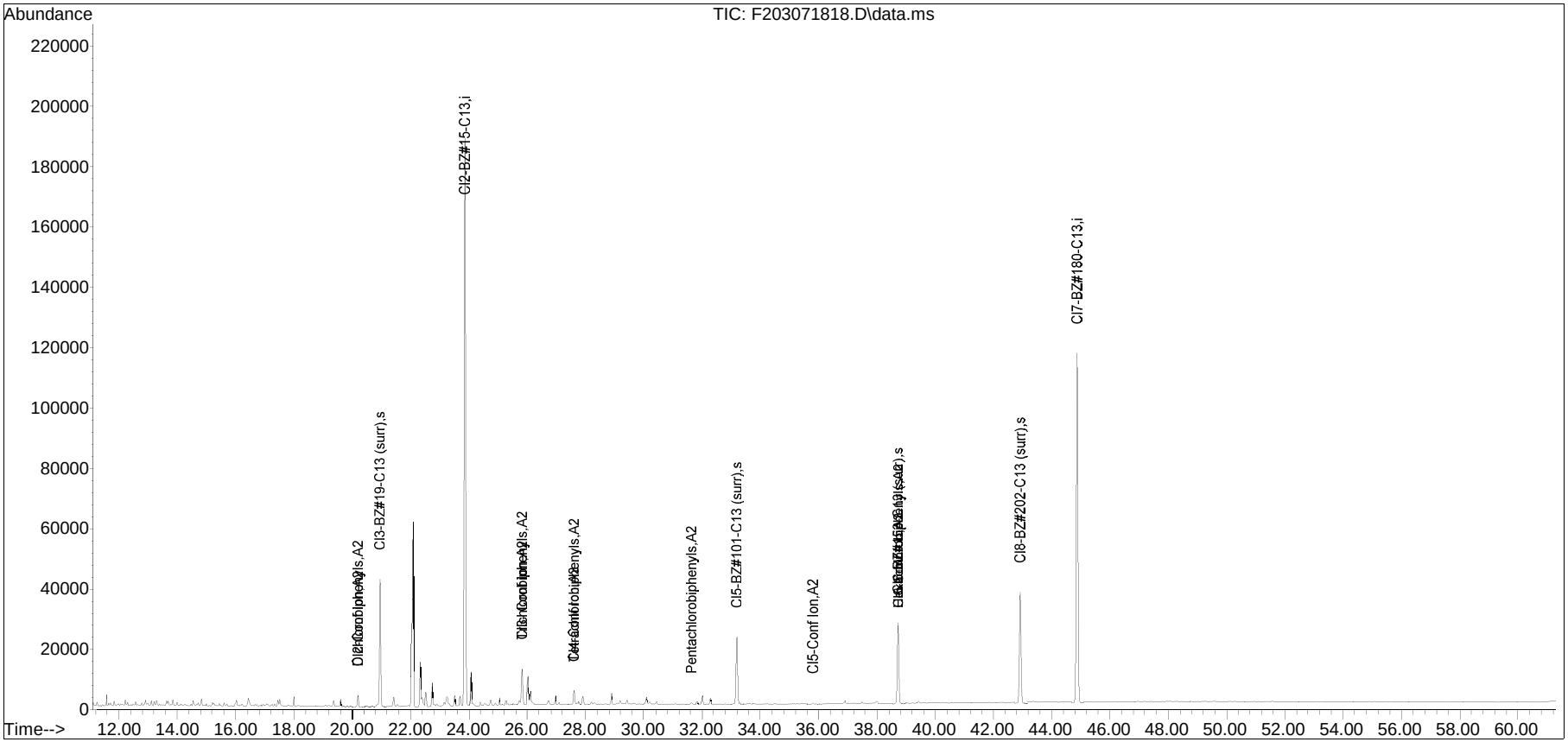
(#) = qualifier out of range (m) = manual integration (+) = signals summed

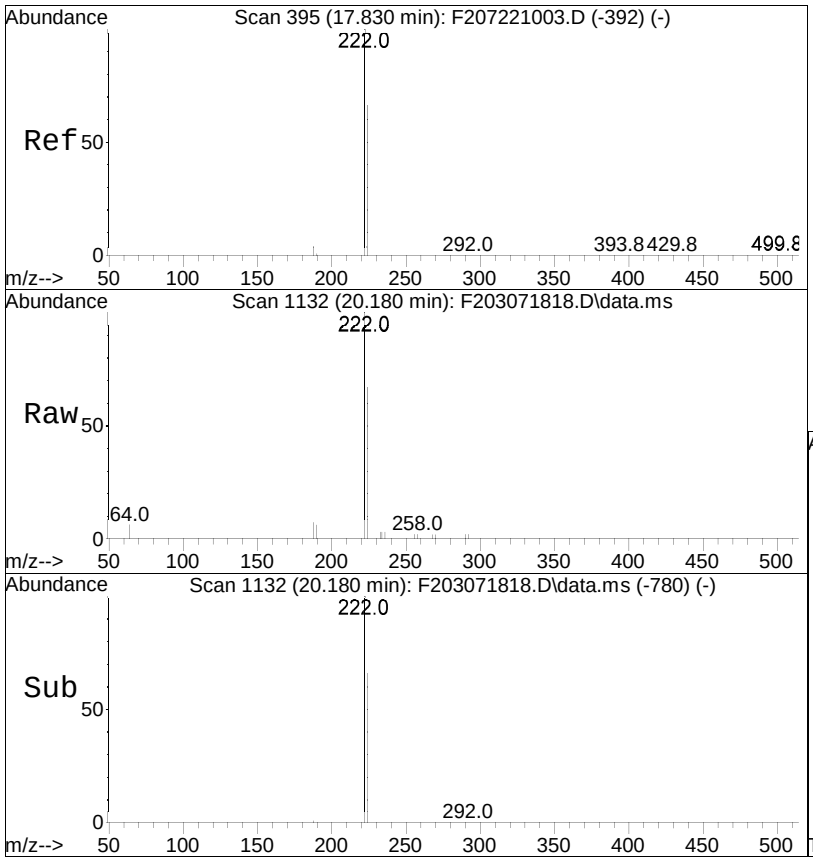
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071818.D
Acq On : 8 Mar 2018 7:07 am
Operator : BNA2:MJS
Sample : L1806872-06,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 13:09:06 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

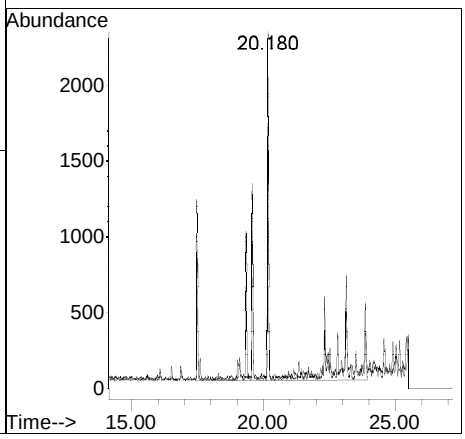


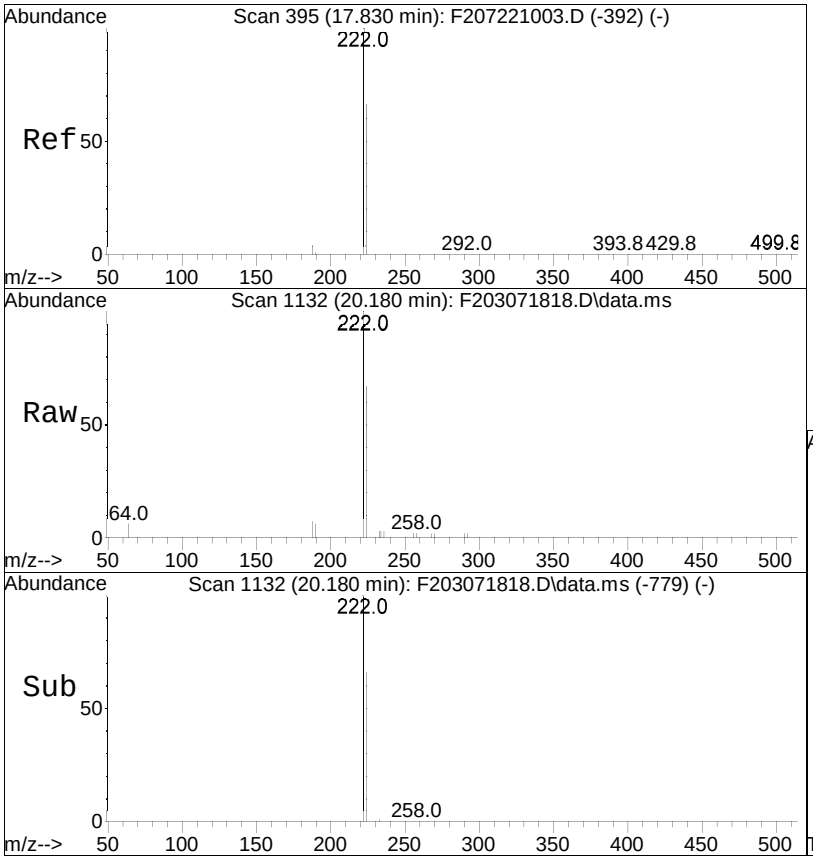


#14
Dichlorobiphenyls
Concen: 24.88 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:222 Resp: 30950

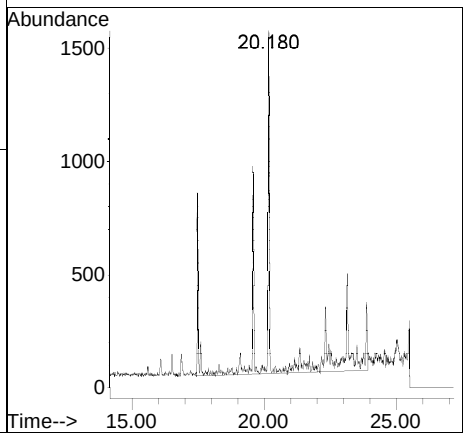
Ion	Ratio	Lower	Upper
222	100		
224	0.0	52.1	78.1#

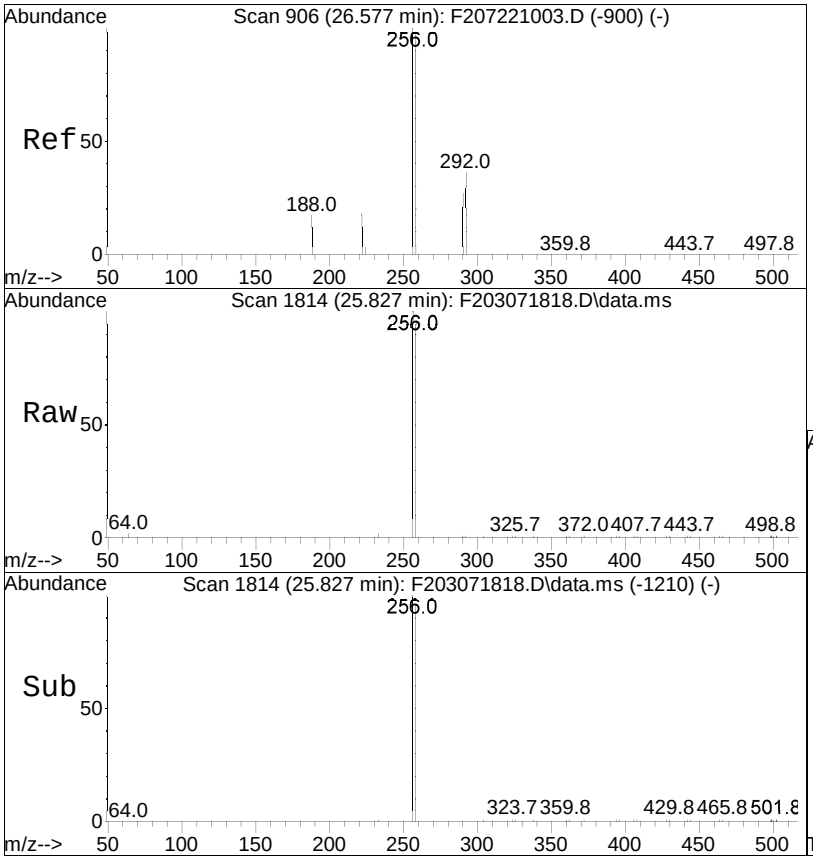




#15
Cl2-Conf Ion
Concen: 17.41 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:224 Resp: 21658

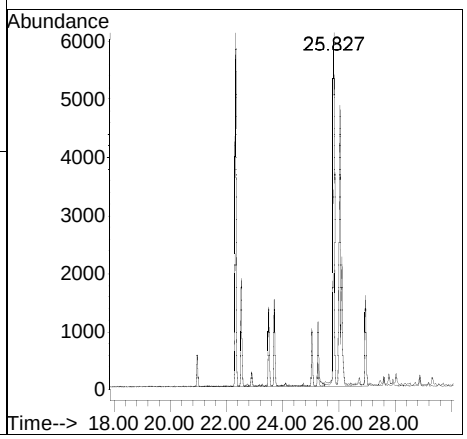


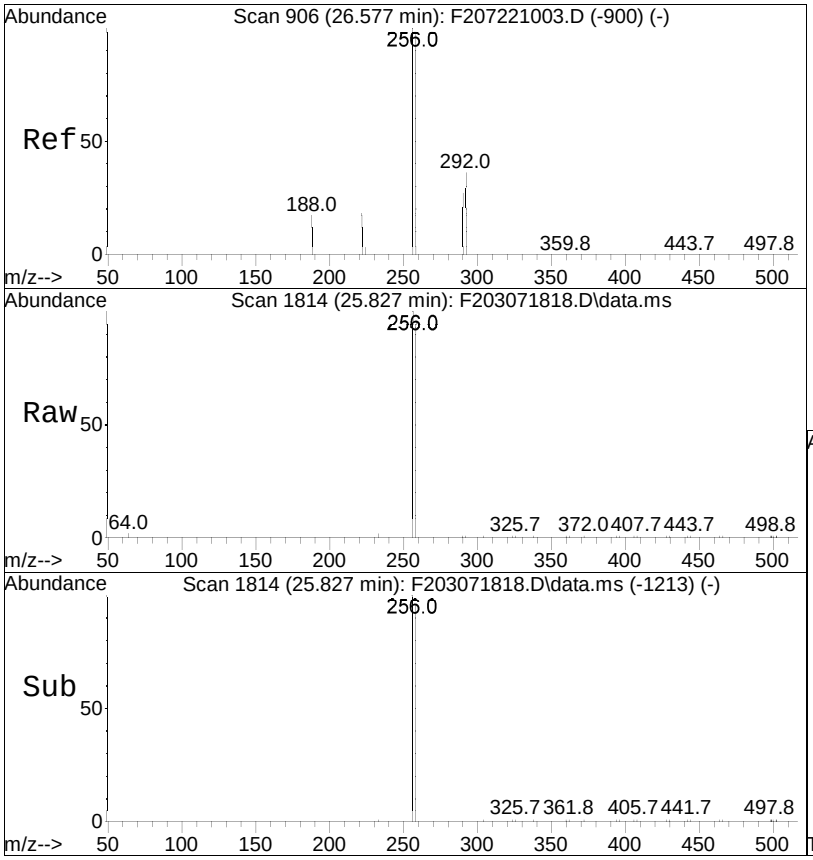


#33
Trichlorobiphenyls
Concen: 84.26 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:256 Resp: 75818

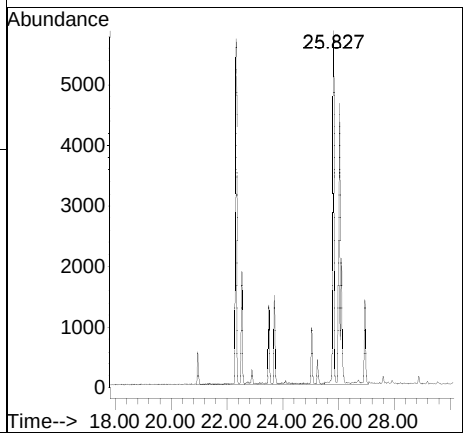
Ion	Ratio	Lower	Upper
256	100		
258	8.6	76.8	115.2#

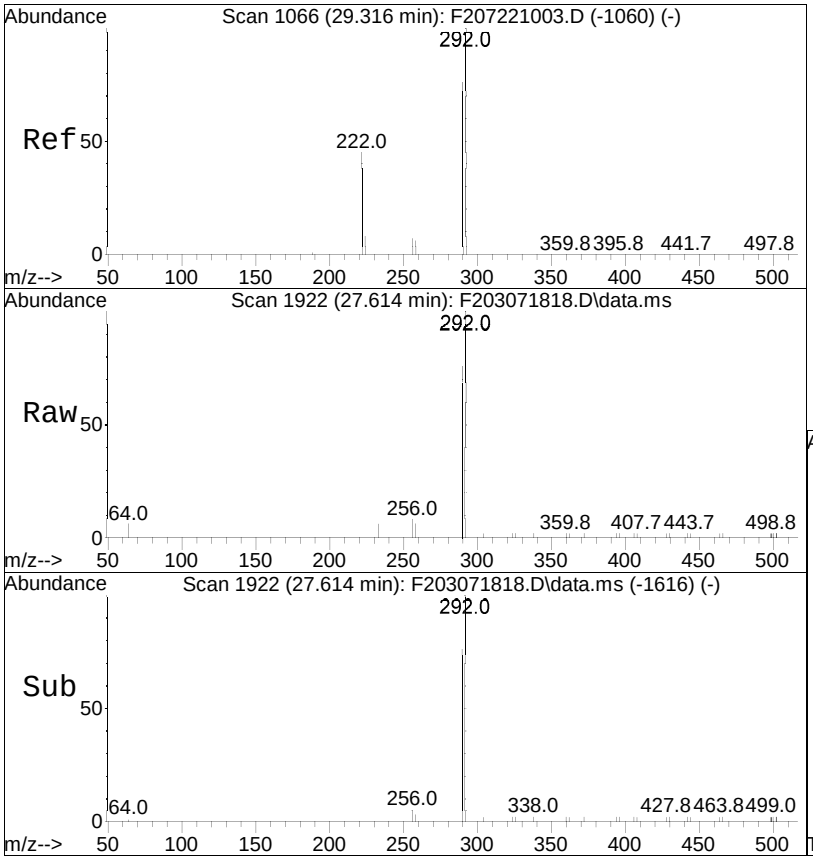




#34
Cl3- Conf Ion
Concen: 79.36 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:258 Resp: 71408

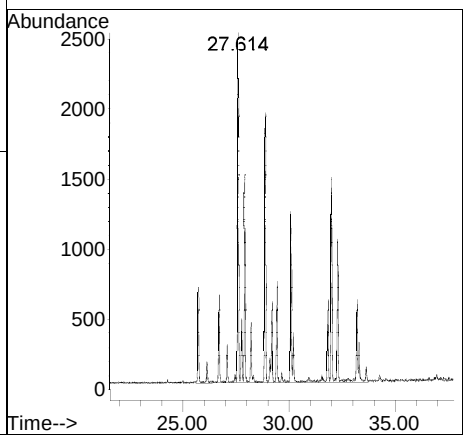


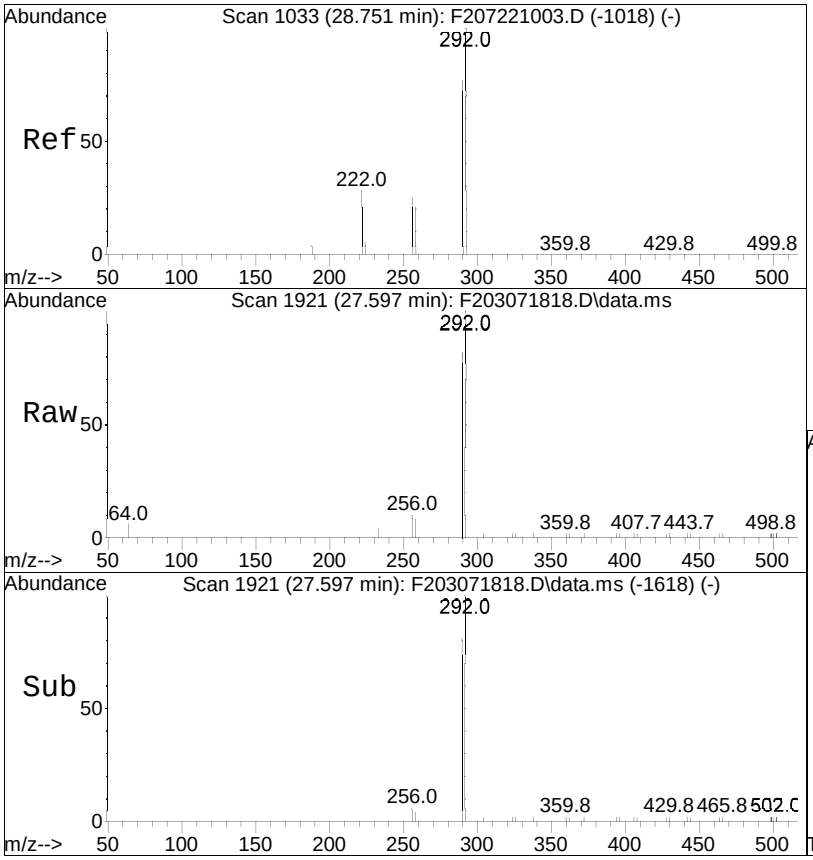


#36
Tetrachlorobiphenyls
Concen: 78.69 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:292 Resp: 54626

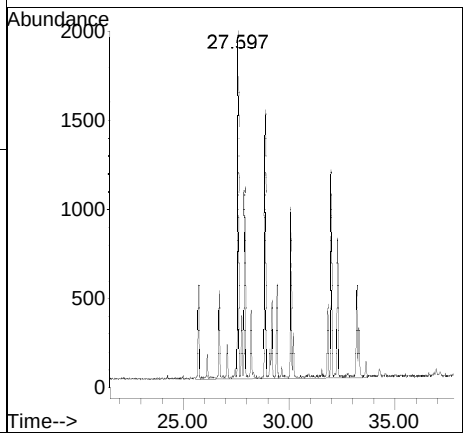
Ion	Ratio	Lower	Upper
292	100		
290	0.0	61.0	91.4#

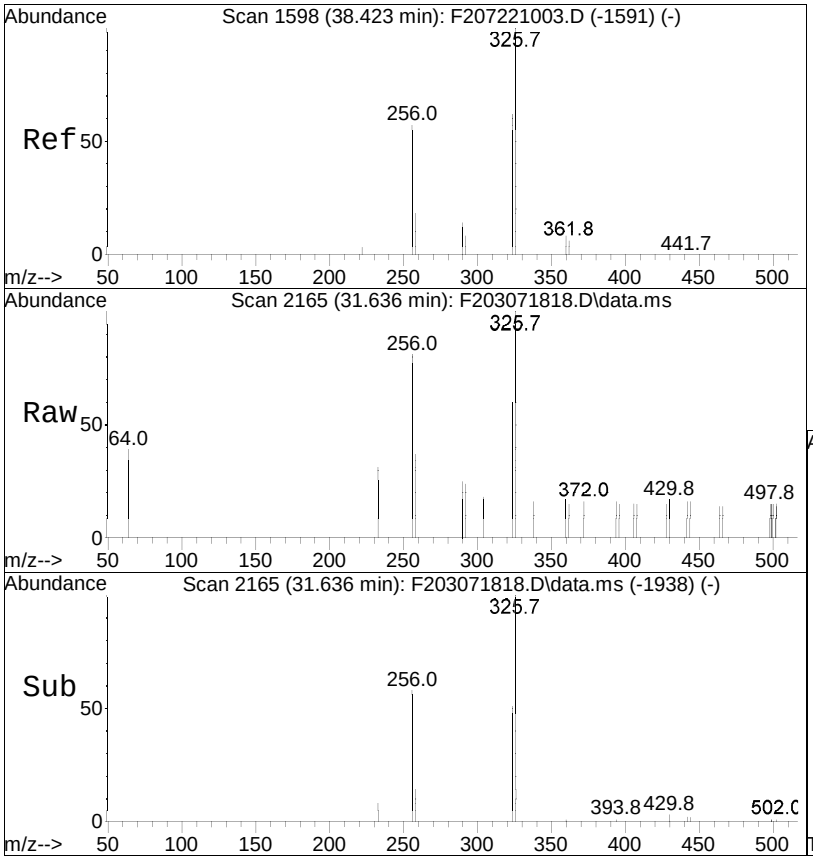




#37
Cl4-Conf Ion
Concen: 64.65 ng/mL M5
RT: 27.597 min Scan# 1921
Delta R.T. -0.758 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:290 Resp: 44879

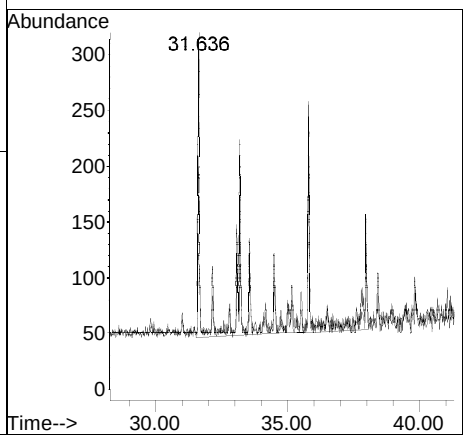


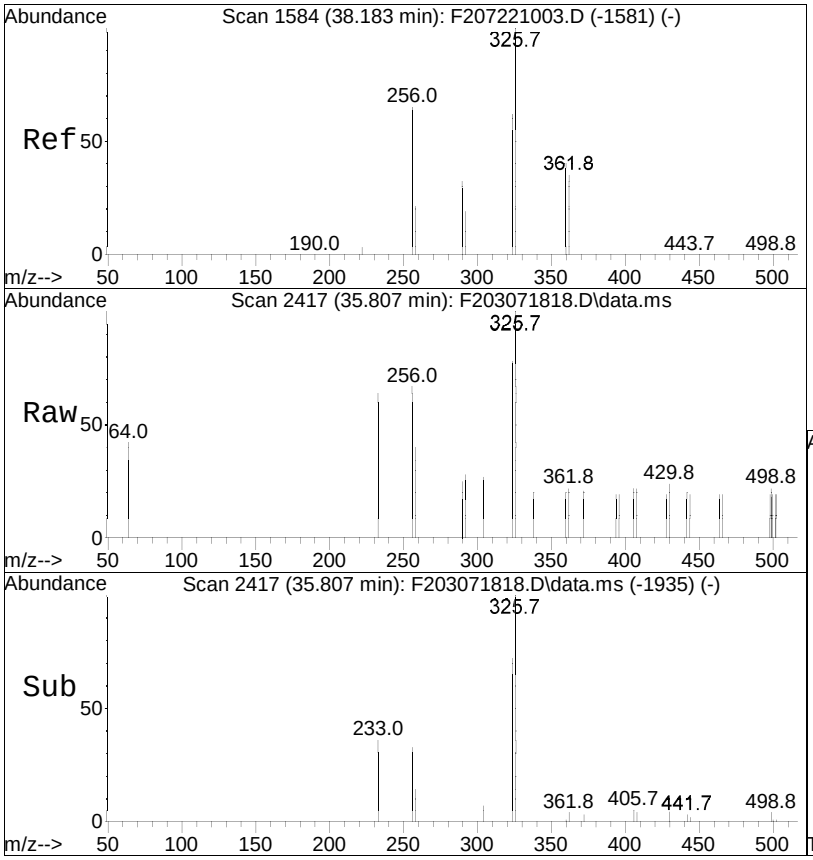


#106
Pentachlorobiphenyls
Concen: 7.44 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:326 Resp: 6390

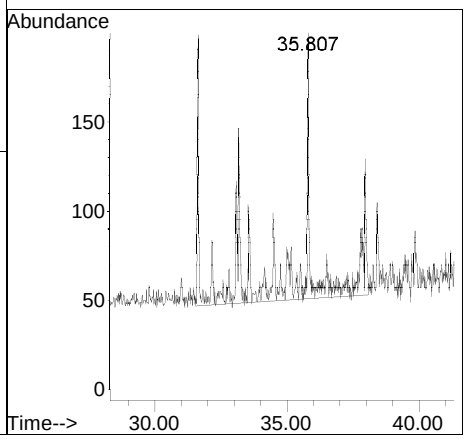
Ion	Ratio	Lower	Upper
326	100		
324	0.0	48.7	73.1#

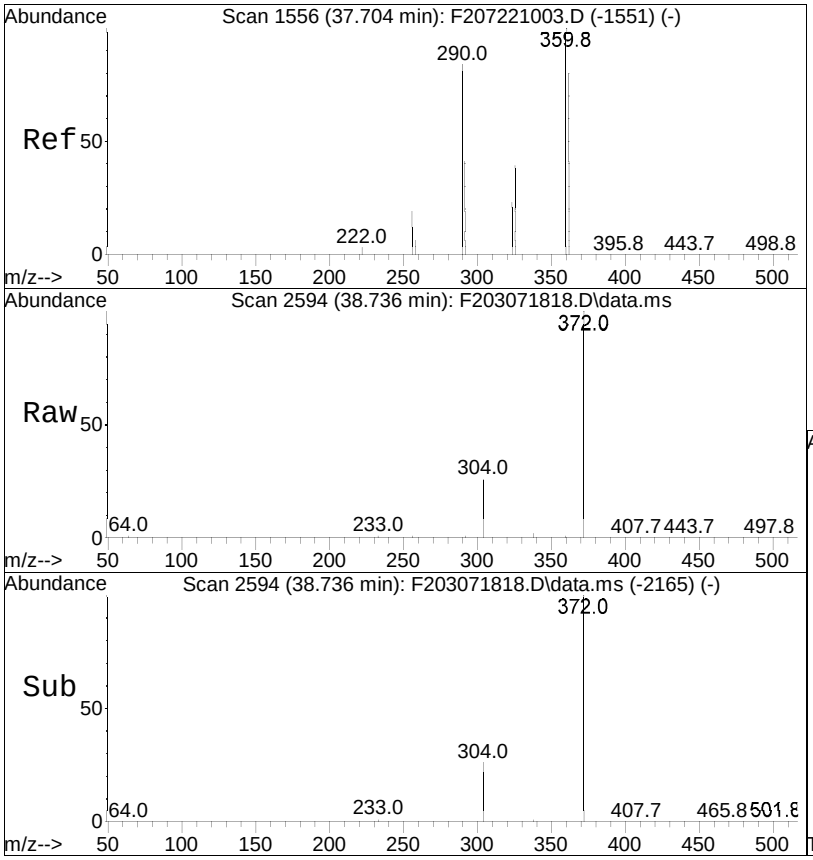




#107
Cl5-Conf Ion
Concen: 5.58 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. -1.841 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:324 Resp: 4788

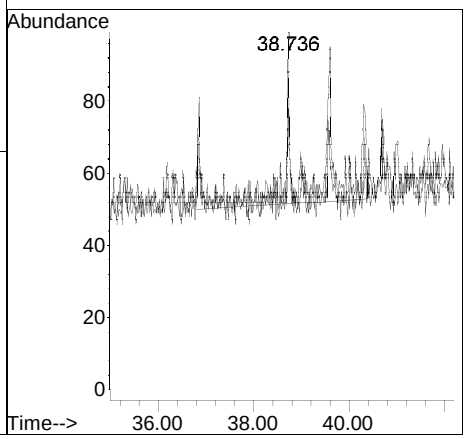


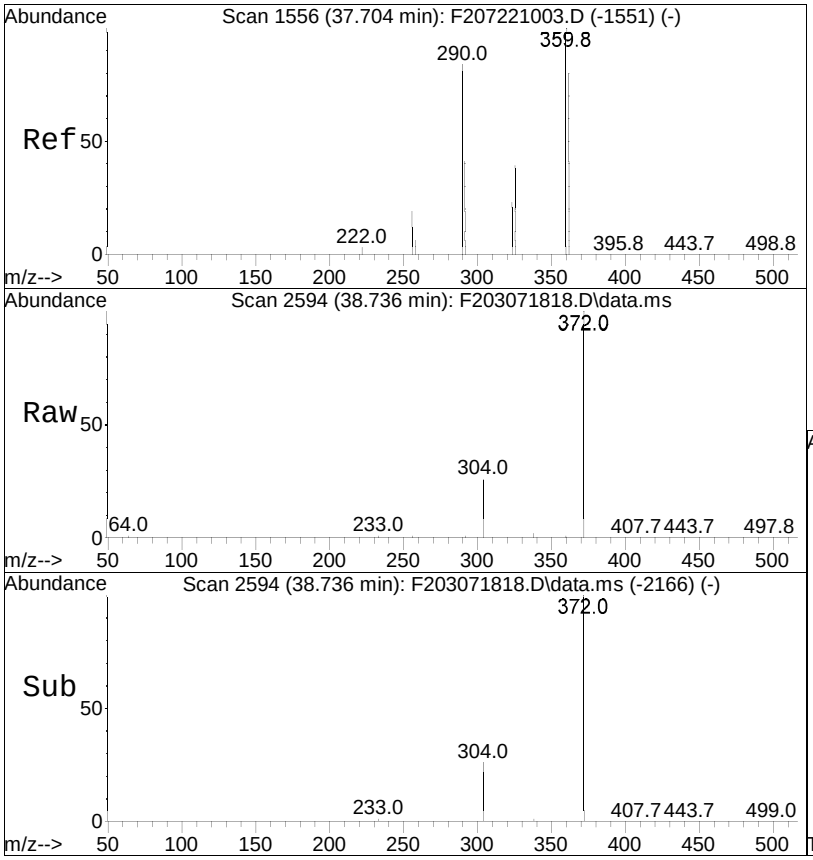


#112
Hexachlorobiphenyls
Concen: 1.29 ng/mL M5
RT: 38.736 min Scan# 2594
Delta R.T. 1.616 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:360 Resp: 1068

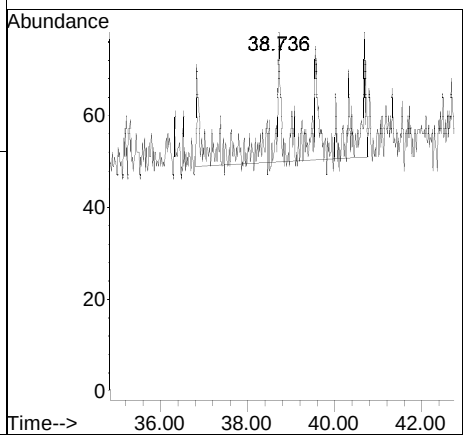
Ion	Ratio	Lower	Upper
360	100		
362	0.0	63.7	95.5#





#113
Cl6-Conf Ion
Concen: 1.25 ng/mL M5
RT: 38.736 min Scan# 2594
Delta R.T. 1.616 min
Lab File: F203071818.D
Acq: 8 Mar 2018 7:07 am

Tgt Ion:362 Resp: 1028



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071819.D
Acq On : 8 Mar 2018 8:21 am
Operator : BNA2:MJS
Sample : L1806872-07,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 13:12:48 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.864	234	381434	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	199398	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	56356	84.020	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 84.02%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	88779	90.555	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 90.56%			
151) Cl6-BZ#153-C13 (surr)	38.720	372	89769	97.950	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 97.95%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	81185	86.452	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 86.45%			
Target Compounds						Qvalue
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
14) Dichlorobiphenyls	20.180	222	40871M5	27.003	ng/mL	
15) Cl2-Conf Ion	20.180	224	31859M5	21.049	ng/mL	
33) Trichlorobiphenyls	25.827	256	181995M5	166.231	ng/mL	
34) Cl3- Conf Ion	25.827	258	131770M5	120.356	ng/mL	
36) Tetrachlorobiphenyls	27.598	292	99821M5	118.175	ng/mL	
37) Cl4-Conf Ion	27.598	290	83201M5	98.499	ng/mL	
106) Pentachlorobiphenyls	35.807	326	16516M5	15.813	ng/mL	
107) Cl5-Conf Ion	35.807	324	15288M5	14.637	ng/mL	
112) Hexachlorobiphenyls	38.753	360	4435M5	4.417	ng/mL	
113) Cl6-Conf Ion	38.753	362	3125M5	3.112	ng/mL	
135) Heptachlorobiphenyls	44.893	394	1508M5	1.475	ng/mL	
136) Cl7-Conf Ion	44.876	396	2162M5	2.115	ng/mL	
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

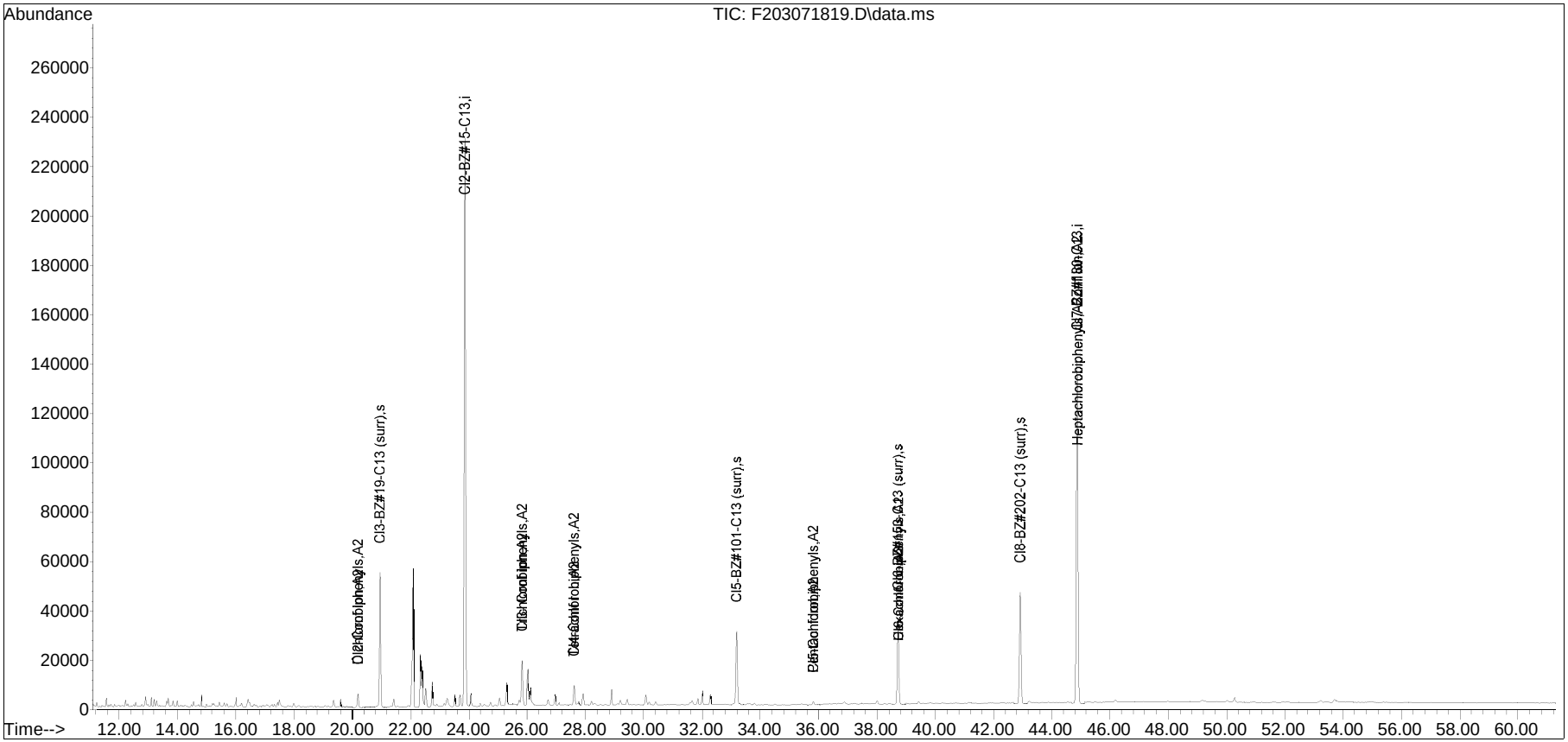
(#) = qualifier out of range (m) = manual integration (+) = signals summed

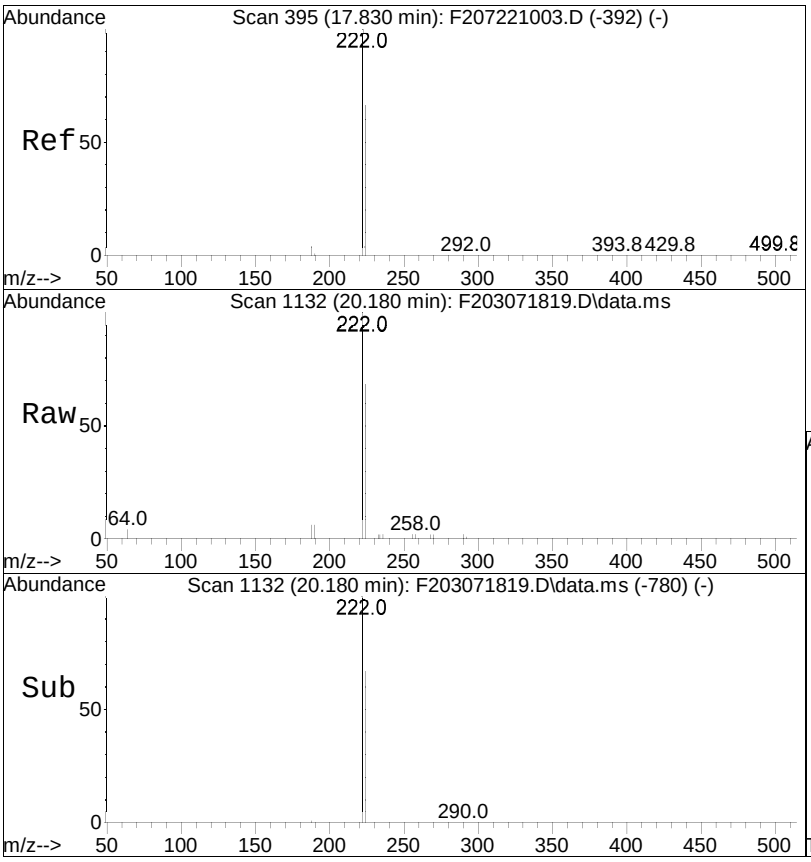
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071819.D
Acq On : 8 Mar 2018 8:21 am
Operator : BNA2:MJS
Sample : L1806872-07,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 13:12:48 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

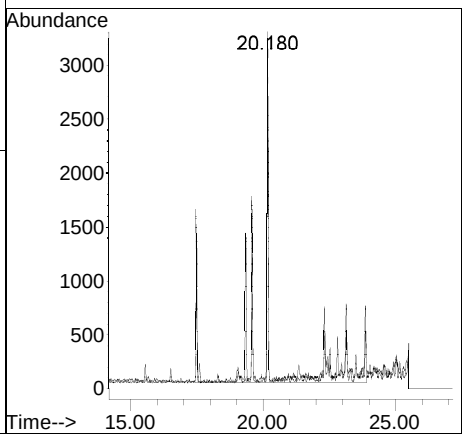


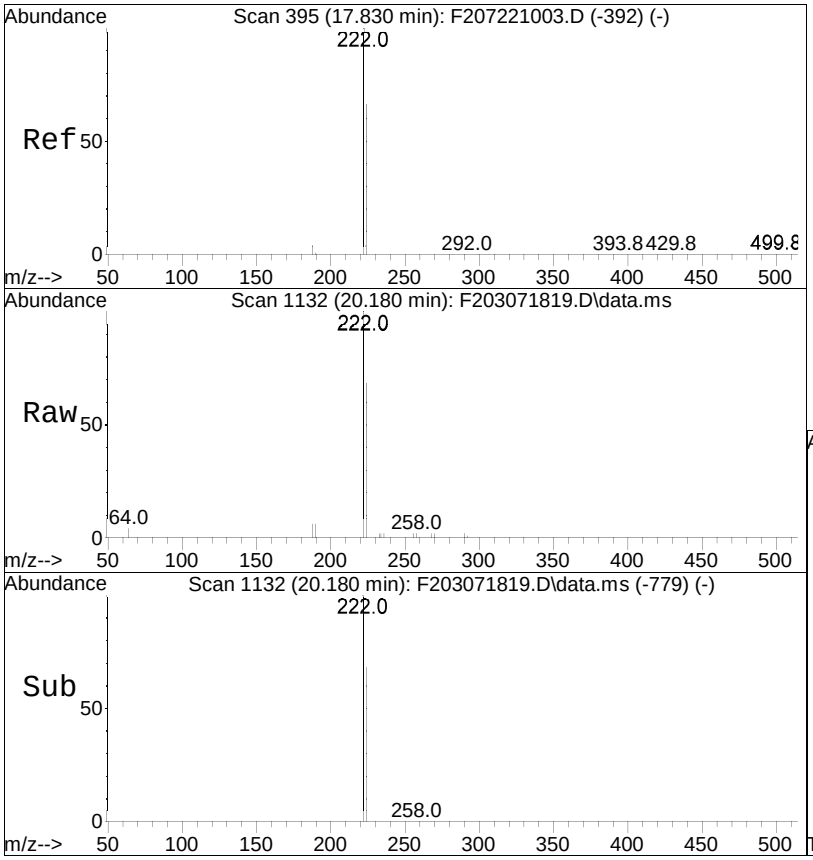


#14
Dichlorobiphenyls
Concen: 27.00 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:222 Resp: 40871

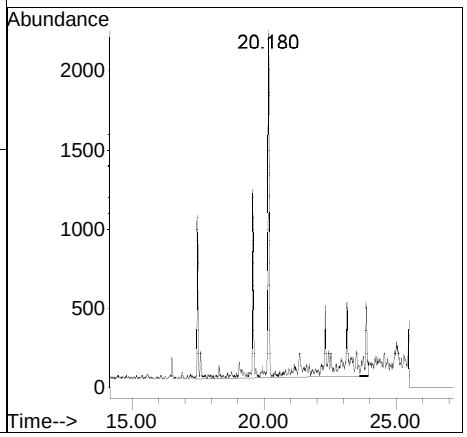
Ion	Ratio	Lower	Upper
222	100		
224	6.1	52.1	78.1#

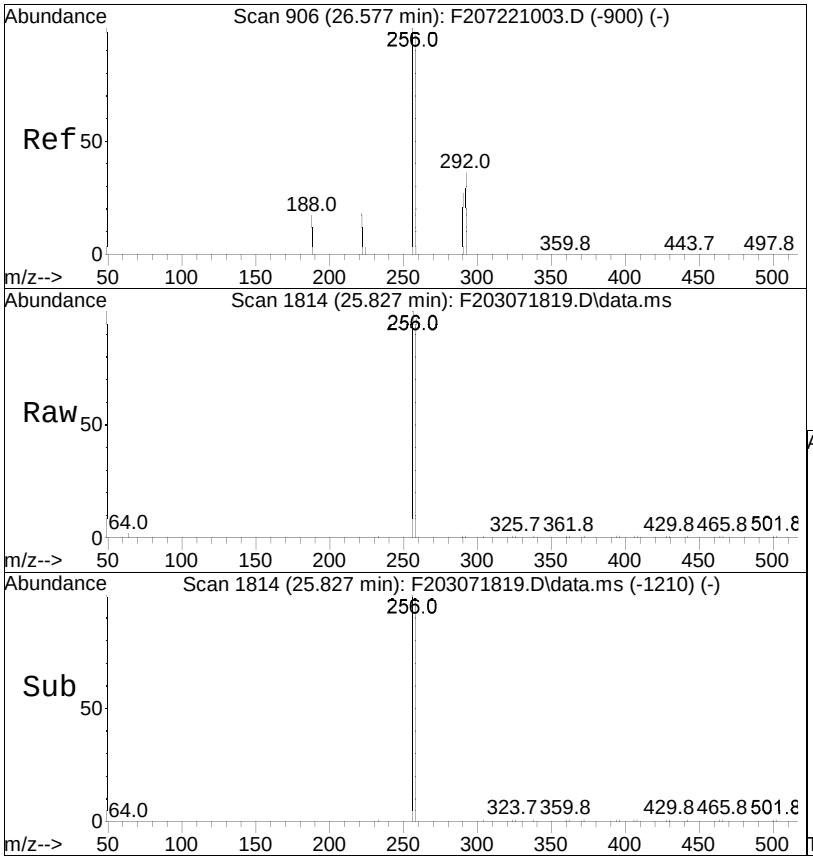




#15
Cl2-Conf Ion
Concen: 21.05 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:224 Resp: 31859

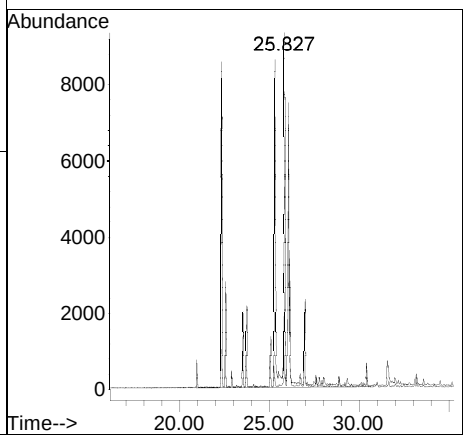


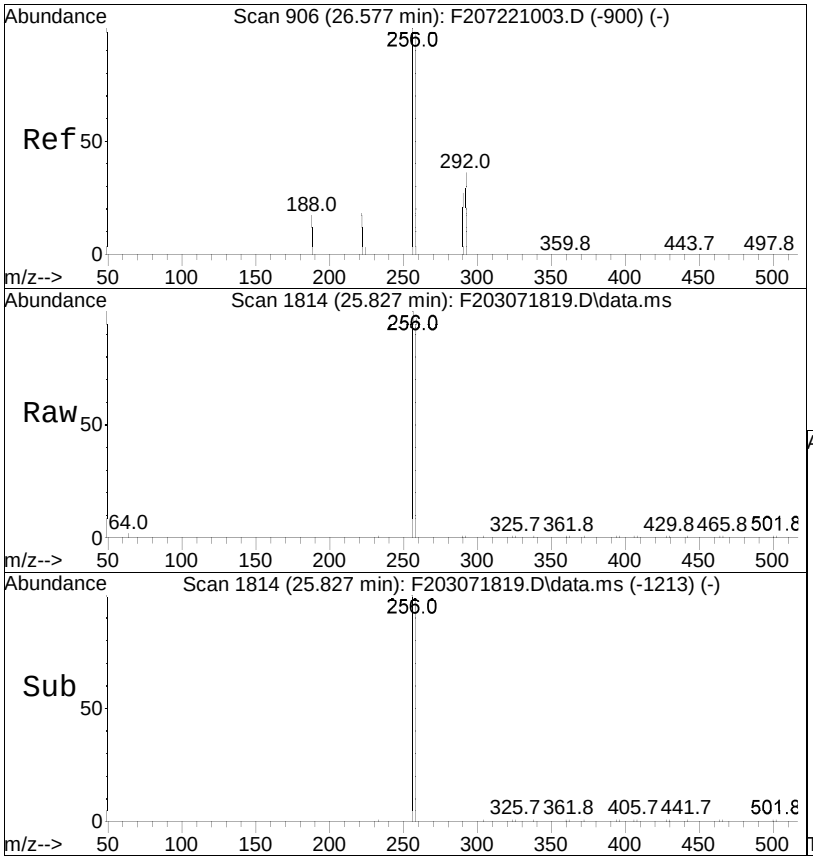


#33
Trichlorobiphenyls
Concen: 166.23 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:256 Resp: 181995

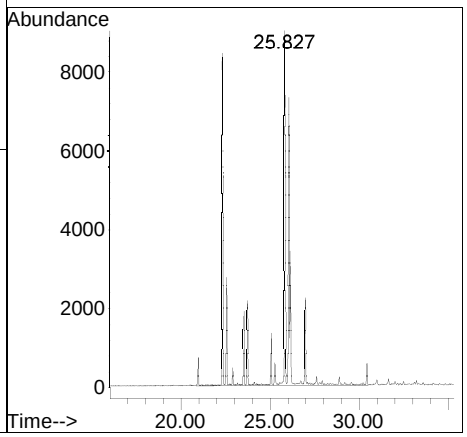
Ion	Ratio	Lower	Upper
256	100		
258	0.0	76.8	115.2#

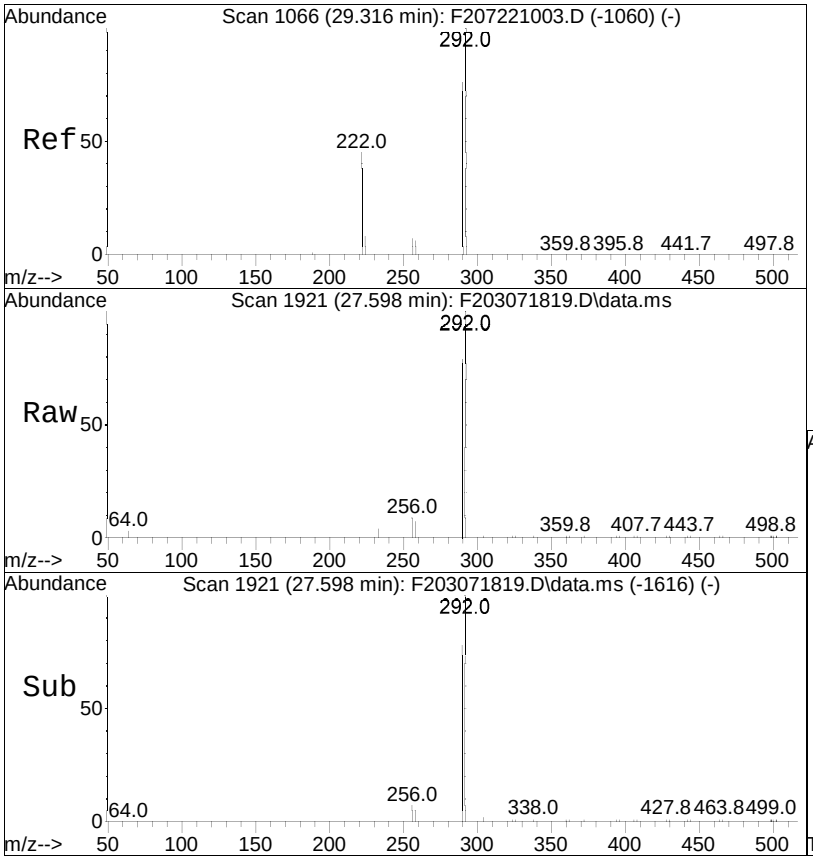




#34
Cl3- Conf Ion
Concen: 120.36 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:258 Resp: 131770

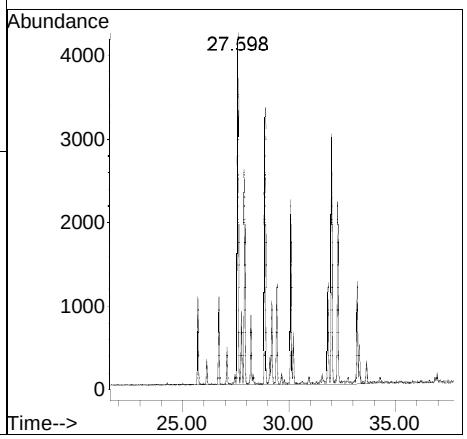


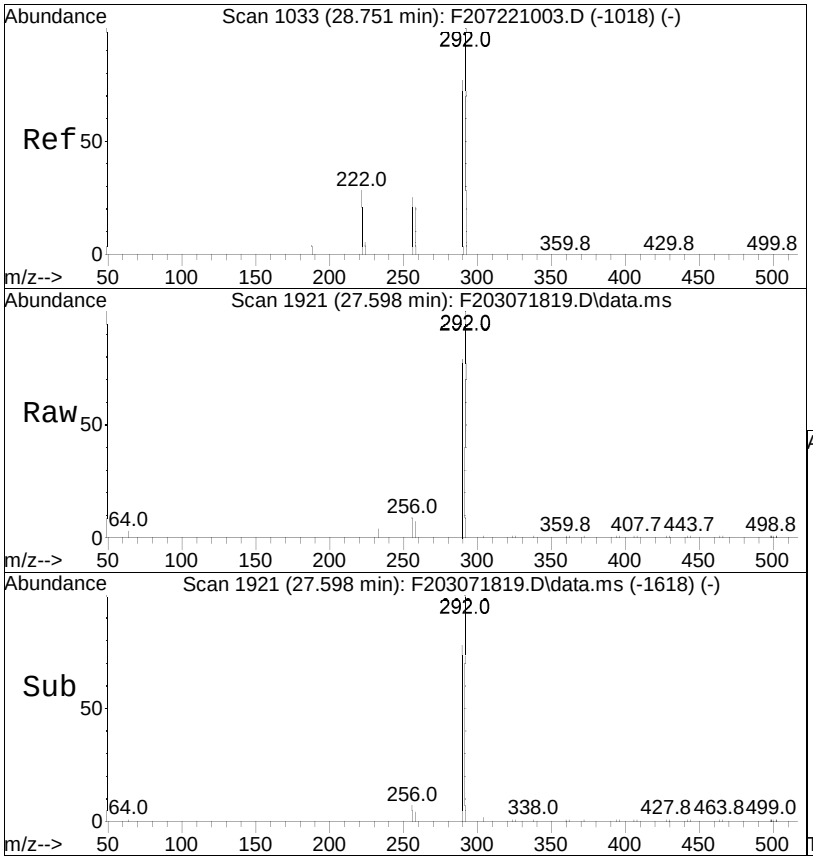


#36
Tetrachlorobiphenyls
Concen: 118.18 ng/mL M5
RT: 27.598 min Scan# 1921
Delta R.T. -0.774 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:292 Resp: 99821

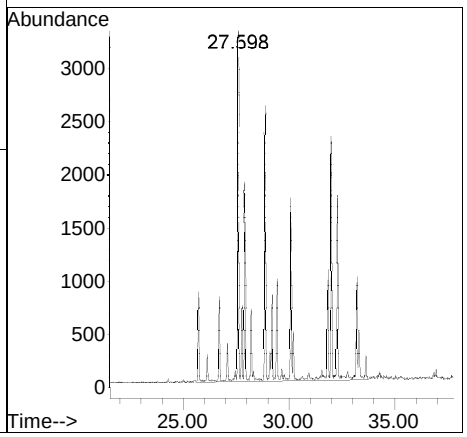
Ion	Ratio	Lower	Upper
292	100		
290	0.0	61.0	91.4#

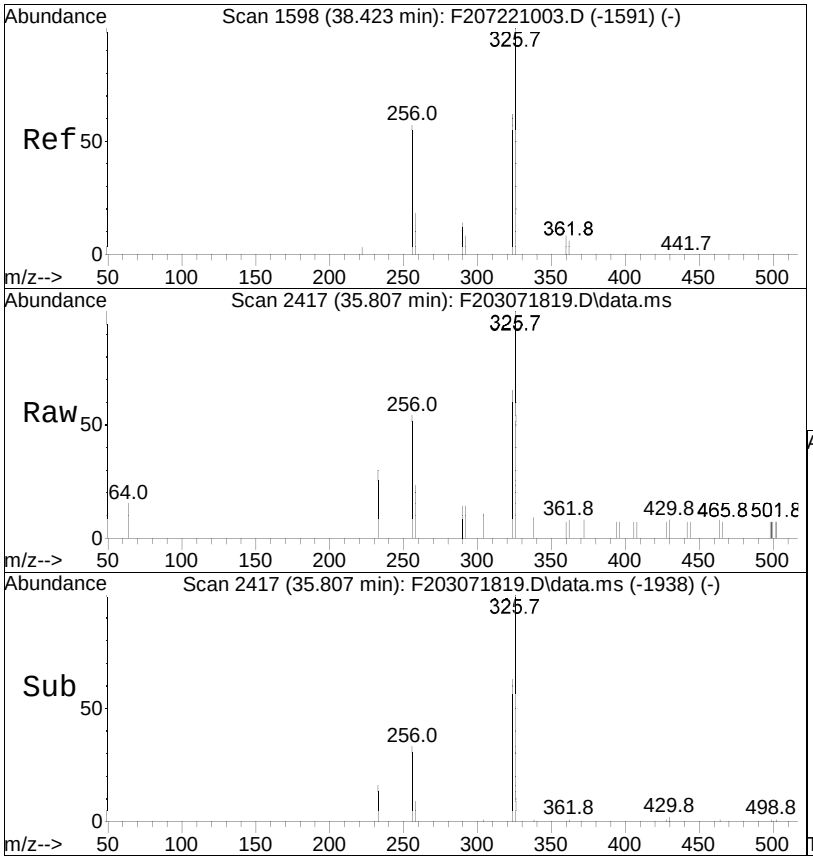




#37
Cl4-Conf Ion
Concen: 98.50 ng/mL M5
RT: 27.598 min Scan# 1921
Delta R.T. -0.758 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:290 Resp: 83201

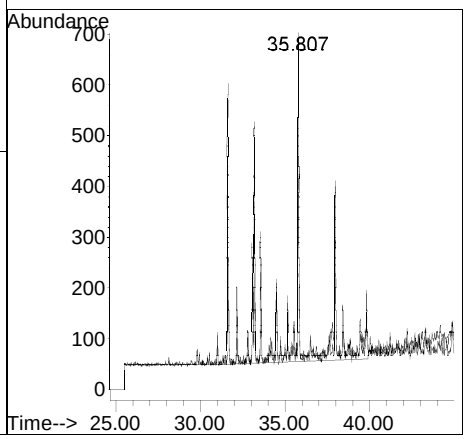


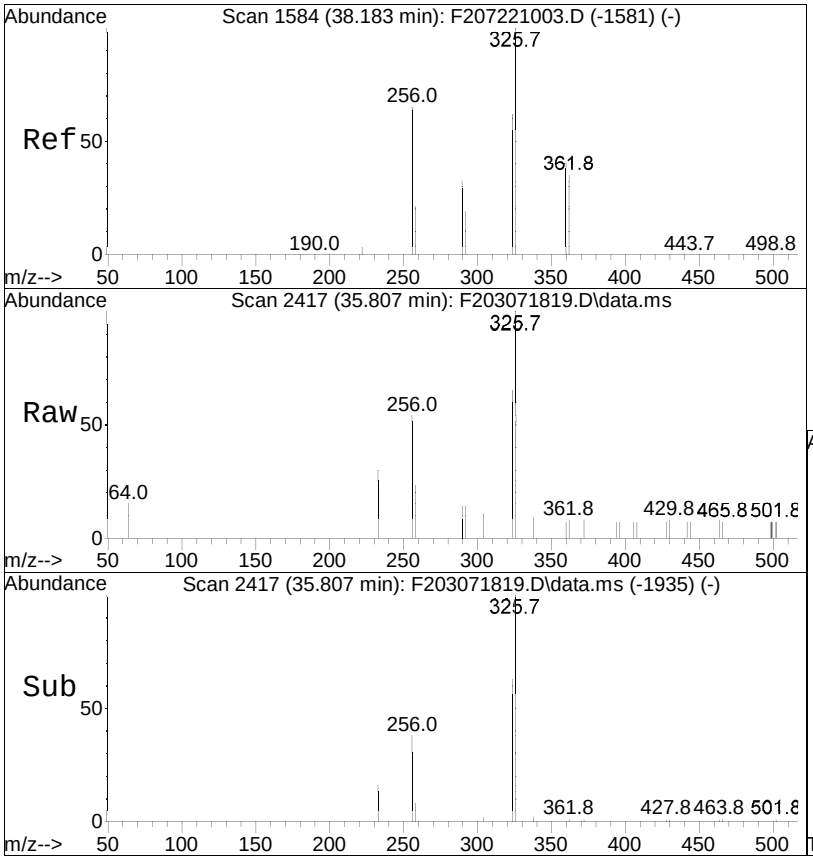


#106
Pentachlorobiphenyls
Concen: 15.81 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. 1.543 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:326 Resp: 16516

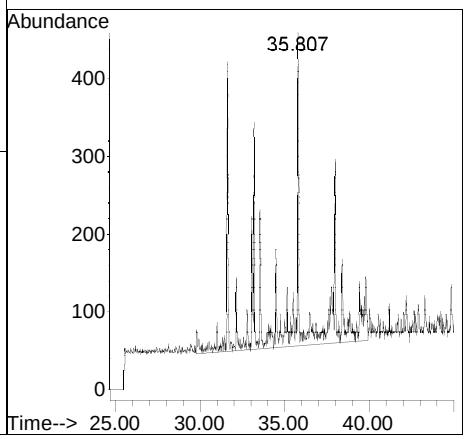
Ion	Ratio	Lower	Upper
326	100		
324	2.8	48.7	73.1#

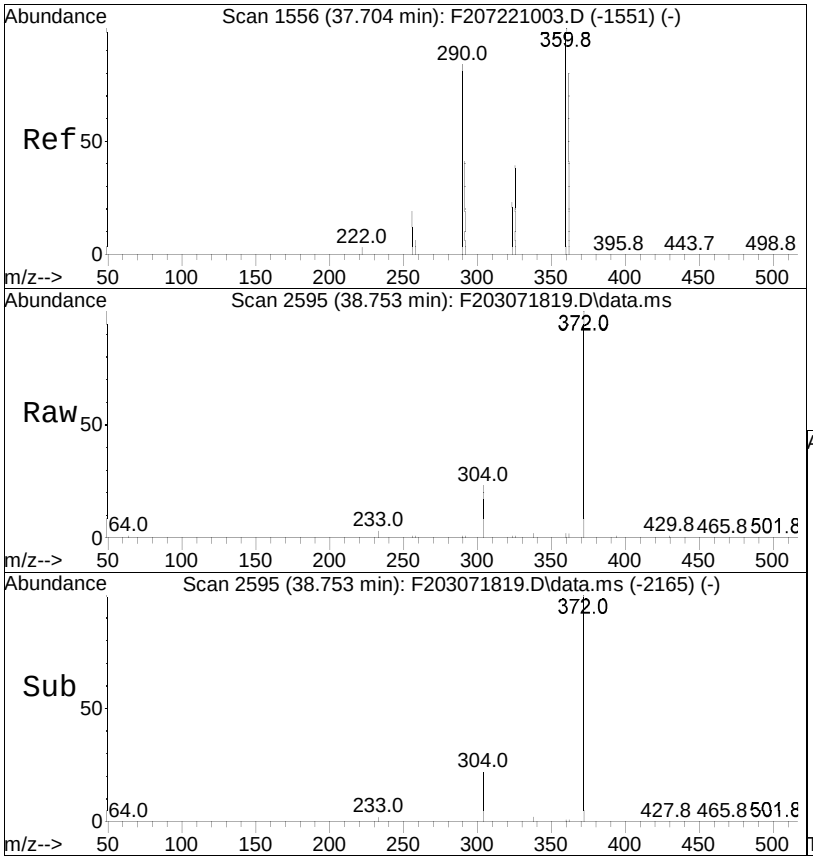




#107
Cl5-Conf Ion
Concen: 14.64 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. -1.841 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:324 Resp: 15288

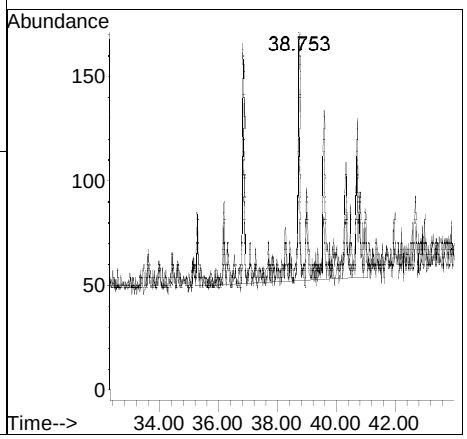


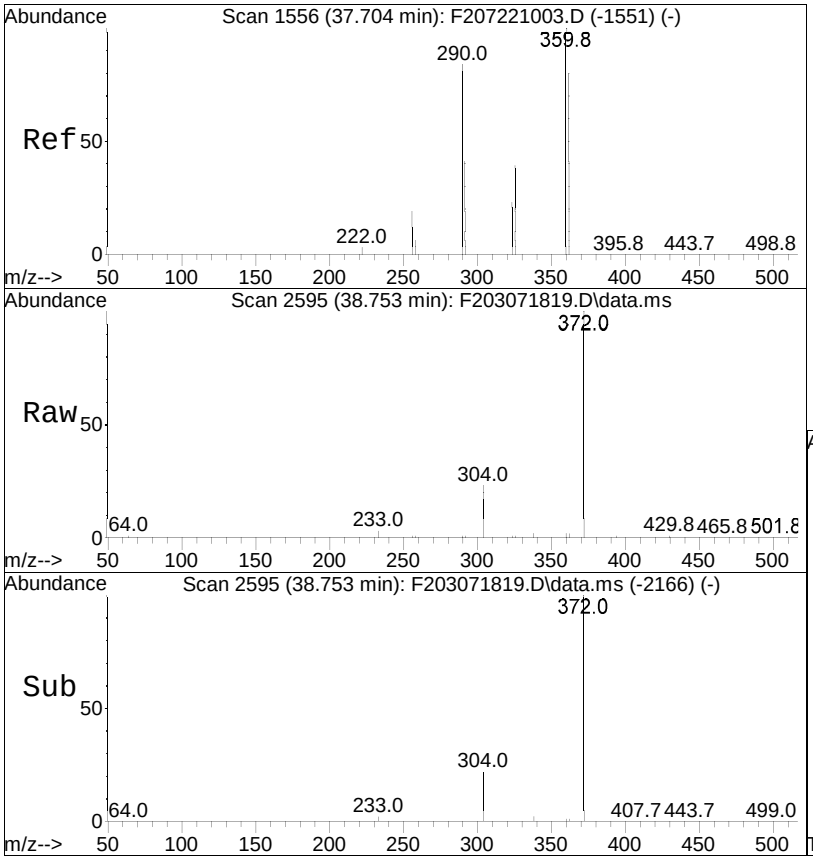


#112
Hexachlorobiphenyls
Concen: 4.42 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:360 Resp: 4435

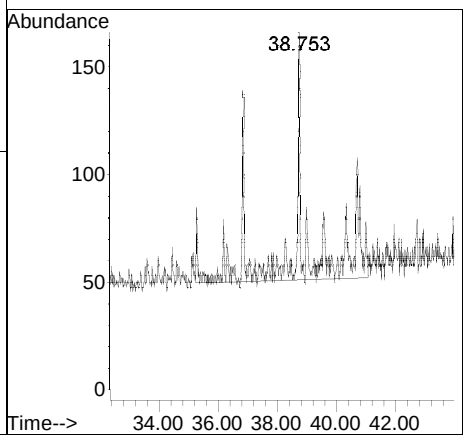
Ion	Ratio	Lower	Upper
360	100		
362	8.6	63.7	95.5#

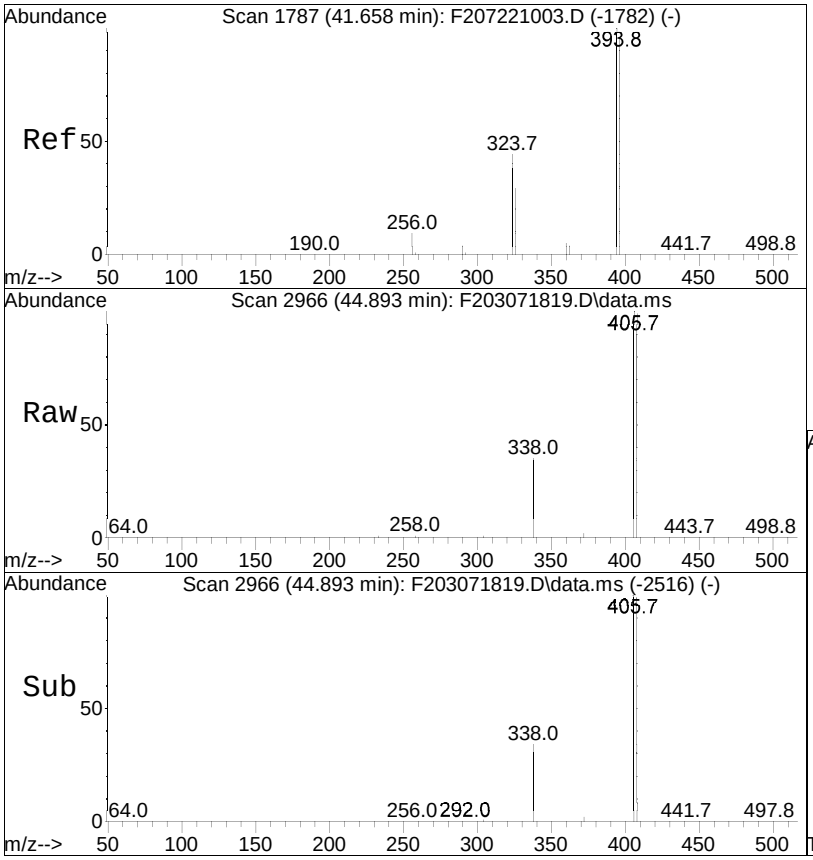




#113
Cl6-Conf Ion
Concen: 3.11 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:362 Resp: 3125

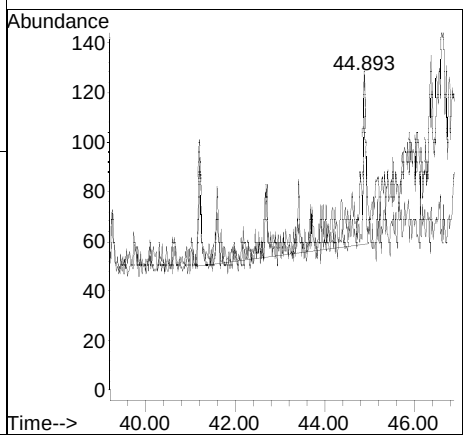


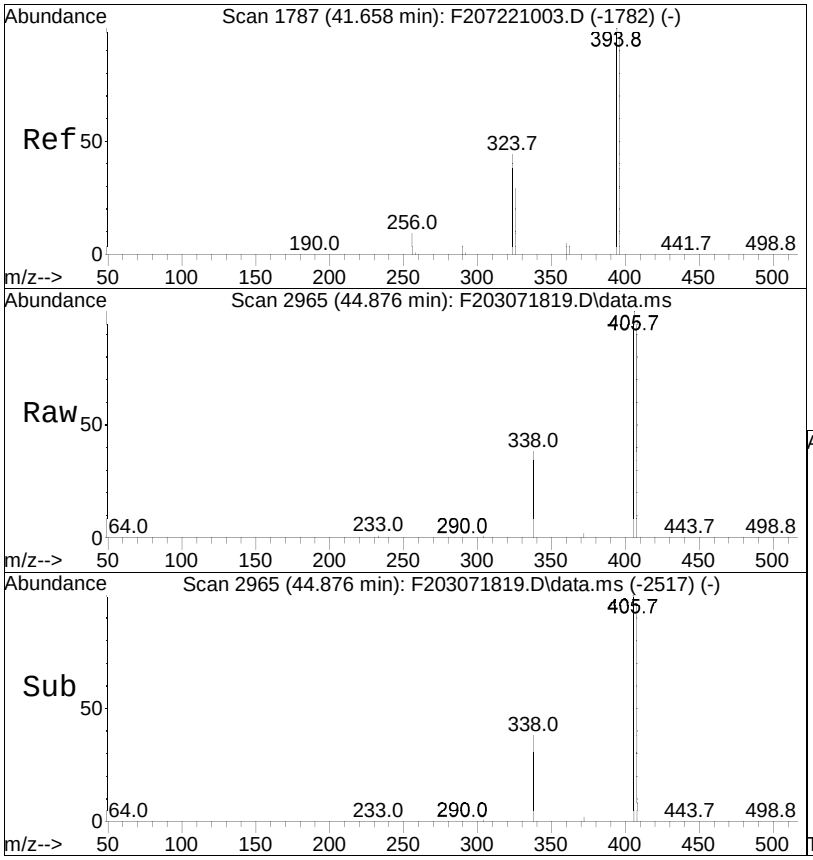


#135
Heptachlorobiphenyls
Concen: 1.48 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:394 Resp: 1508

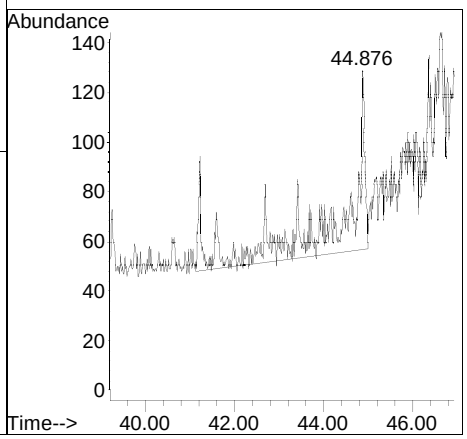
Ion	Ratio	Lower	Upper
394	100		
396	12.6	78.6	118.0#





#136
Cl7-Conf Ion
Concen: 2.11 ng/mL M5
RT: 44.876 min Scan# 2965
Delta R.T. 3.777 min
Lab File: F203071819.D
Acq: 8 Mar 2018 8:21 am

Tgt Ion:396 Resp: 2162



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071820.D
Acq On : 8 Mar 2018 9:35 am
Operator : BNA2:MJS
Sample : L1806872-08,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 13:15:52 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.863	234	379013	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	198771	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	53001	79.523	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 79.52%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	81778	83.947	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 83.95%			
151)	Cl6-BZ#153-C13 (surr)	38.719	372	82915	90.757	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 90.76%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	75326	80.466	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 80.47%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.180	222	37872M5	25.181	ng/mL	
15)	Cl2-Conf Ion	20.180	224	25914M5	17.230	ng/mL	
33)	Trichlorobiphenyls	25.827	256	133982M5	123.158	ng/mL	
34)	Cl3- Conf Ion	25.827	258	124316M5	114.273	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	70854M5	84.418	ng/mL	
37)	Cl4-Conf Ion	27.597	290	57898M5	68.982	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	9241M5	8.904	ng/mL	
107)	Cl5-Conf Ion	31.636	324	8642M5	8.327	ng/mL	
112)	Hexachlorobiphenyls	39.597	360	1508M5	1.511	ng/mL	
113)	Cl6-Conf Ion	38.736	362	1111M5	1.113	ng/mL	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

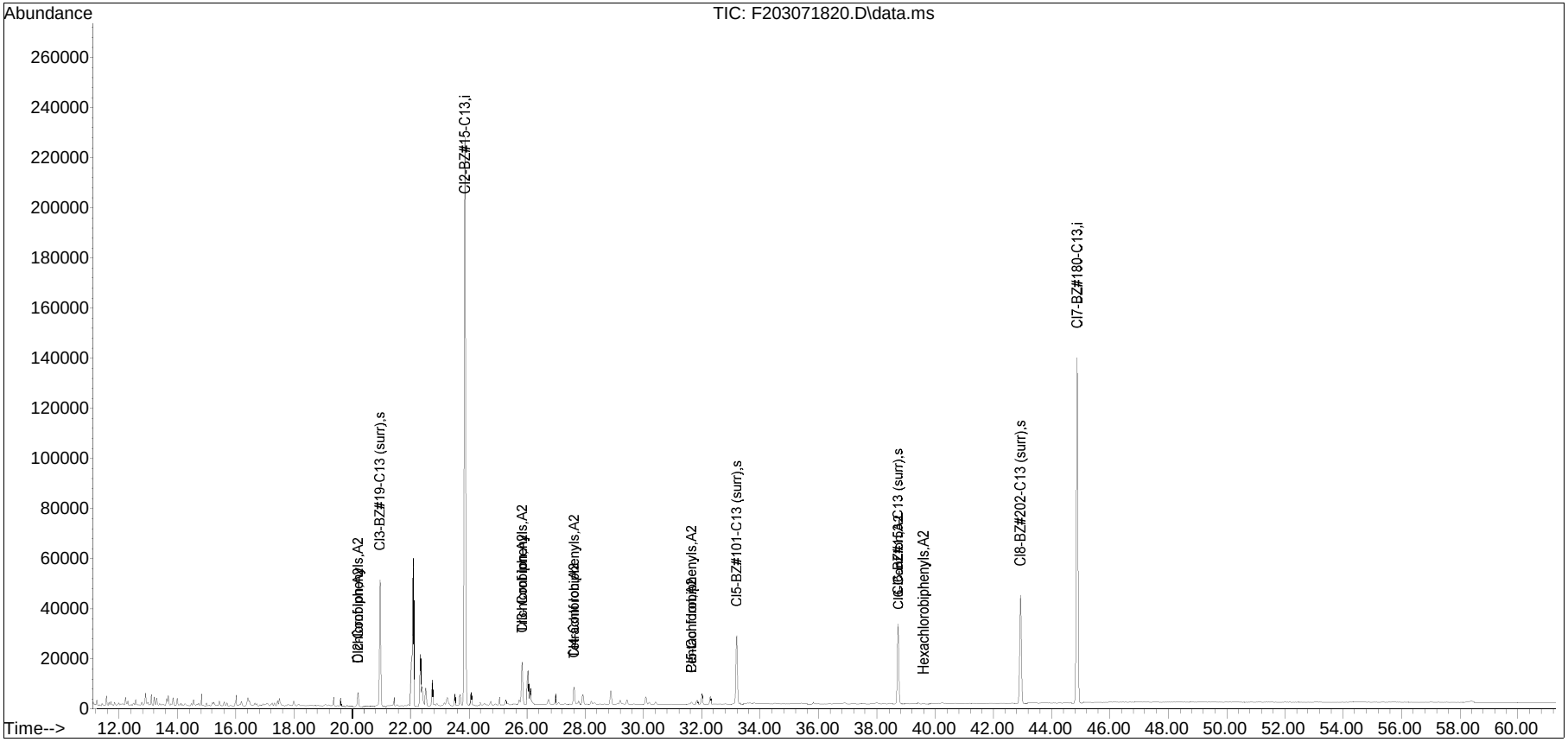
(#) = qualifier out of range (m) = manual integration (+) = signals summed

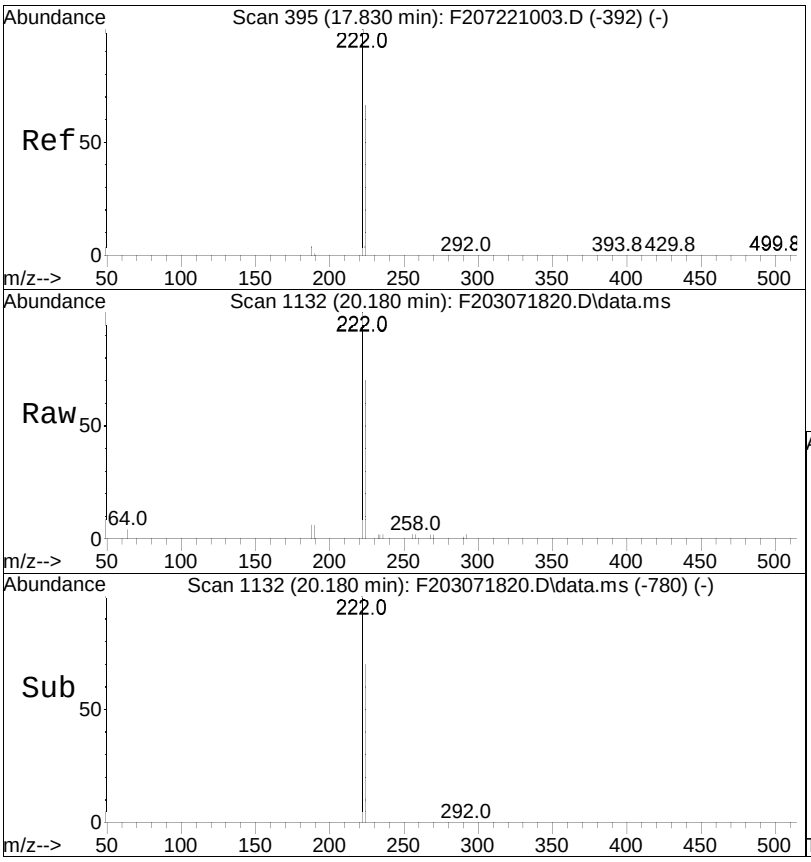
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071820.D
Acq On : 8 Mar 2018 9:35 am
Operator : BNA2:MJS
Sample : L1806872-08,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 13:15:52 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

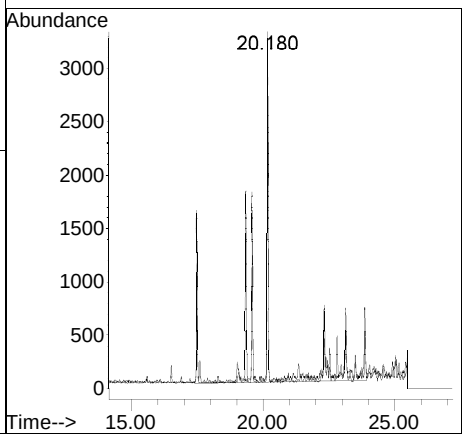


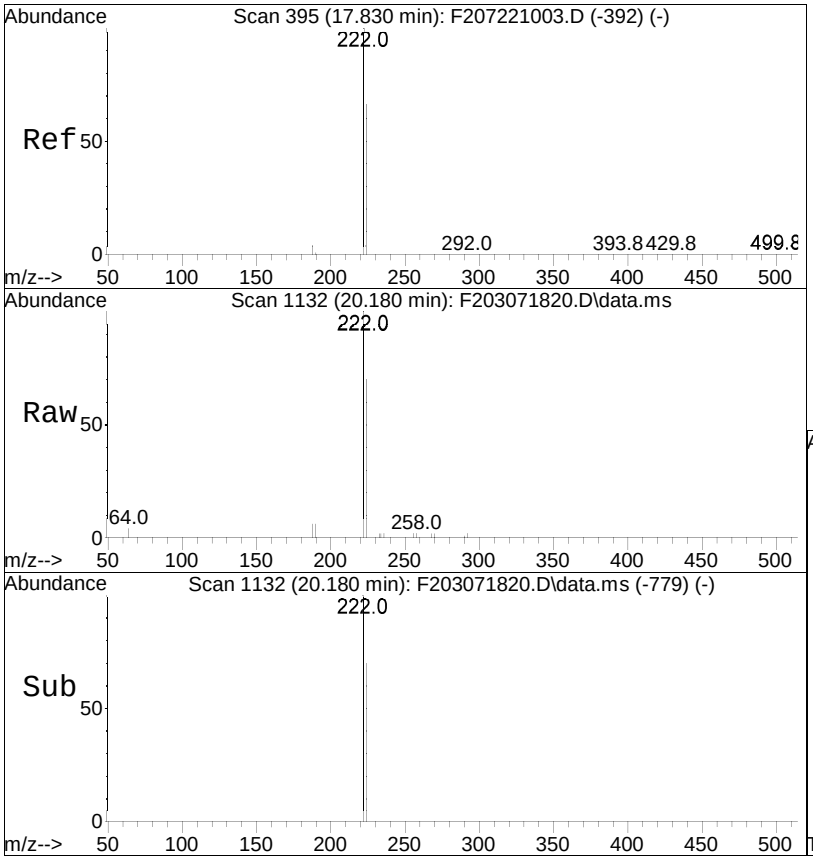


#14
Dichlorobiphenyls
Concen: 25.18 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:222 Resp: 37872

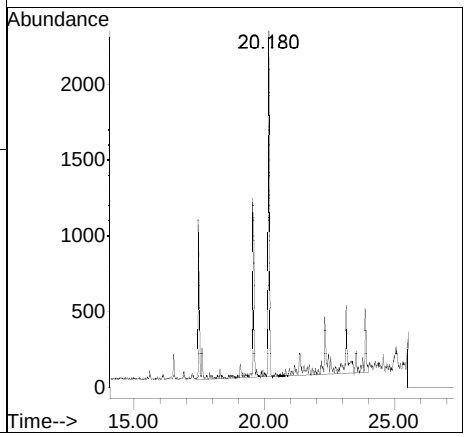
Ion	Ratio	Lower	Upper
222	100		
224	6.6	52.1	78.1#

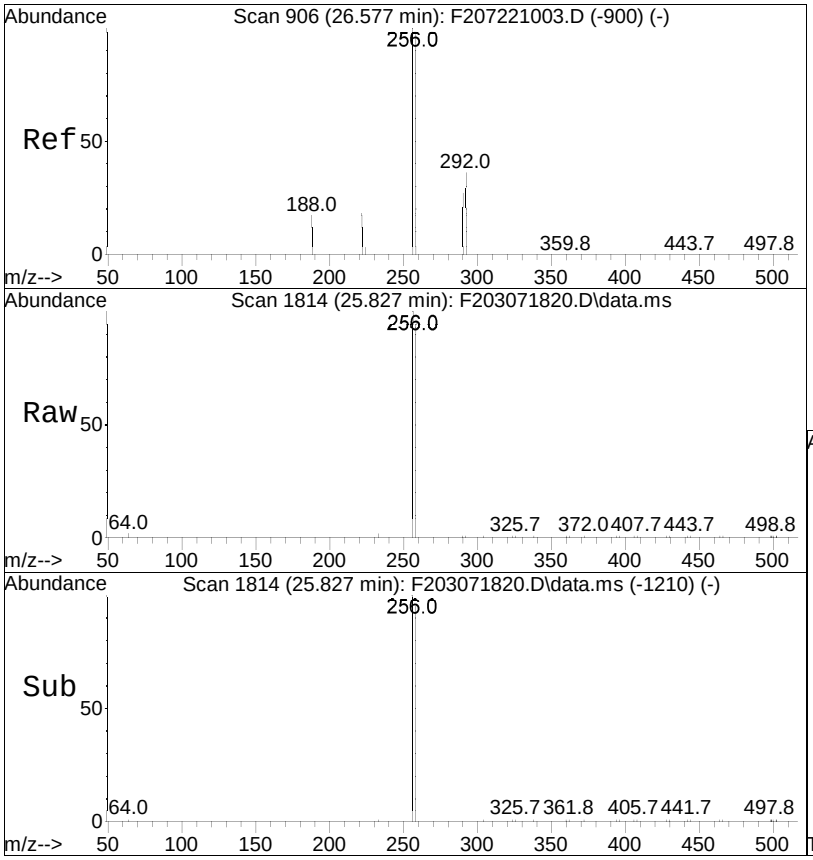




#15
Cl2-Conf Ion
Concen: 17.23 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:224 Resp: 25914

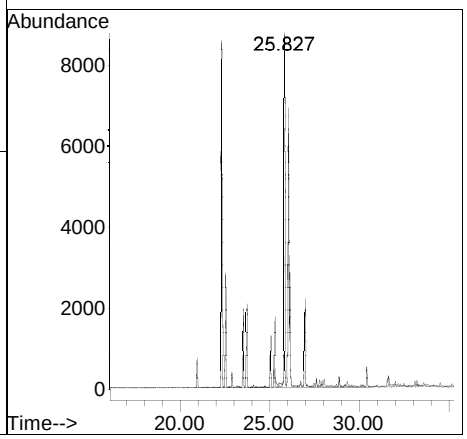


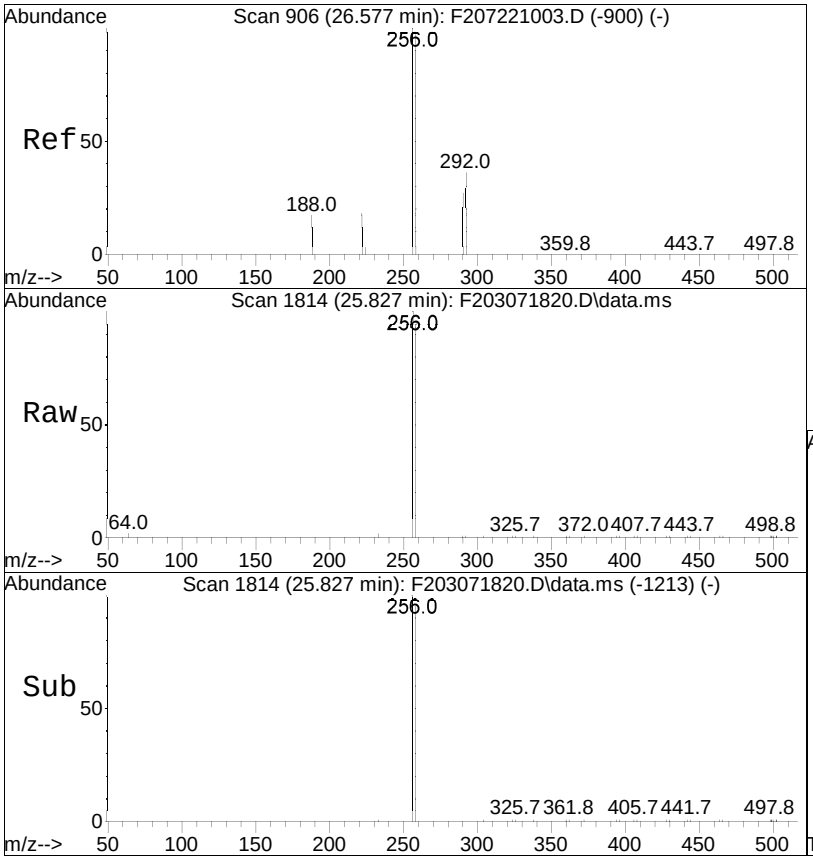


#33
Trichlorobiphenyls
Concen: 123.16 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:256 Resp: 133982

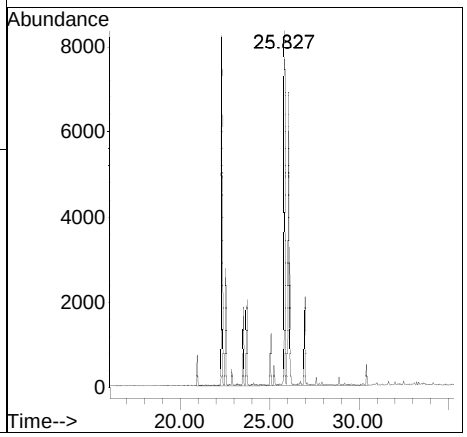
Ion	Ratio	Lower	Upper
256	100		
258	7.2	76.8	115.2#

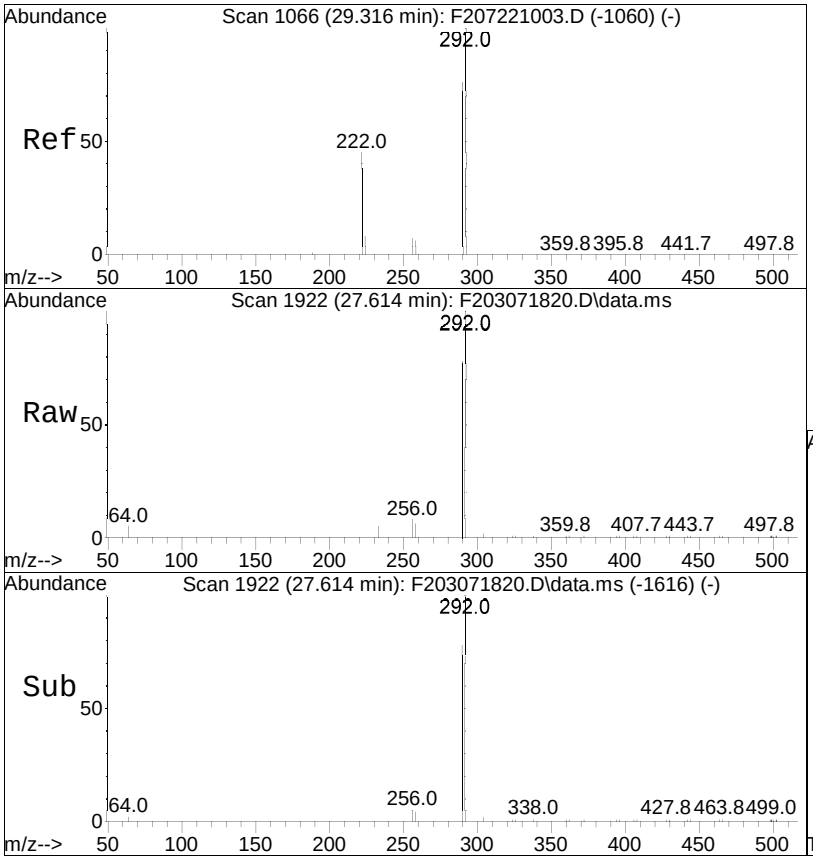




#34
Cl3- Conf Ion
Concen: 114.27 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:258 Resp: 124316

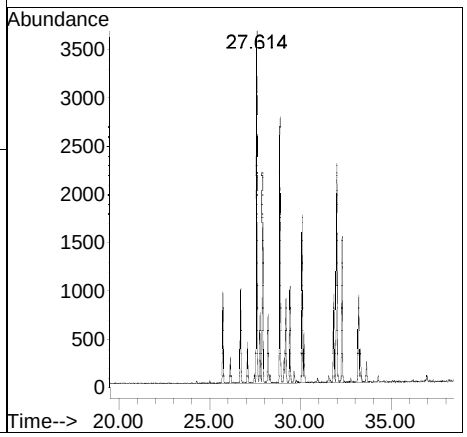


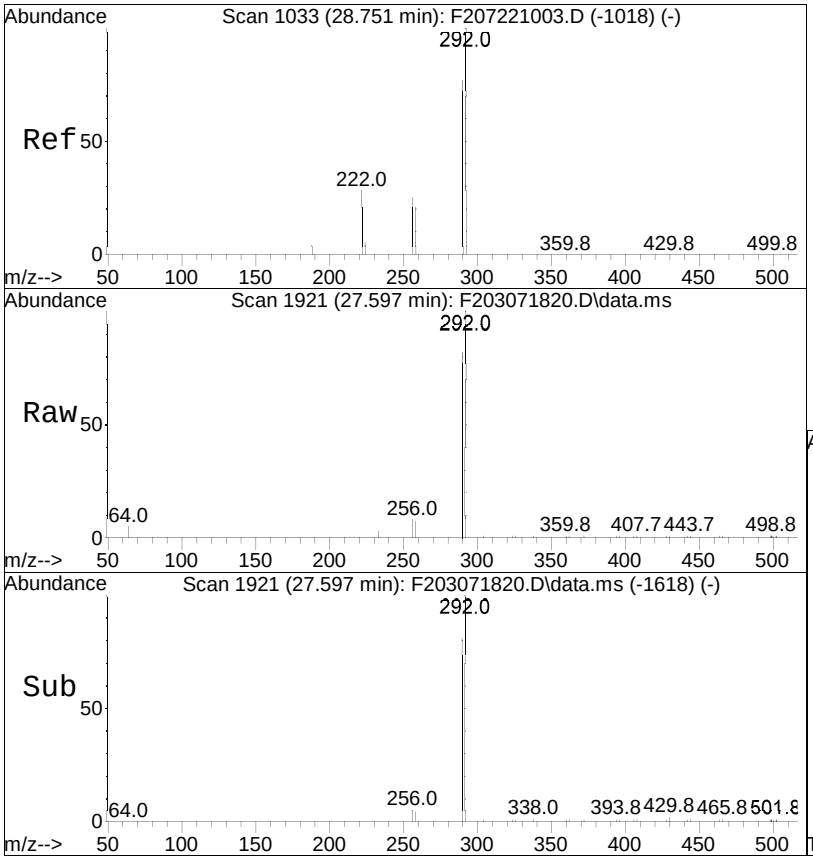


#36
Tetrachlorobiphenyls
Concen: 84.42 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:292 Resp: 70854

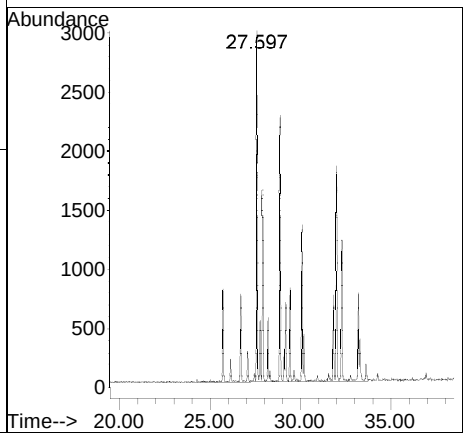
Ion	Ratio	Lower	Upper
292	100		
290	2.7	61.0	91.4#

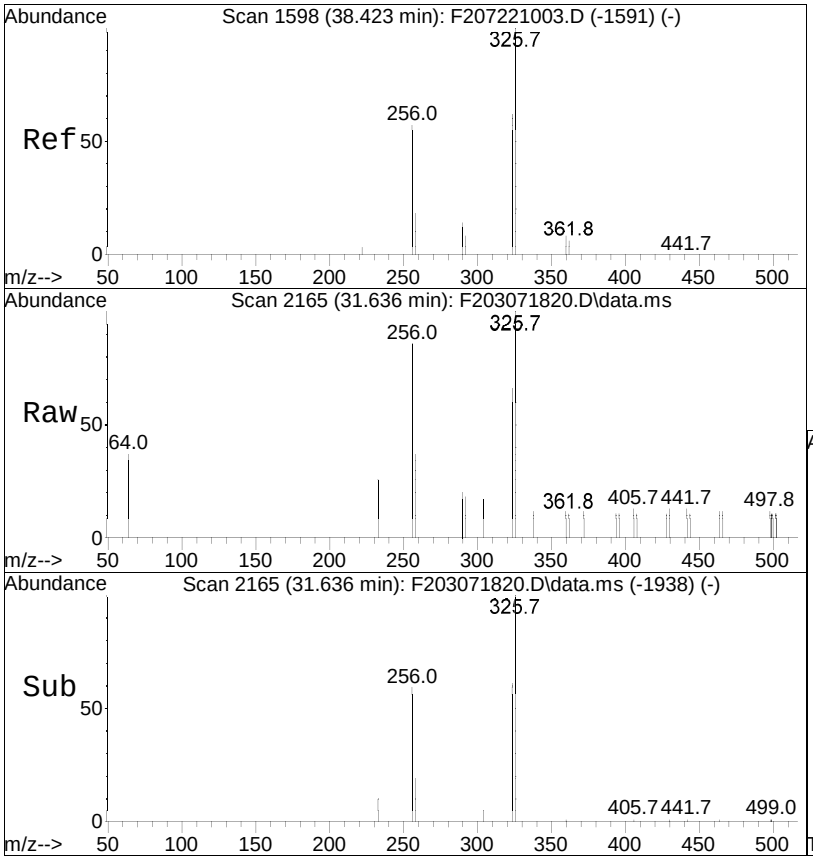




#37
Cl4-Conf Ion
Concen: 68.98 ng/mL M5
RT: 27.597 min Scan# 1921
Delta R.T. -0.758 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:290 Resp: 57898

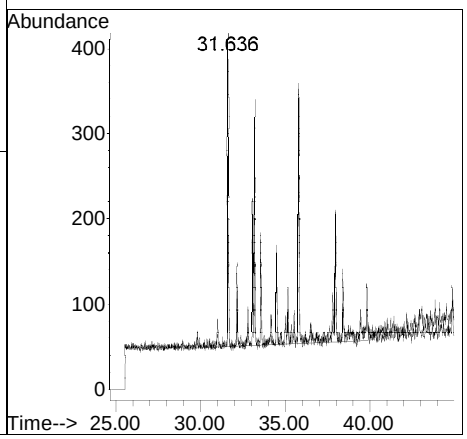


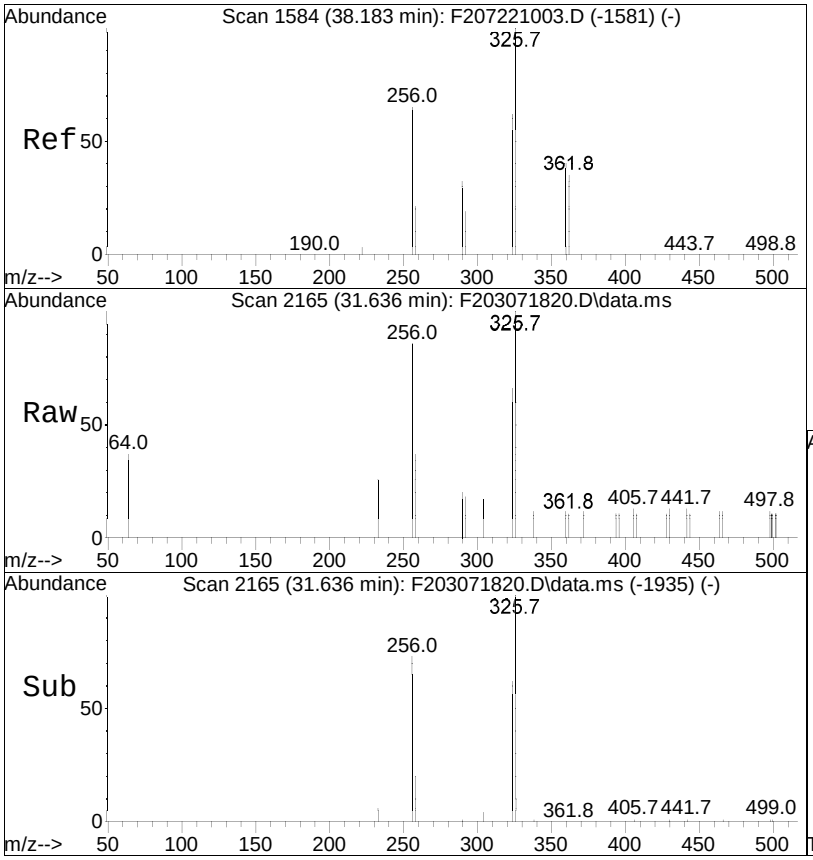


#106
Pentachlorobiphenyls
Concen: 8.90 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:326 Resp: 9241

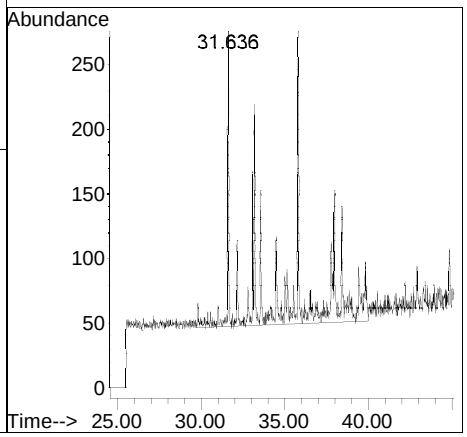
Ion	Ratio	Lower	Upper
326	100		
324	3.8	48.7	73.1#

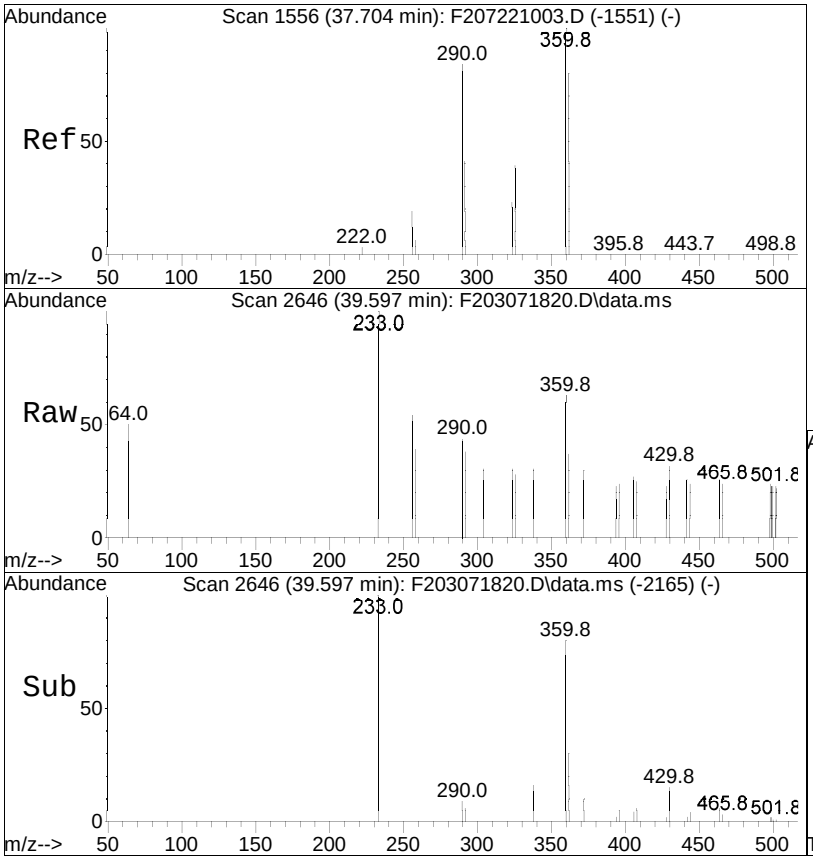




#107
Cl5-Conf Ion
Concen: 8.33 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -6.012 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:324 Resp: 8642

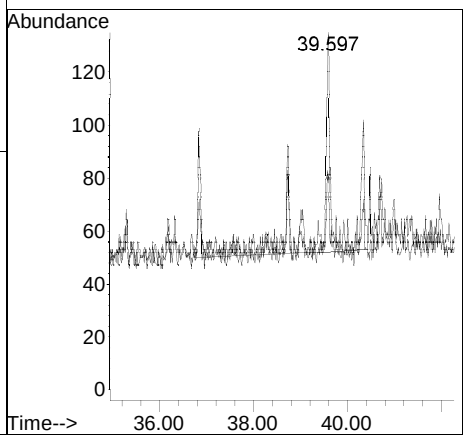


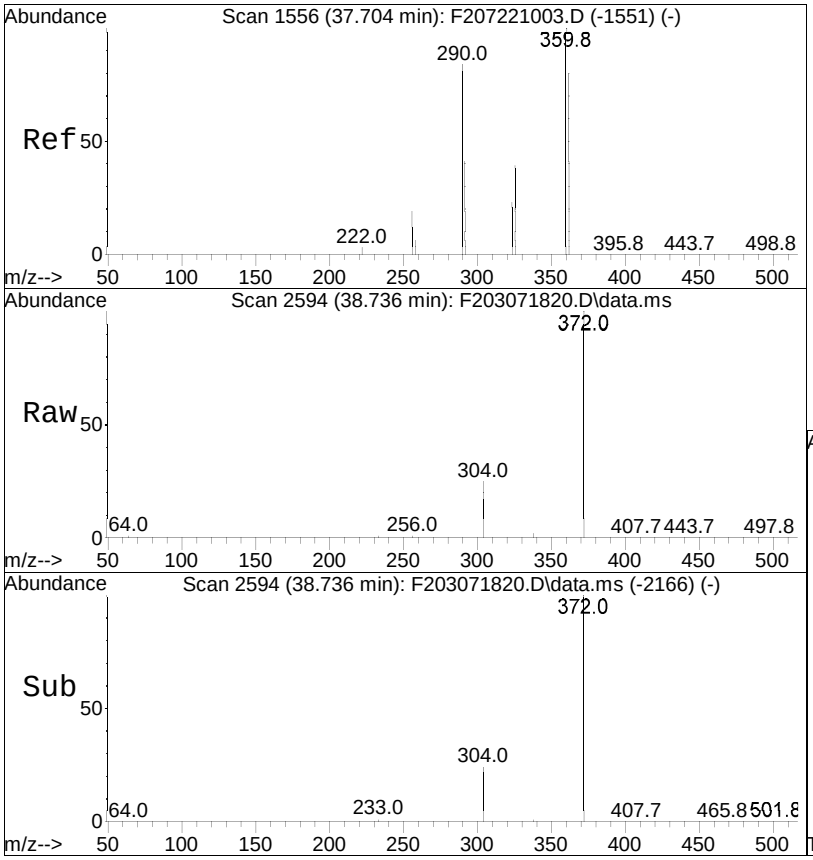


#112
Hexachlorobiphenyls
Concen: 1.51 ng/mL M5
RT: 39.597 min Scan# 2646
Delta R.T. 2.477 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:360 Resp: 1508

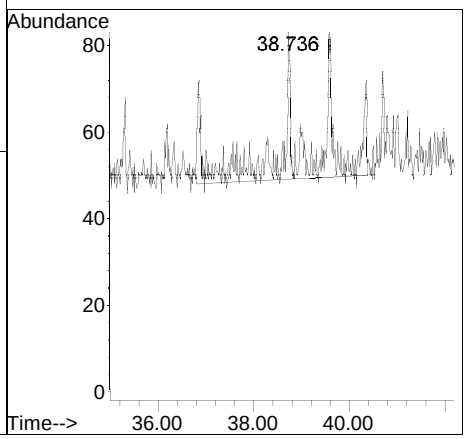
Ion	Ratio	Lower	Upper
360	100		
362	0.0	63.7	95.5#





#113
Cl6-Conf Ion
Concen: 1.11 ng/mL M5
RT: 38.736 min Scan# 2594
Delta R.T. 1.616 min
Lab File: F203071820.D
Acq: 8 Mar 2018 9:35 am

Tgt Ion:362 Resp: 1111



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071821.D
Acq On : 8 Mar 2018 10:49 am
Operator : BNA2:MJS
Sample : L1806872-09,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 09 13:19:54 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.864	234	382102	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	201216	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	57148	85.052	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 85.05%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	89674	91.308	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 91.31%			
151)	Cl6-BZ#153-C13 (surr)	38.720	372	90084	97.405	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 97.41%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	82147	86.686	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 86.69%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.189	222	43234M5	28.514	ng/mL	
15)	Cl2-Conf Ion	20.189	224	32794M5	21.628	ng/mL	
33)	Trichlorobiphenyls	25.827	256	158373M5	144.402	ng/mL	
34)	Cl3- Conf Ion	25.827	258	108982M5	99.368	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	91250M5	107.839	ng/mL	
37)	Cl4-Conf Ion	27.614	290	76106M5	89.942	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	12454M5	11.903	ng/mL	
107)	Cl5-Conf Ion	31.636	324	10290M5	9.835	ng/mL	
112)	Hexachlorobiphenyls	39.613	360	1987M5	1.975	ng/mL	
113)	Cl6-Conf Ion	38.753	362	1036M5	1.030	ng/mL	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

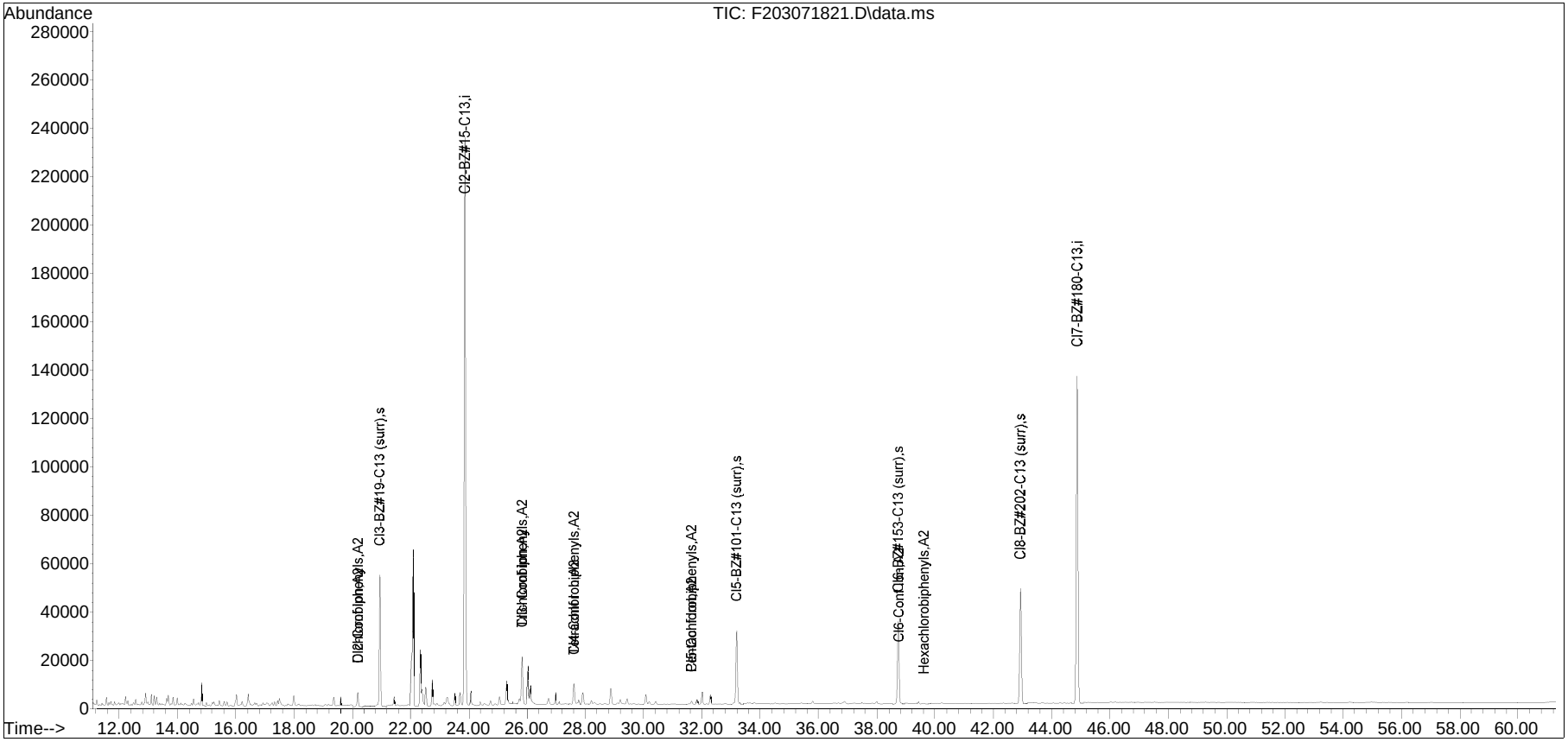
(#) = qualifier out of range (m) = manual integration (+) = signals summed

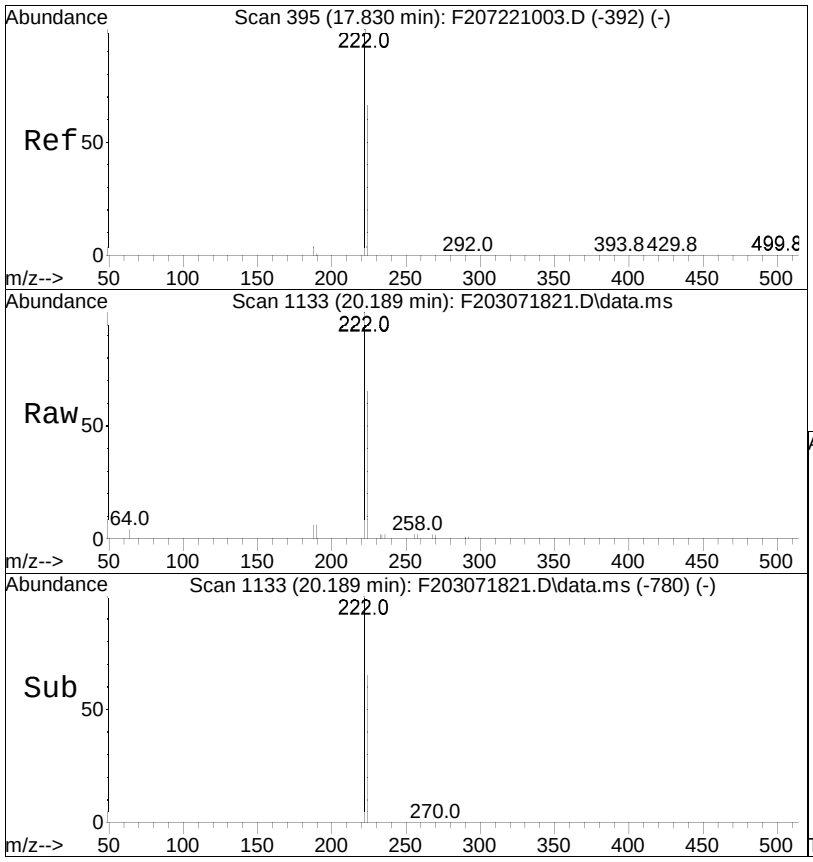
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071821.D
Acq On : 8 Mar 2018 10:49 am
Operator : BNA2:MJS
Sample : L1806872-09,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Mar 09 13:19:54 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

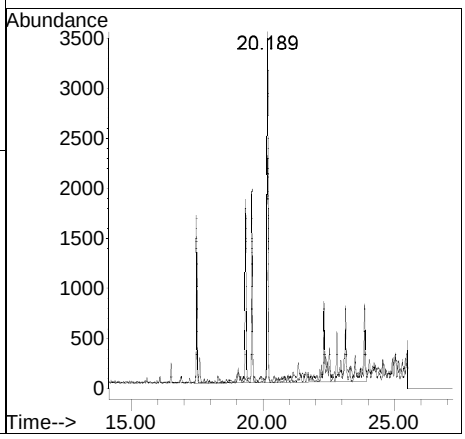


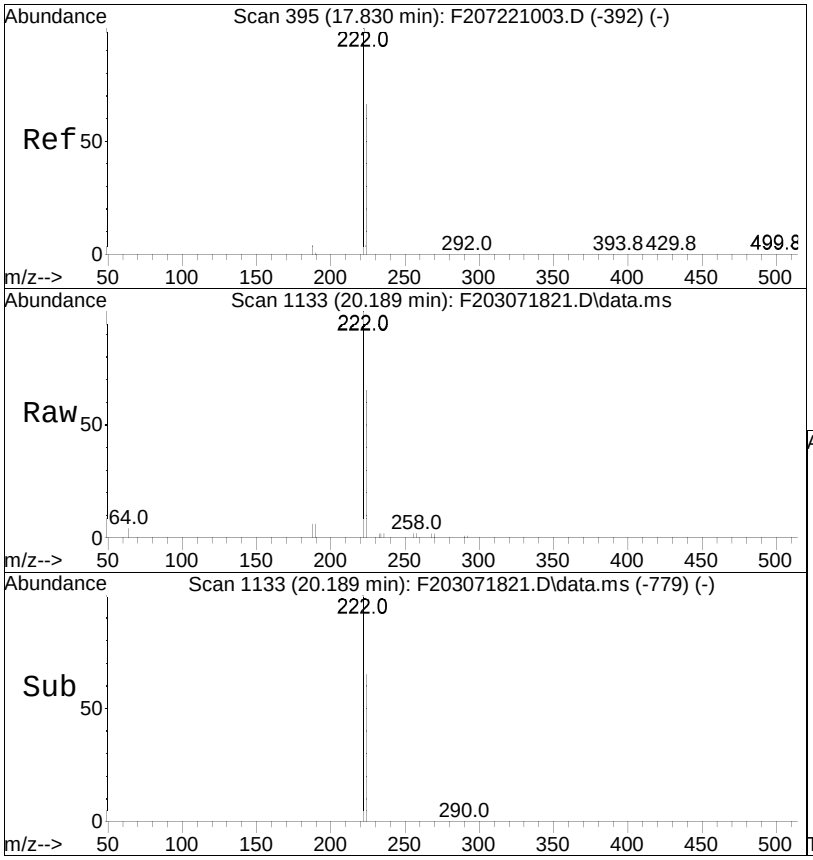


#14
Dichlorobiphenyls
Concen: 28.51 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:222 Resp: 43234

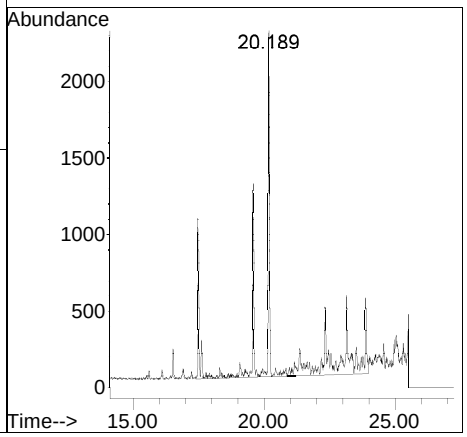
Ion	Ratio	Lower	Upper
222	100		
224	6.2	52.1	78.1#

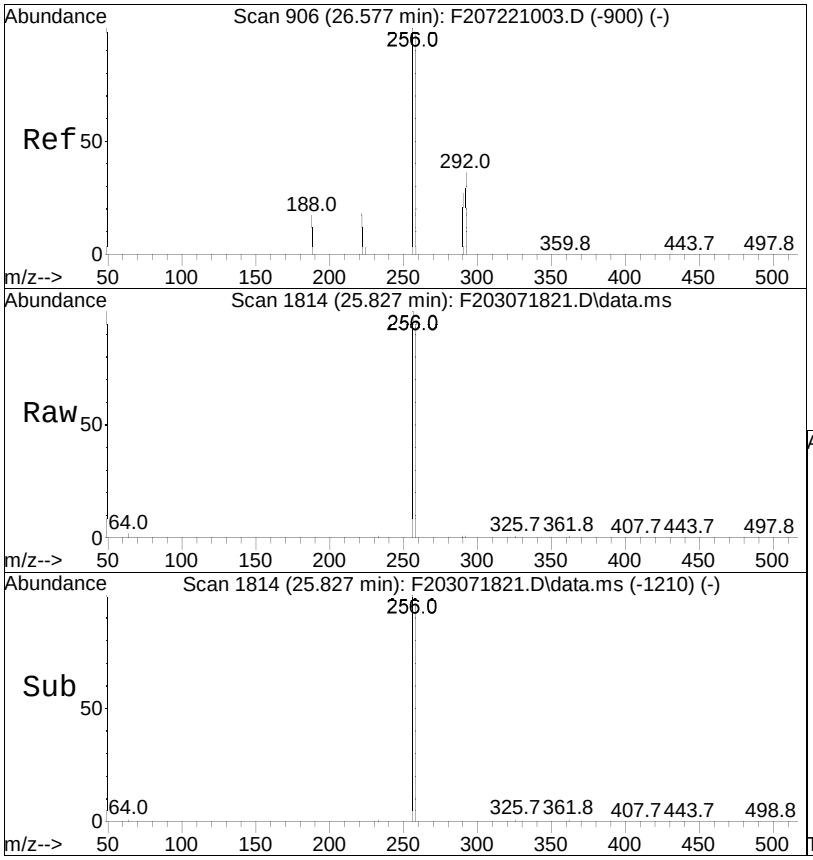




#15
Cl2-Conf Ion
Concen: 21.63 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:224 Resp: 32794

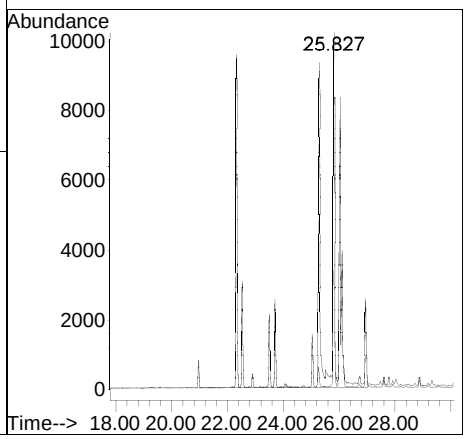


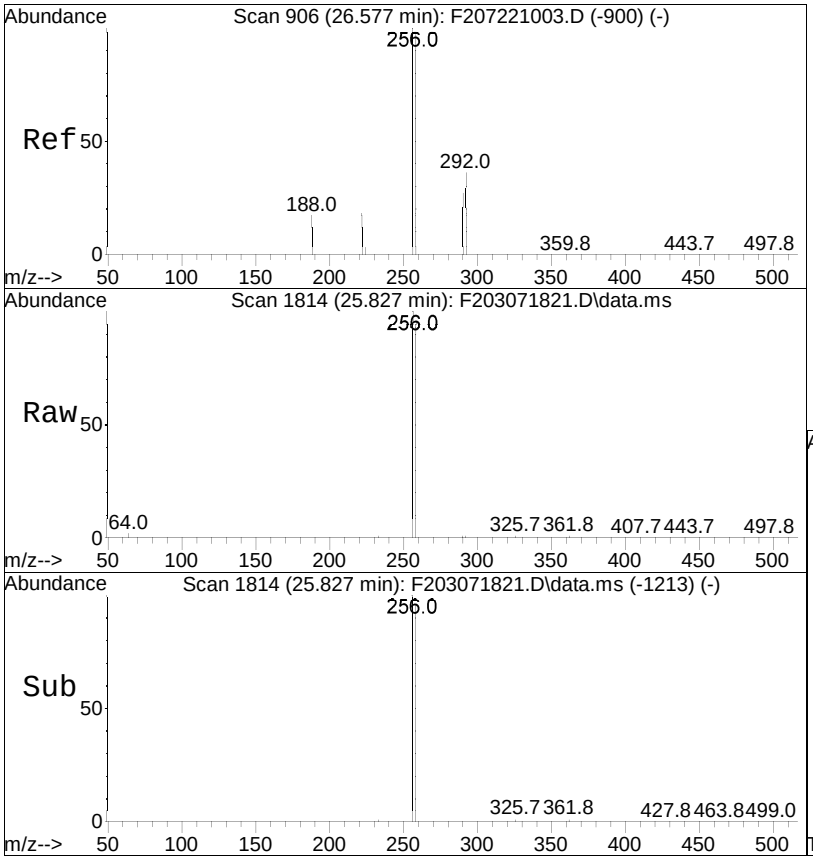


#33
Trichlorobiphenyls
Concen: 144.40 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:256 Resp: 158373

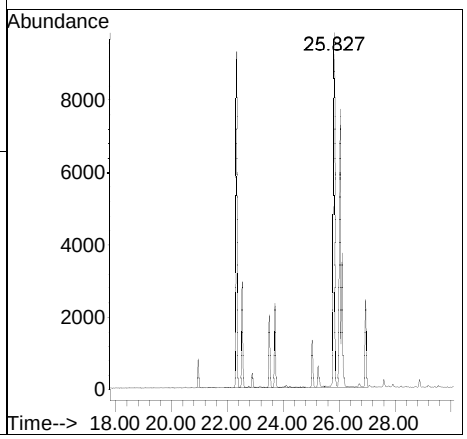
Ion	Ratio	Lower	Upper
256	100		
258	7.0	76.8	115.2#

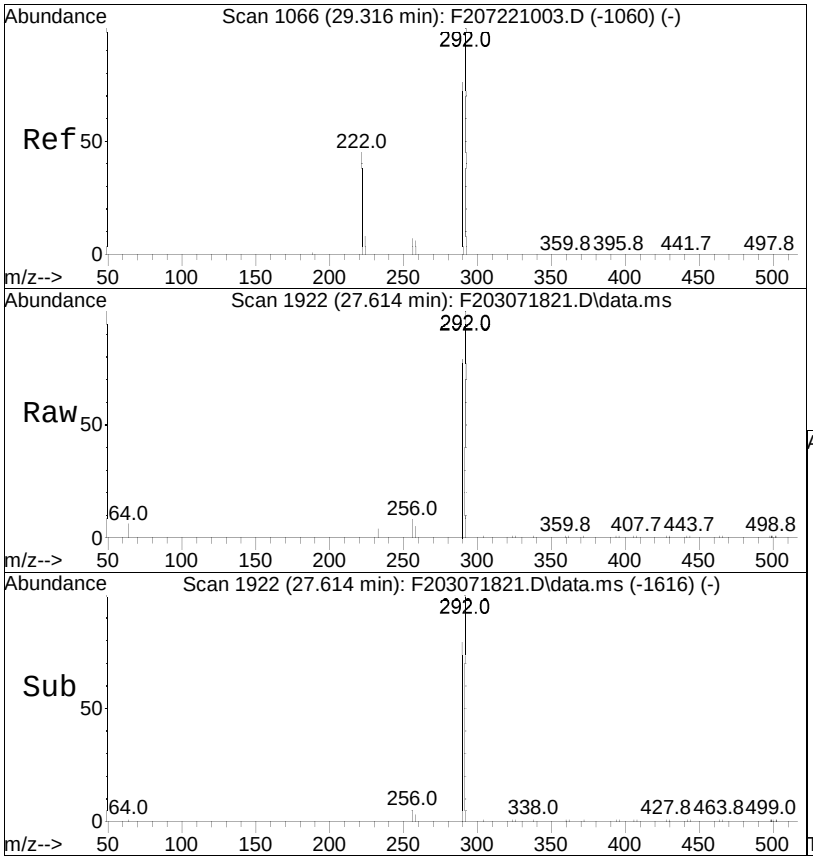




#34
Cl3- Conf Ion
Concen: 99.37 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:258 Resp: 108982

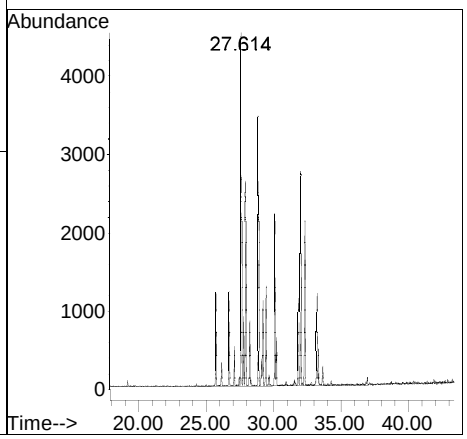


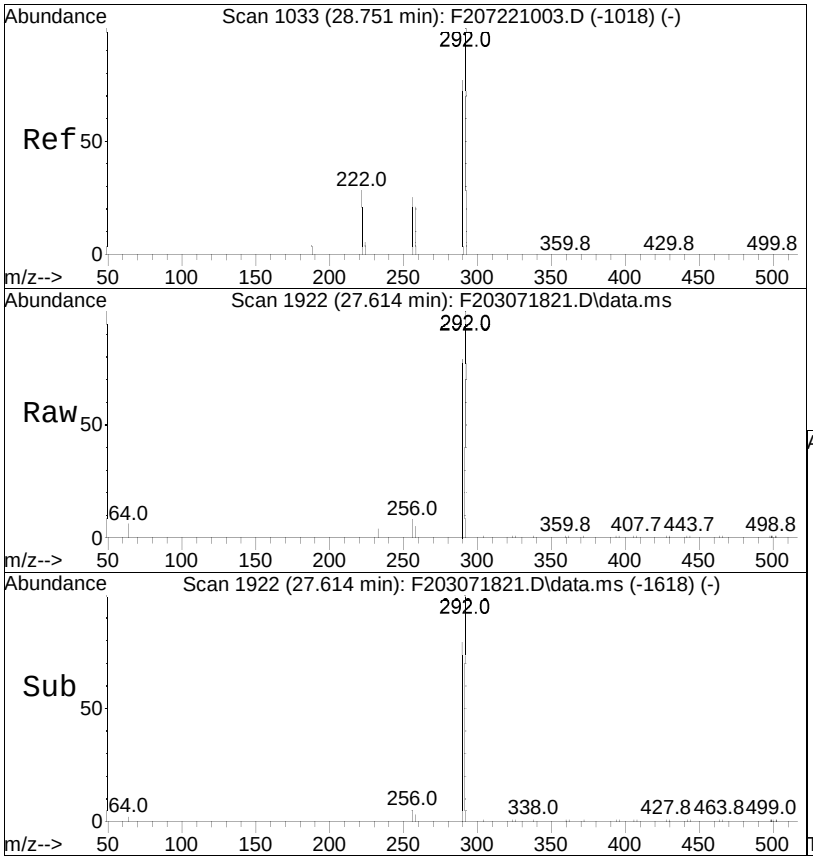


#36
Tetrachlorobiphenyls
Concen: 107.84 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:292 Resp: 91250

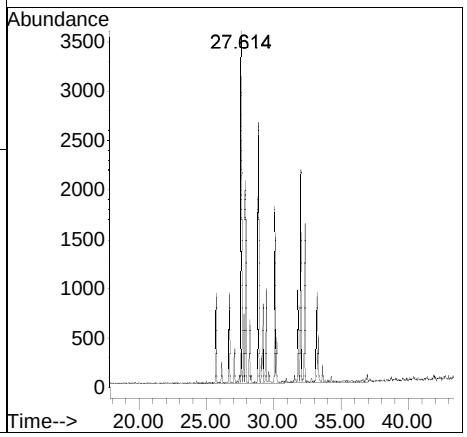
Ion	Ratio	Lower	Upper
292	100		
290	2.5	61.0	91.4#

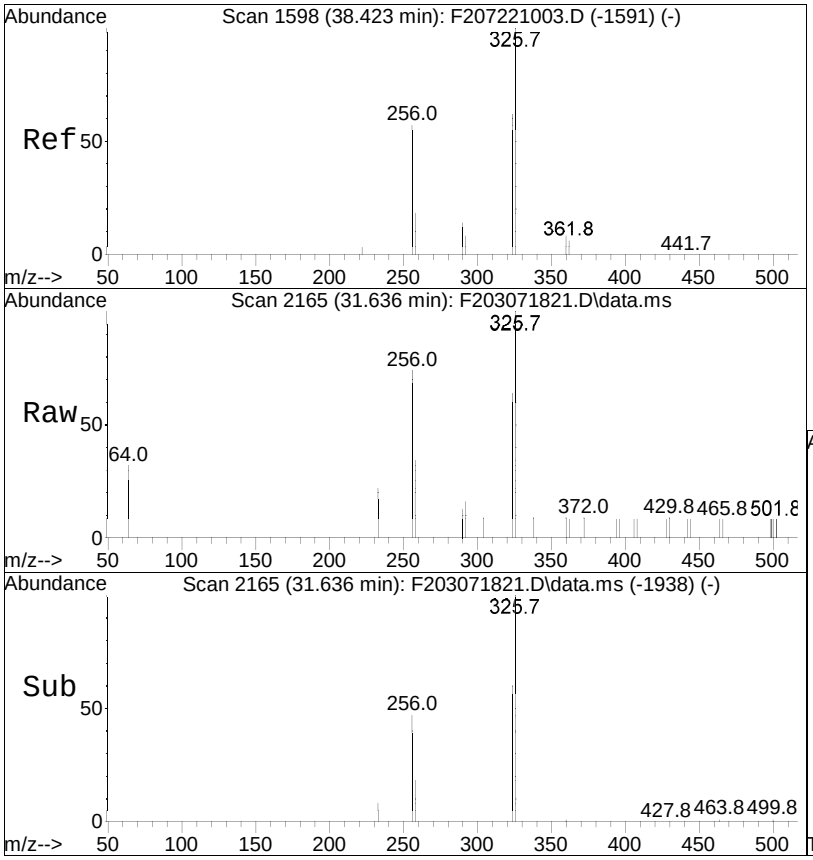




#37
Cl4-Conf Ion
Concen: 89.94 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:290 Resp: 76106

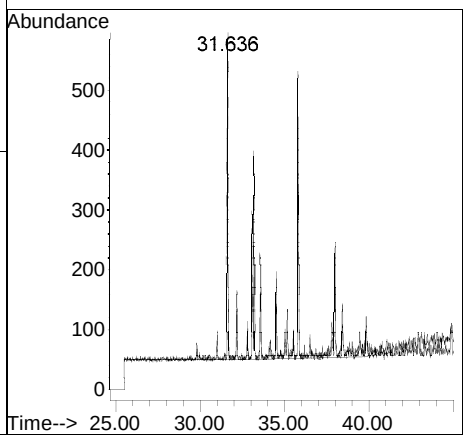


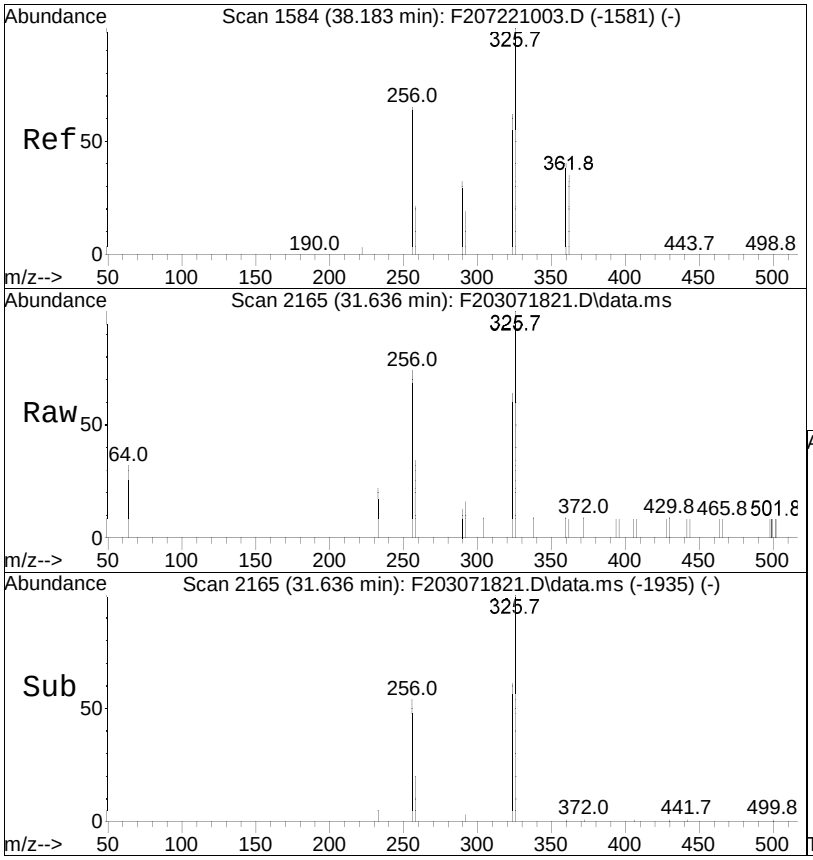


#106
Pentachlorobiphenyls
Concen: 11.90 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:326 Resp: 12454

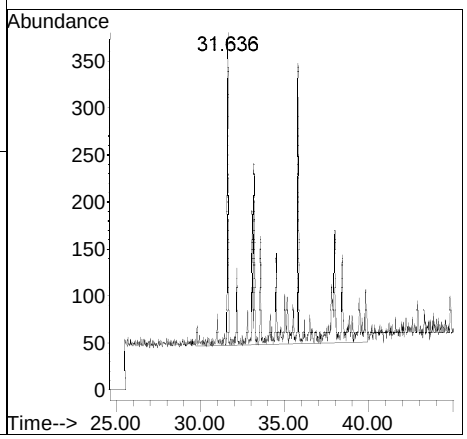
Ion	Ratio	Lower	Upper
326	100		
324	2.5	48.7	73.1#

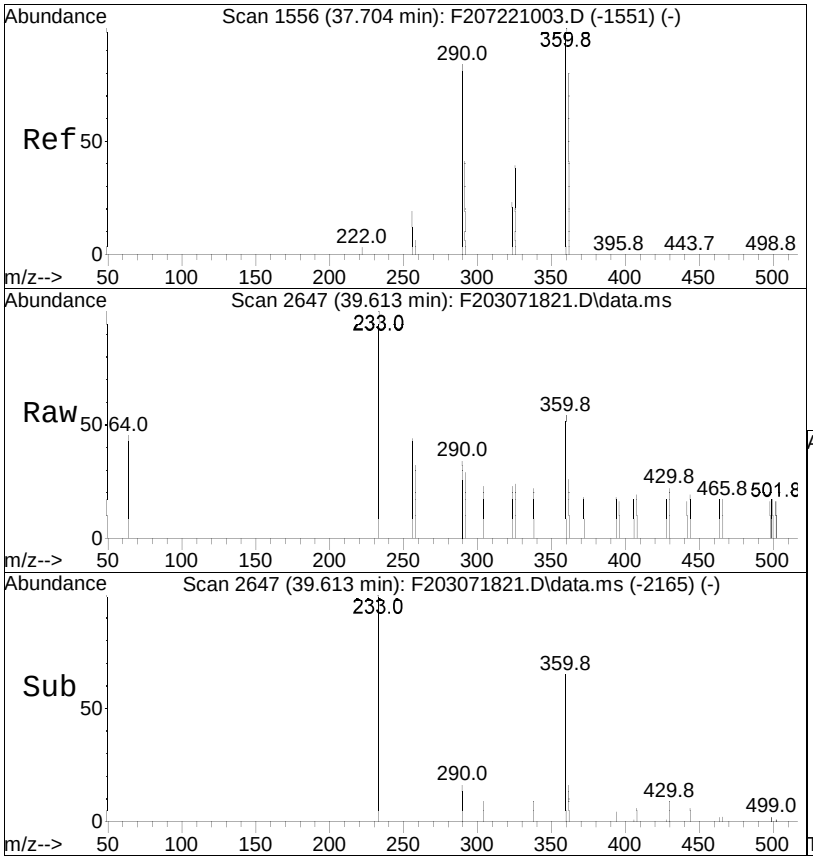




#107
Cl5-Conf Ion
Concen: 9.83 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -6.012 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:324 Resp: 10290

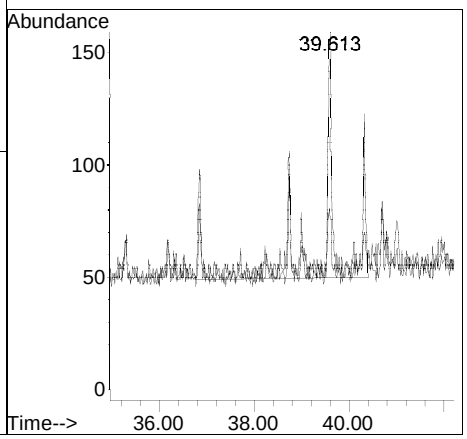


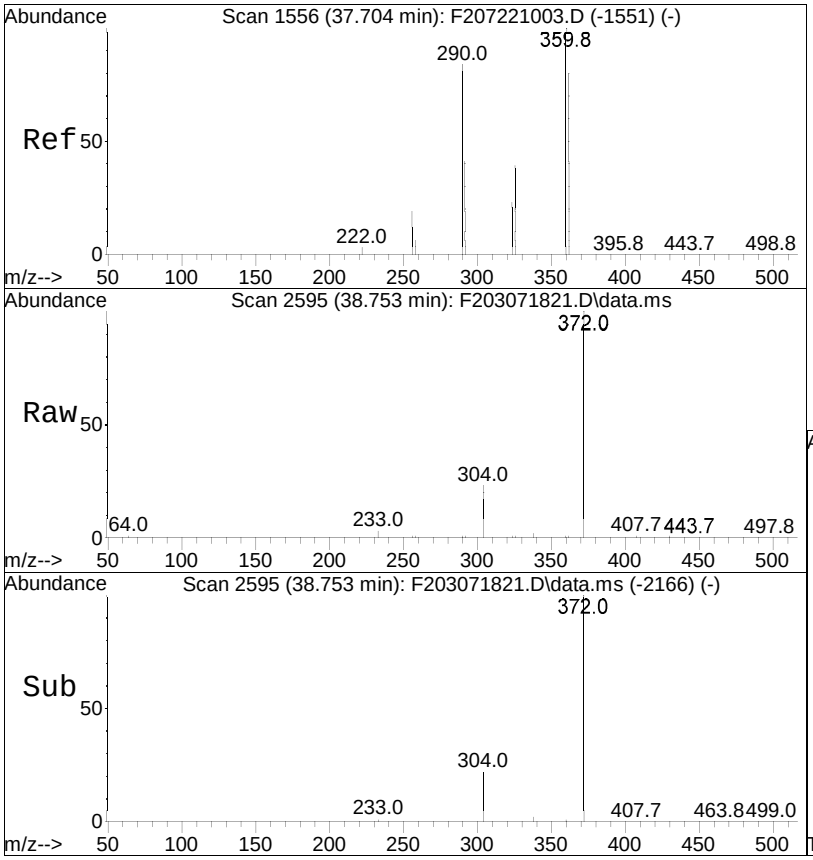


#112
Hexachlorobiphenyls
Concen: 1.98 ng/mL M5
RT: 39.613 min Scan# 2647
Delta R.T. 2.493 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:360 Resp: 1987

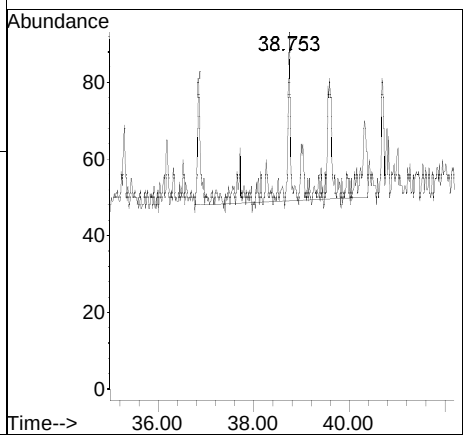
Ion	Ratio	Lower	Upper
360	100		
362	8.8	63.7	95.5#





#113
Cl6-Conf Ion
Concen: 1.03 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071821.D
Acq: 8 Mar 2018 10:49 am

Tgt Ion:362 Resp: 1036



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071822.D
Acq On : 8 Mar 2018 12:03 pm
Operator : BNA2:MJS
Sample : L1806872-10,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 13:49:45 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.863	234	378628	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	198366	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	52311	78.568	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 78.57%			
93)	Cl5-BZ#101-C13 (surr)	33.191	338	88432	90.869	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 90.87%			
151)	Cl6-BZ#153-C13 (surr)	38.719	372	89831	98.527	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 98.53%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	81810	87.570	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 87.57%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.180	222	35883M5	23.883	ng/mL	
15)	Cl2-Conf Ion	20.180	224	24863M5	16.548	ng/mL	
33)	Trichlorobiphenyls	25.826	256	110526M5	101.700	ng/mL	
34)	Cl3- Conf Ion	25.826	258	102909M5	94.692	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	133311M5	158.993	ng/mL	
37)	Cl4-Conf Ion	27.597	290	111461M5	132.933	ng/mL	
106)	Pentachlorobiphenyls	35.807	326	24190M5	23.332	ng/mL	
107)	Cl5-Conf Ion	35.807	324	21306M5	20.550	ng/mL	
112)	Hexachlorobiphenyls	38.736	360	5665M5	5.683	ng/mL	
113)	Cl6-Conf Ion	38.753	362	5112M5	5.129	ng/mL	
135)	Heptachlorobiphenyls	44.893	394	3228M5	3.174	ng/mL	
136)	Cl7-Conf Ion	44.893	396	3009M5	2.959	ng/mL	
181)	Octachlorobiphenyls	46.780	428	3223M5	3.709	ng/mL	
182)	Cl8-Conf Ion	46.763	430	10093M5	11.614	ng/mL	
208)	Nonachlorobiphenyls	54.045	464	176	N.D.		
209)	Cl9-Conf Ion	54.045	466	110	N.D.		
211)	Decachlorobiphenyl	56.296	498	172	N.D.		
212)	Cl10-Conf Ion	56.313	500	138	N.D.		

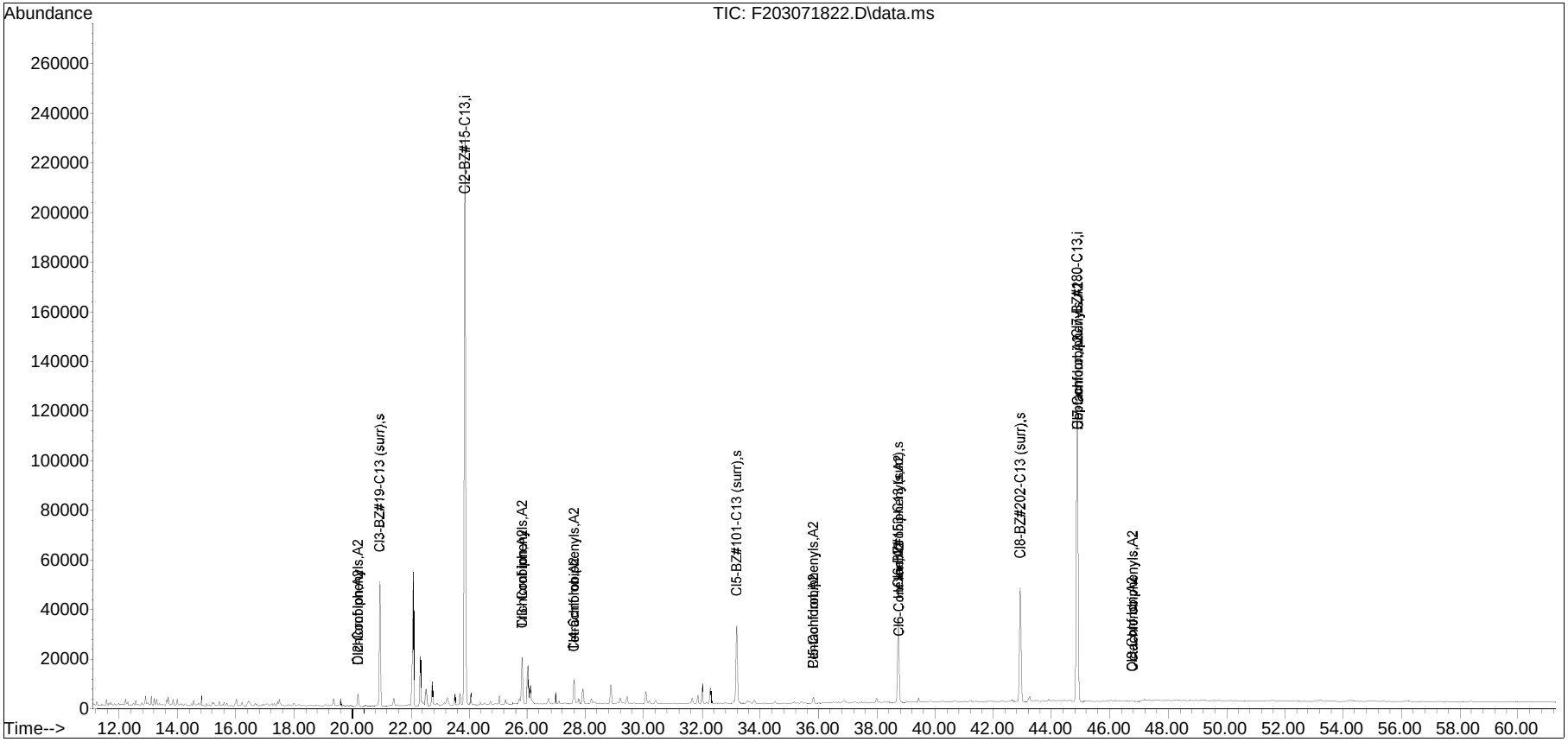
(#) = qualifier out of range (m) = manual integration (+) = signals summed

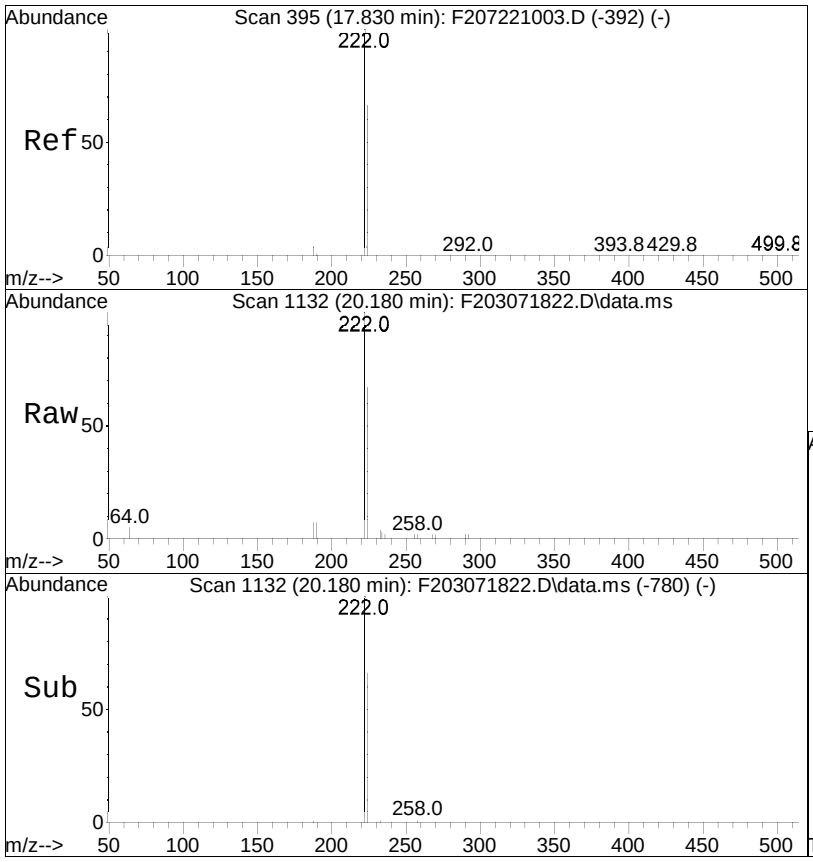
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071822.D
Acq On : 8 Mar 2018 12:03 pm
Operator : BNA2:MJS
Sample : L1806872-10,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Mar 09 13:49:45 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

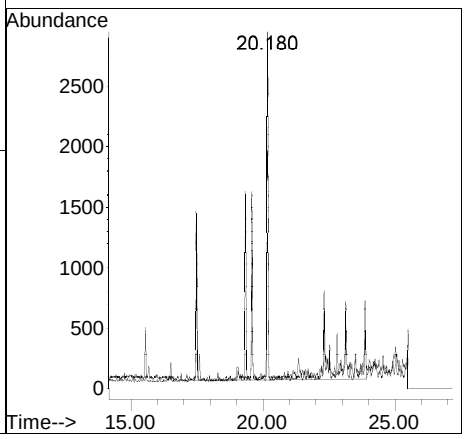


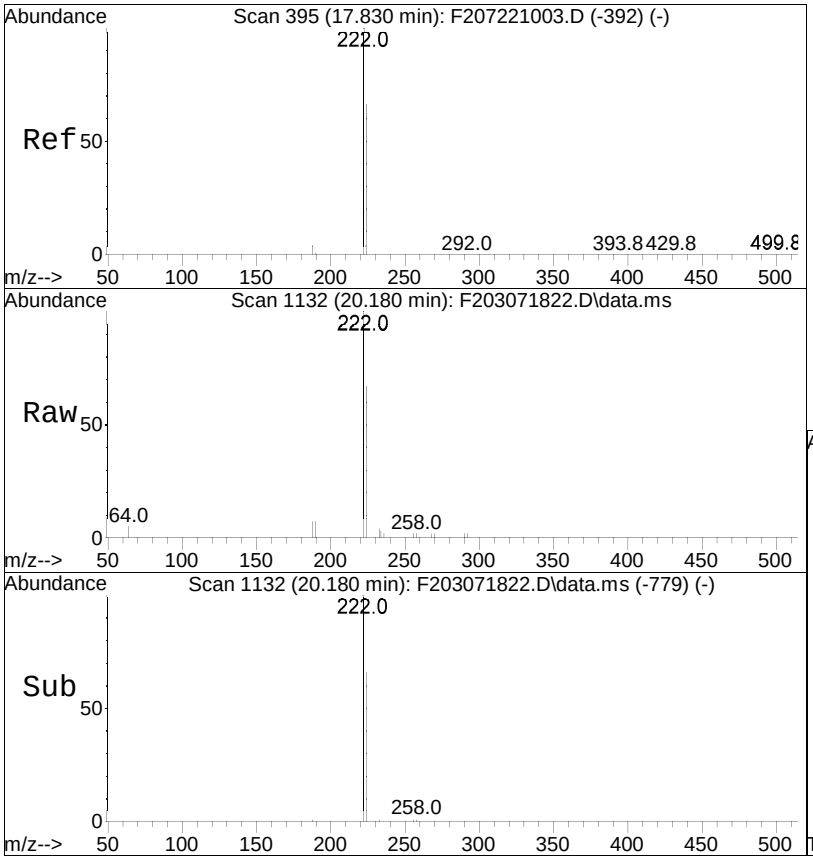


#14
Dichlorobiphenyls
Concen: 23.88 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:222 Resp: 35883

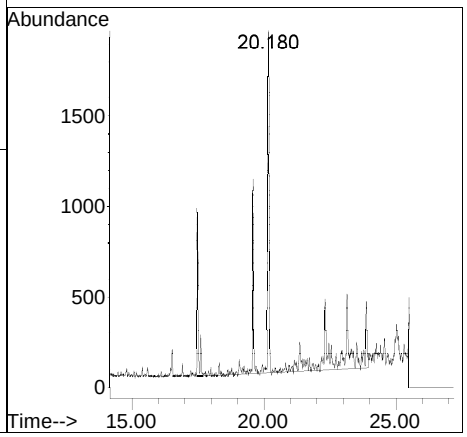
Ion	Ratio	Lower	Upper
222	100		
224	6.1	52.1	78.1#

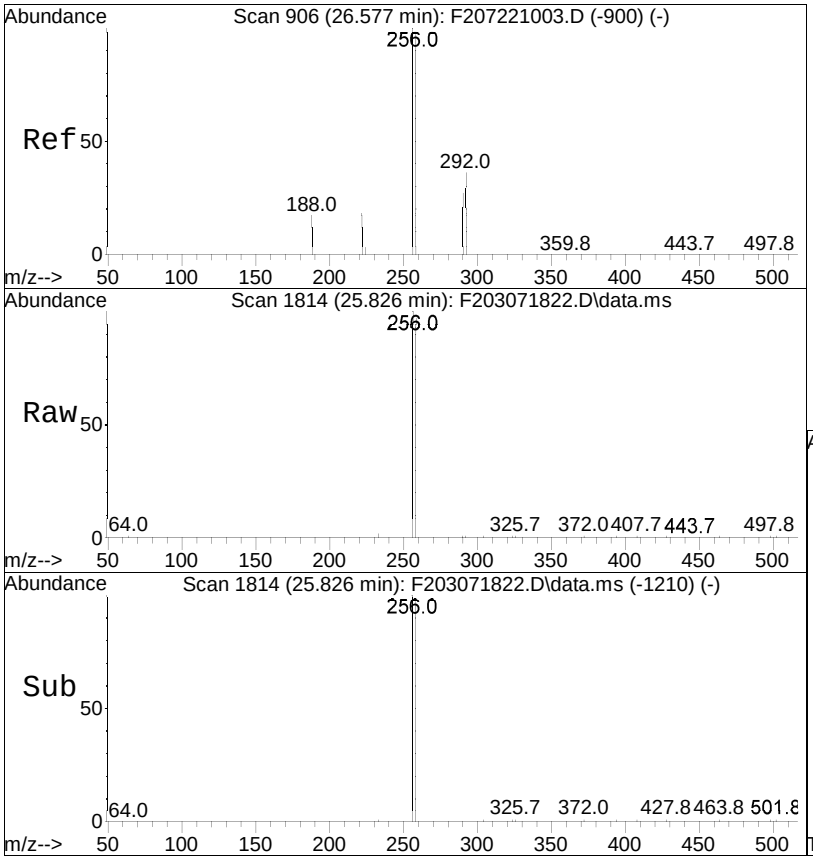




#15
Cl2-Conf Ion
Concen: 16.55 ng/mL M5
RT: 20.180 min Scan# 1132
Delta R.T. 2.628 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:224 Resp: 24863

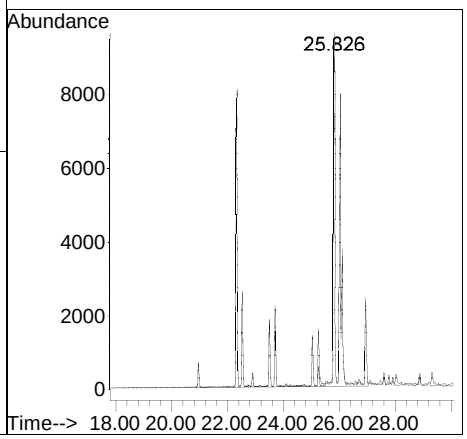


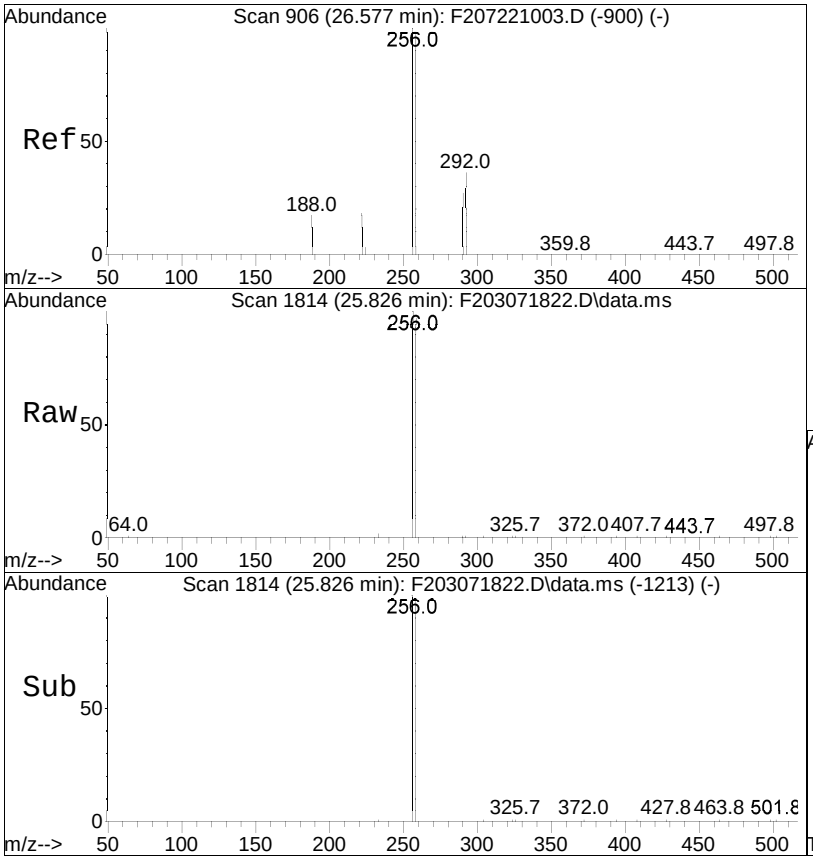


#33
Trichlorobiphenyls
Concen: 101.70 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:256 Resp: 110526

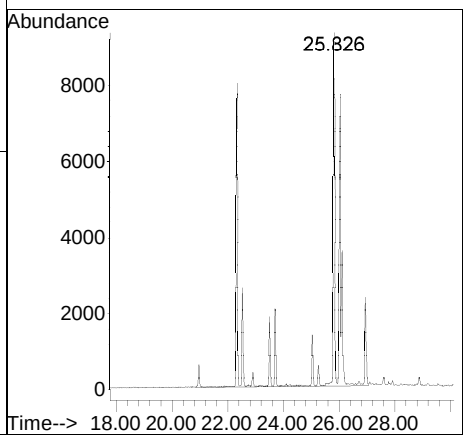
Ion	Ratio	Lower	Upper
256	100		
258	9.8	76.8	115.2#

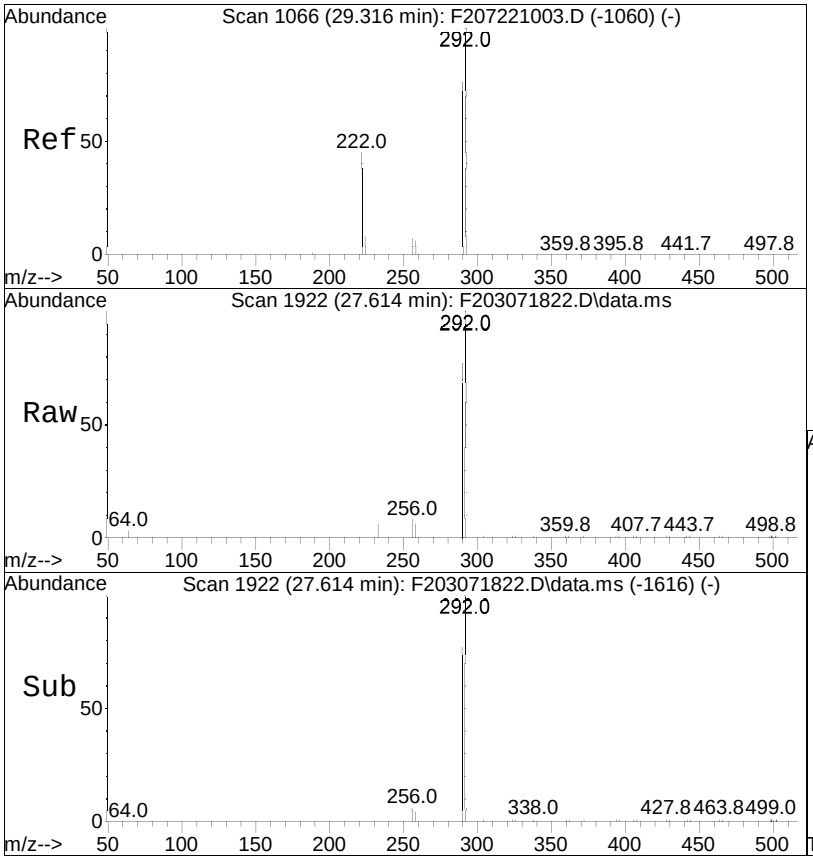




#34
Cl3- Conf Ion
Concen: 94.69 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:258 Resp: 102909

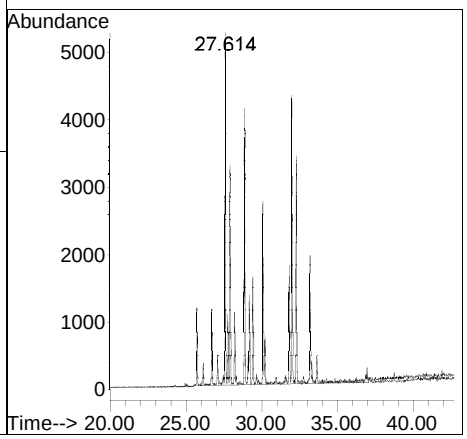


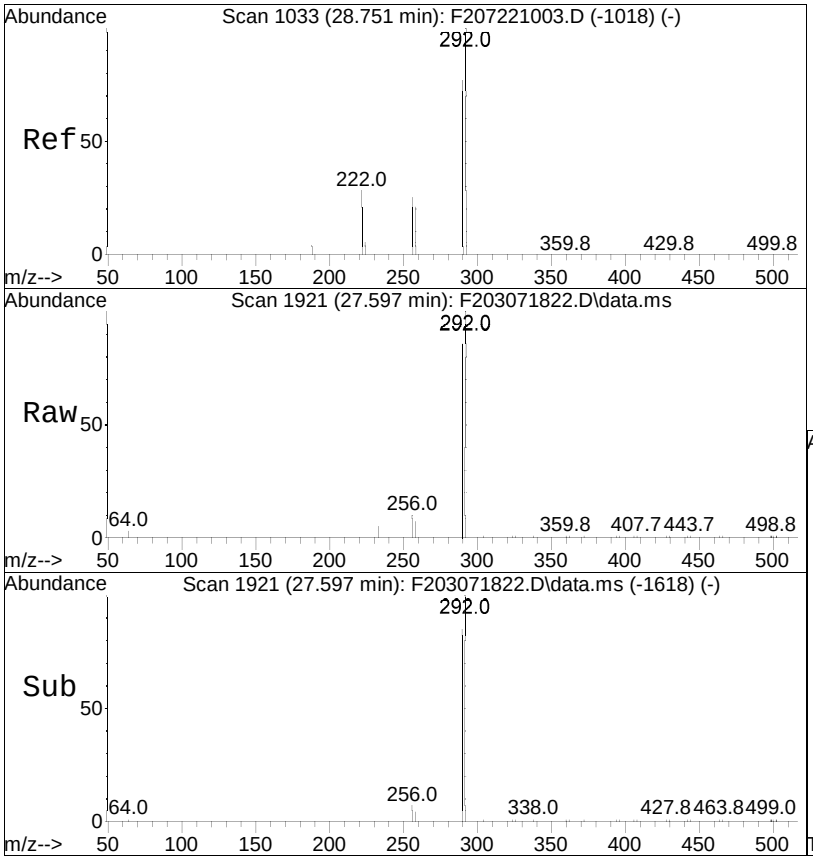


#36
Tetrachlorobiphenyls
Concen: 158.99 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:292 Resp: 133311

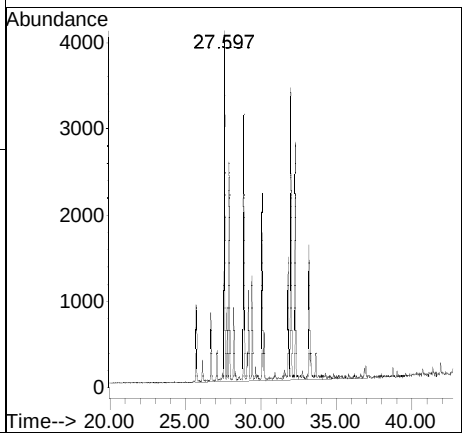
Ion	Ratio	Lower	Upper
292	100		
290	2.2	61.0	91.4#

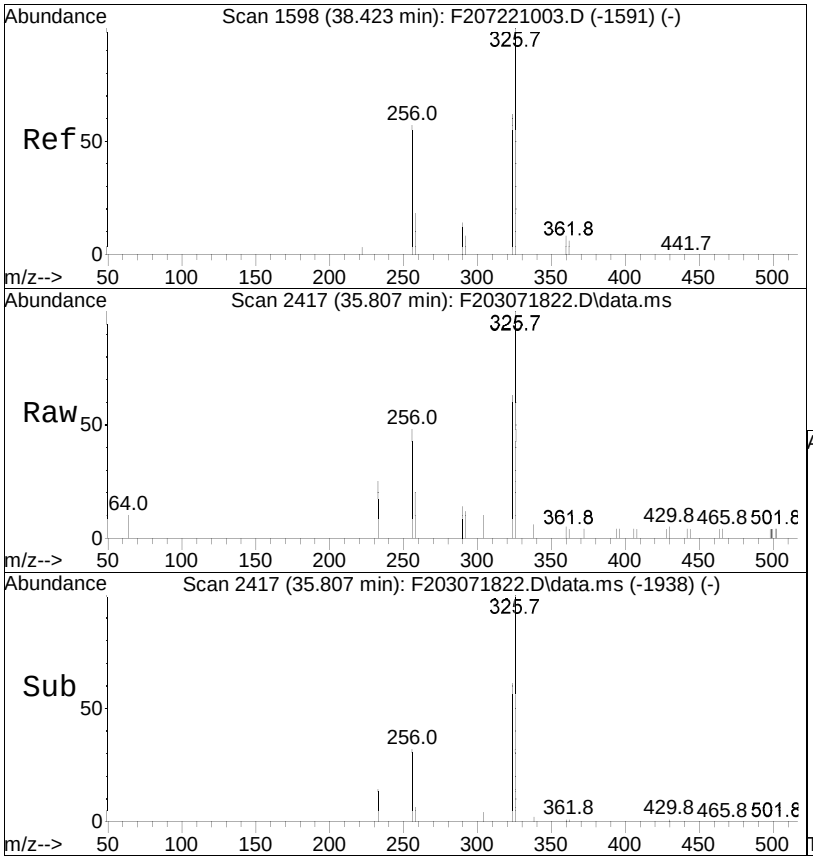




#37
Cl4-Conf Ion
Concen: 132.93 ng/mL M5
RT: 27.597 min Scan# 1921
Delta R.T. -0.758 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:290 Resp: 111461

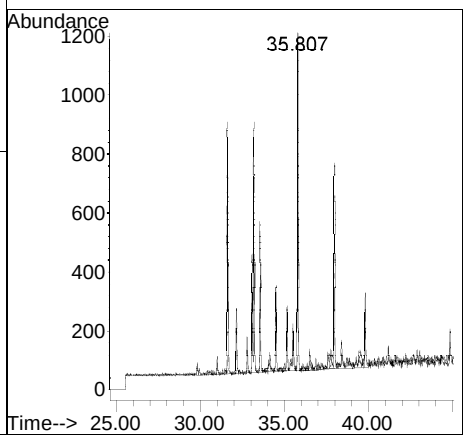


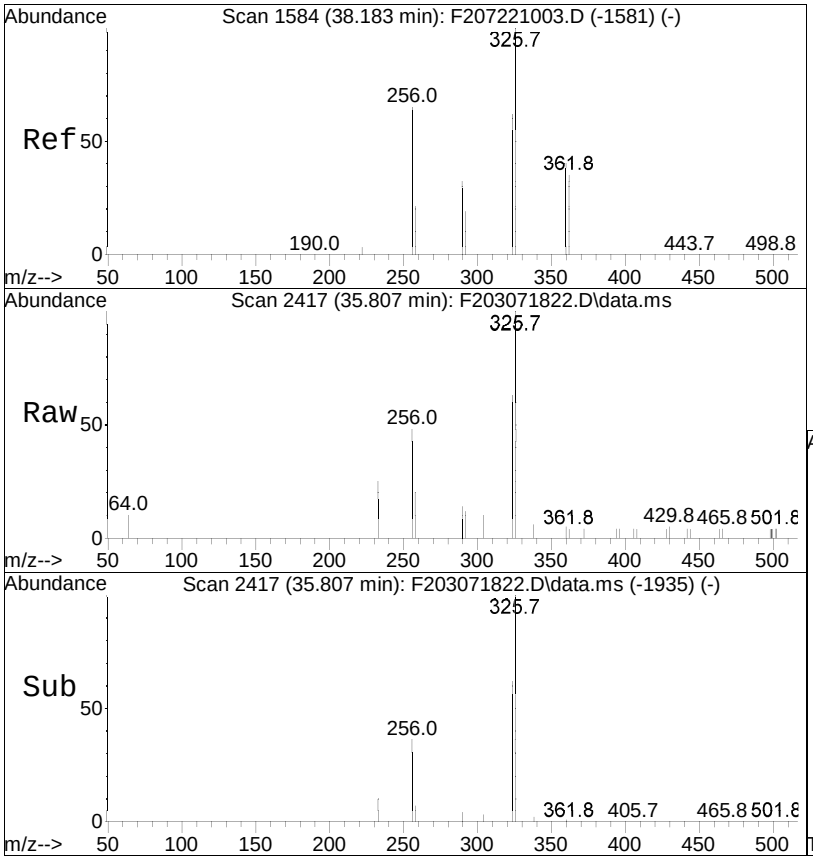


#106
Pentachlorobiphenyls
Concen: 23.33 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. 1.543 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:326 Resp: 24190

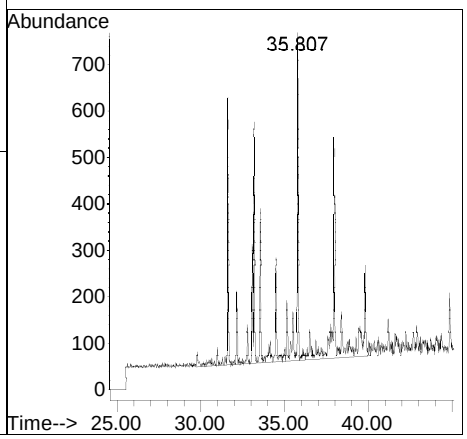
Ion	Ratio	Lower	Upper
326	100		
324	4.8	48.7	73.1#

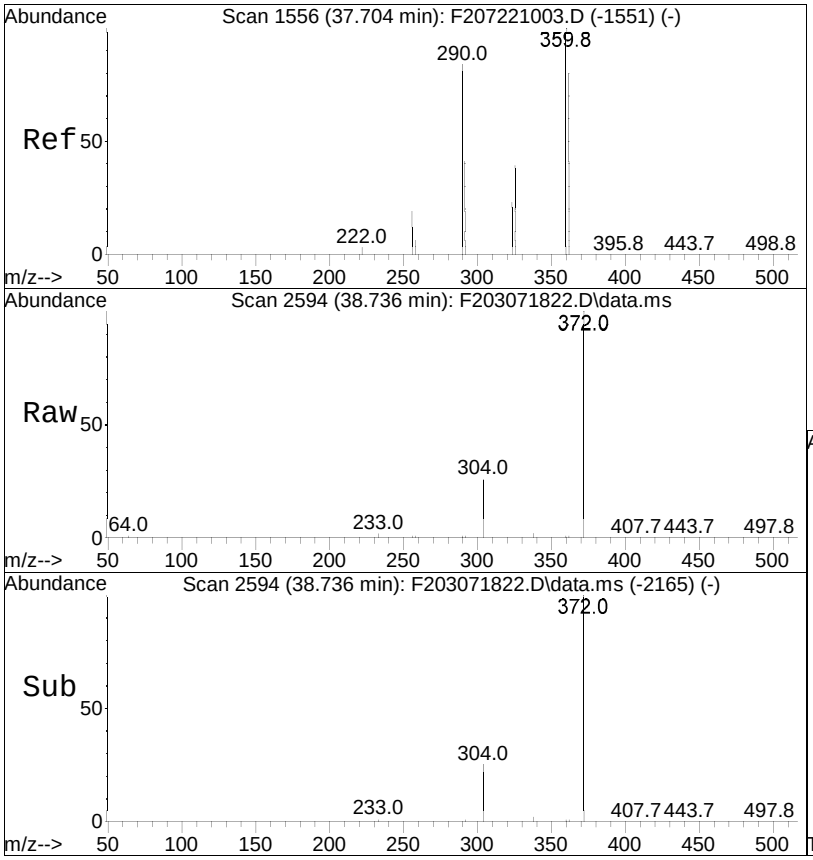




#107
Cl5-Conf Ion
Concen: 20.55 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. -1.841 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:324 Resp: 21306

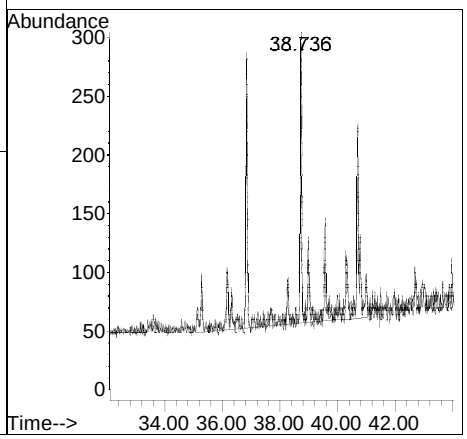


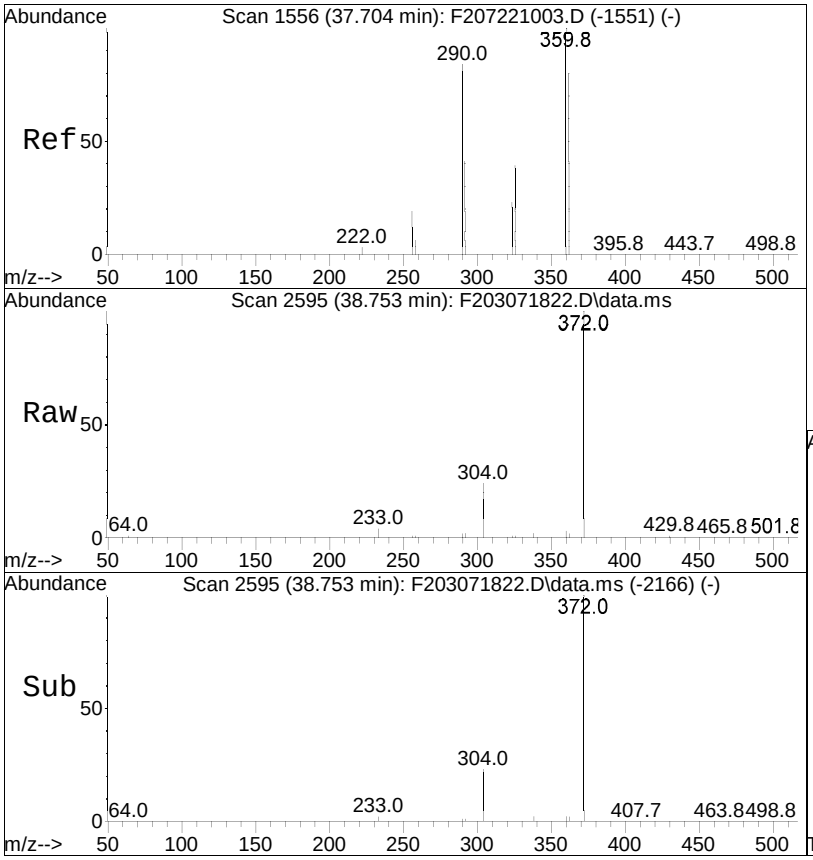


#112
Hexachlorobiphenyls
Concen: 5.68 ng/mL M5
RT: 38.736 min Scan# 2594
Delta R.T. 1.616 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:360 Resp: 5665

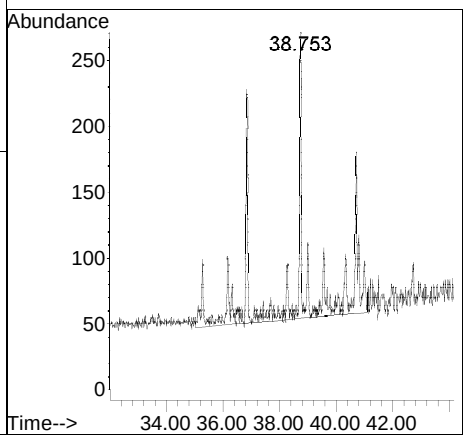
Ion	Ratio	Lower	Upper
360	100		
362	13.3	63.7	95.5#

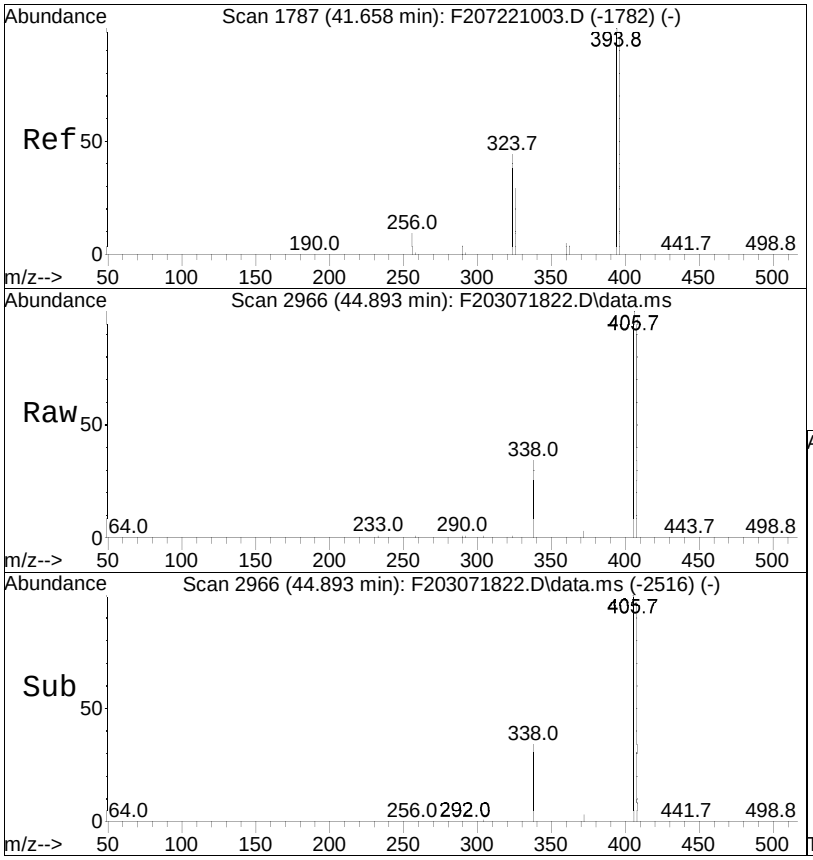




#113
Cl6-Conf Ion
Concen: 5.13 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:362 Resp: 5112

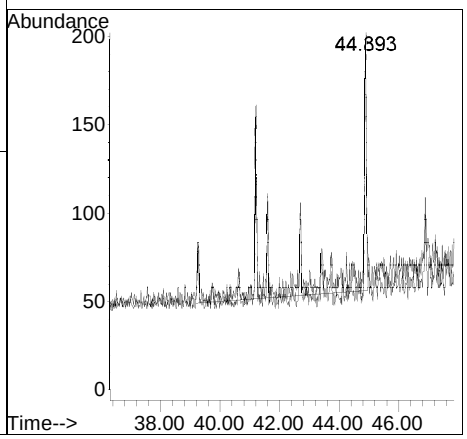


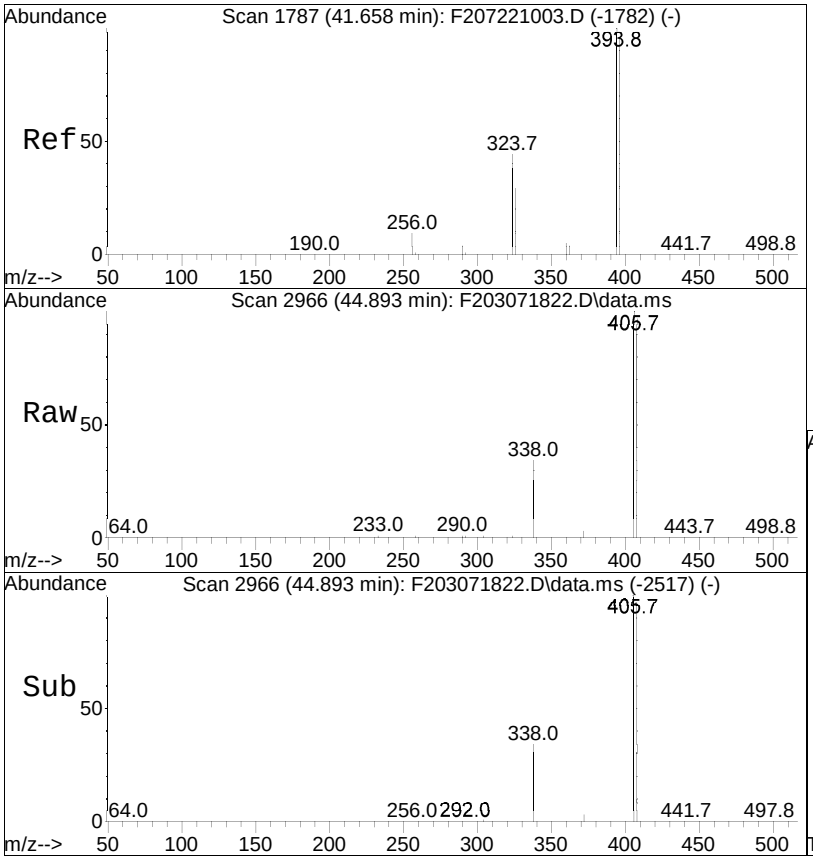


#135
Heptachlorobiphenyls
Concen: 3.17 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:394 Resp: 3228

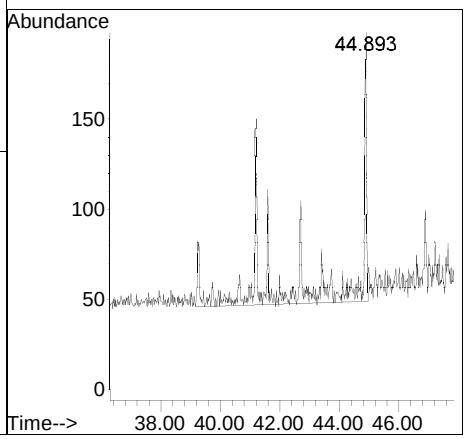
Ion	Ratio	Lower	Upper
394	100		
396	11.5	78.6	118.0#

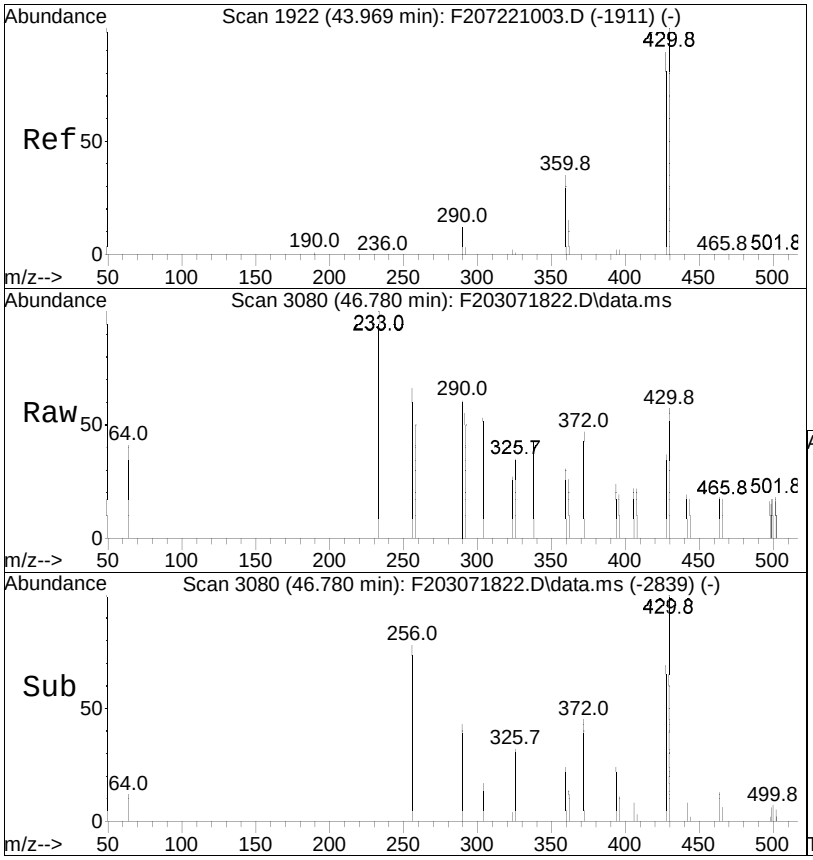




#136
Cl7-Conf Ion
Concen: 2.96 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:396 Resp: 3009

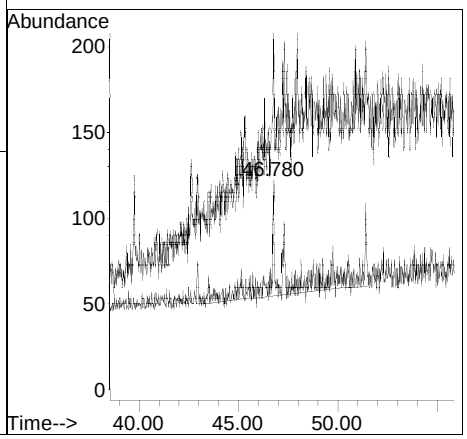


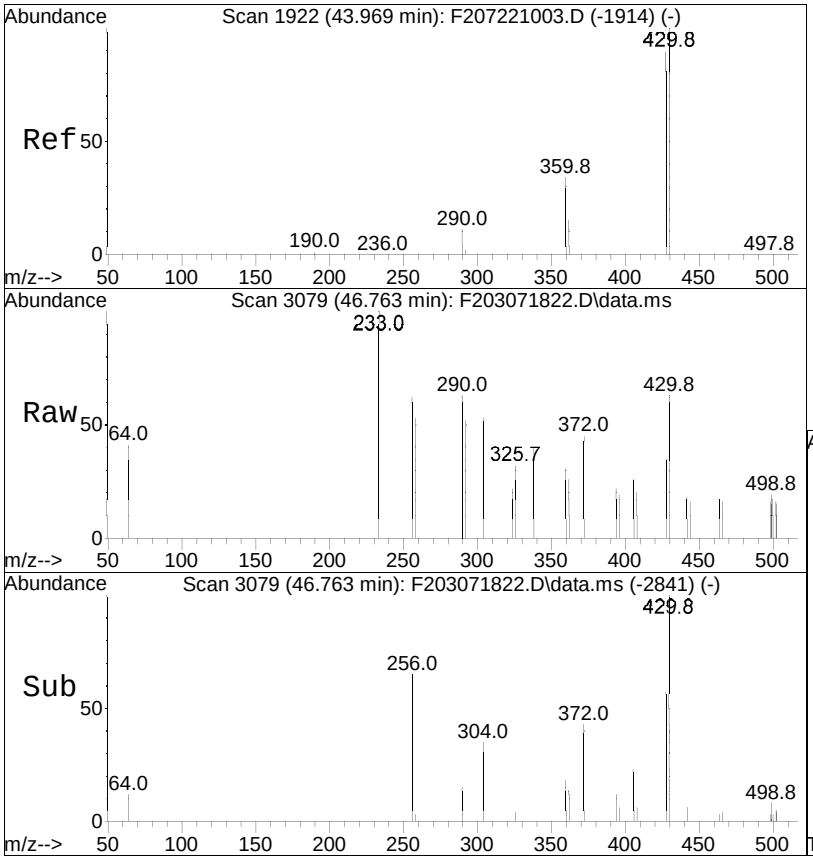


#181
Octachlorobiphenyls
Concen: 3.71 ng/mL M5
RT: 46.780 min Scan# 3080
Delta R.T. 3.202 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:428 Resp: 3223

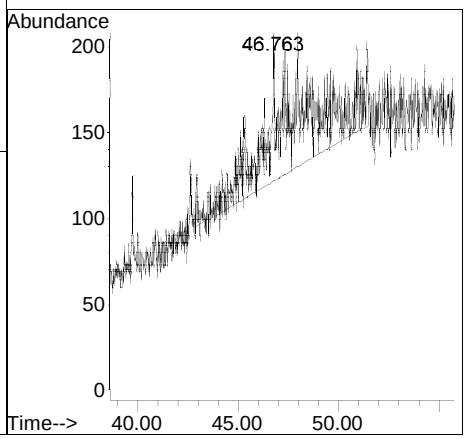
Ion	Ratio	Lower	Upper
428	100		
430	2.9	89.1	133.7#





#182
Cl8-Conf Ion
Concen: 11.61 ng/mL M5
RT: 46.763 min Scan# 3079
Delta R.T. 3.185 min
Lab File: F203071822.D
Acq: 8 Mar 2018 12:03 pm

Tgt Ion:430 Resp: 10093



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071823.D
Acq On : 8 Mar 2018 1:18 pm
Operator : BNA2:MJS
Sample : L1806872-11,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 09 13:53:10 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.856	234	376925	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.877	406	197407	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	50778	76.610	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 76.61%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	84324	87.040	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 87.04%			
151)	Cl6-BZ#153-C13 (surr)	38.720	372	86114	94.909	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 94.91%			
177)	Cl8-BZ#202-C13 (surr)	42.924	442	78815	84.774	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 84.77%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	20.189	222	35865M5	23.979	ng/mL	
15)	Cl2-Conf Ion	20.189	224	24323M5	16.262	ng/mL	
33)	Trichlorobiphenyls	25.827	256	111613M5	103.165	ng/mL	
34)	Cl3- Conf Ion	25.827	258	96829M5	89.500	ng/mL	
36)	Tetrachlorobiphenyls	27.614	292	96385M5	115.472	ng/mL	
37)	Cl4-Conf Ion	27.614	290	80583M5	96.541	ng/mL	
106)	Pentachlorobiphenyls	31.636	326	14214M5	13.772	ng/mL	
107)	Cl5-Conf Ion	35.807	324	11529M5	11.170	ng/mL	
112)	Hexachlorobiphenyls	38.753	360	2897M5	2.920	ng/mL	
113)	Cl6-Conf Ion	38.736	362	2553M5	2.573	ng/mL	
135)	Heptachlorobiphenyls	41.219	394	1778M5	1.757	ng/mL	
136)	Cl7-Conf Ion	44.893	396	1370M5	1.354	ng/mL	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

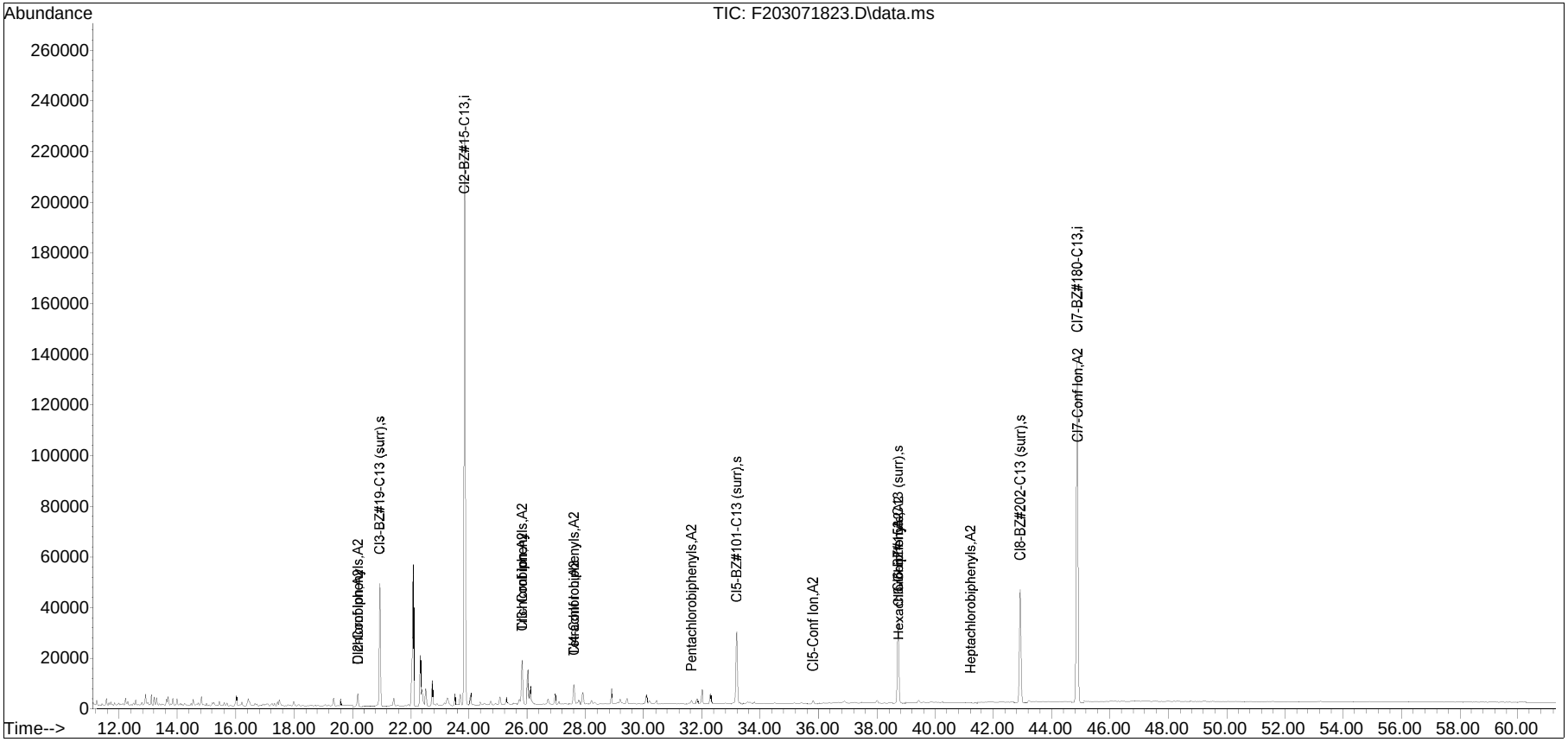
(#) = qualifier out of range (m) = manual integration (+) = signals summed

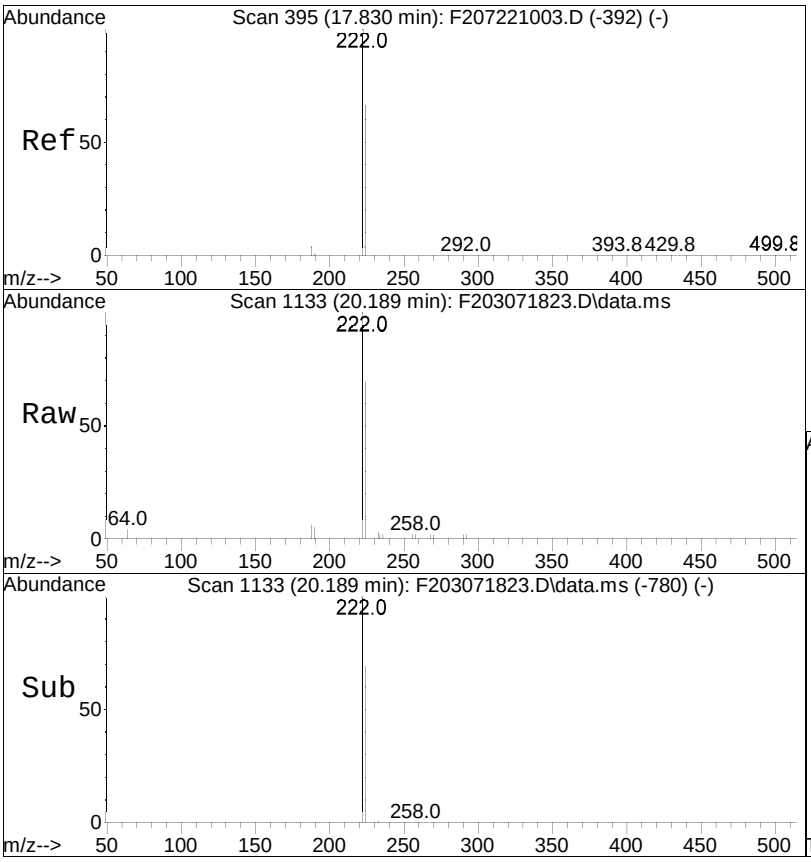
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071823.D
Acq On : 8 Mar 2018 1:18 pm
Operator : BNA2:MJS
Sample : L1806872-11,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Mar 09 13:53:10 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

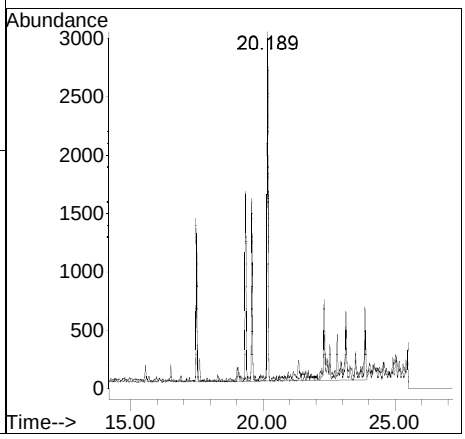


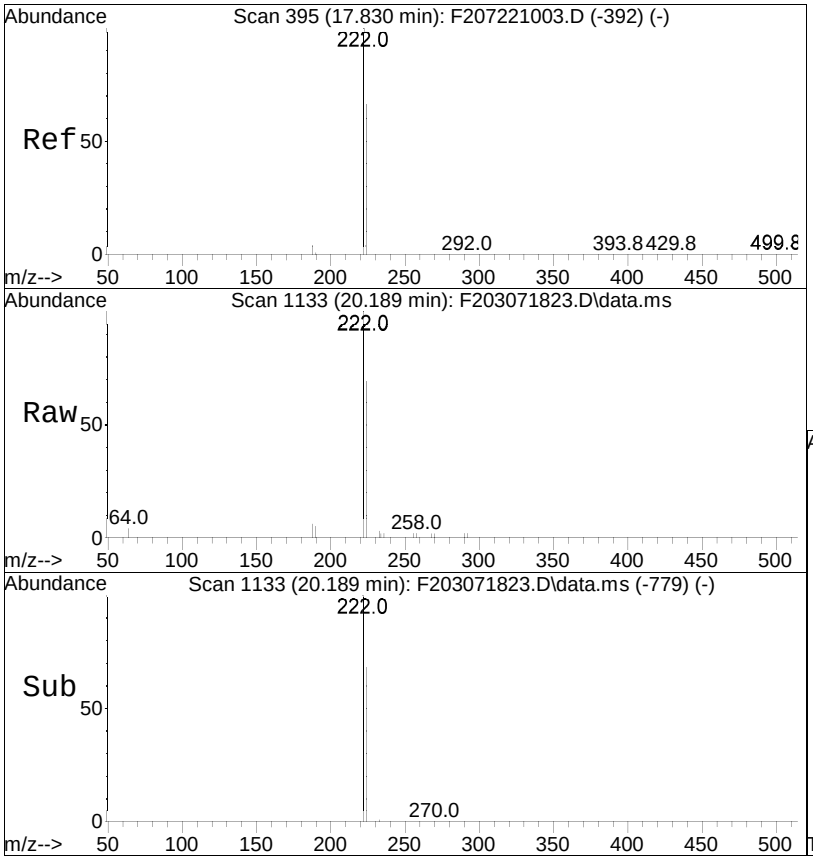


#14
Dichlorobiphenyls
Concen: 23.98 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:222 Resp: 35865

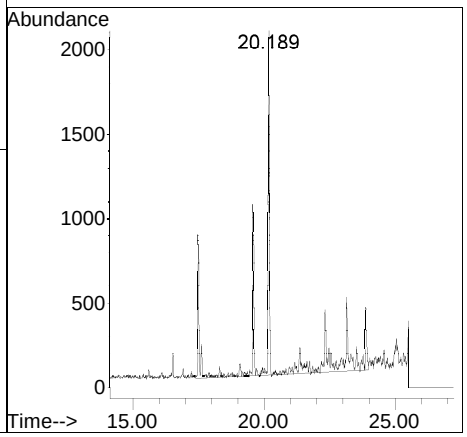
Ion	Ratio	Lower	Upper
222	100		
224	6.1	52.1	78.1#

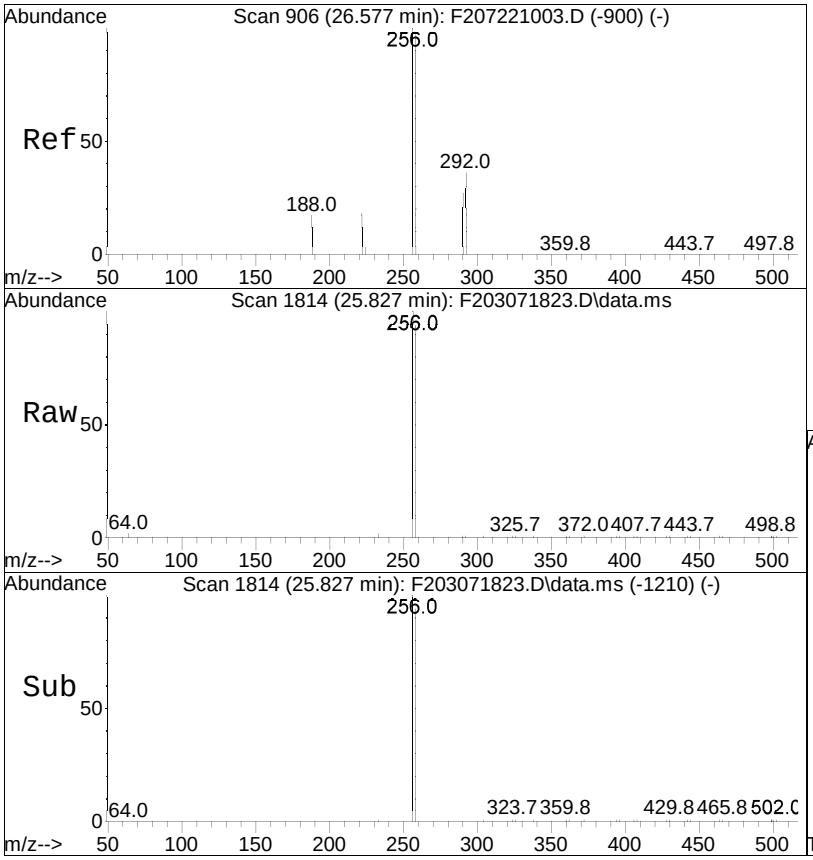




#15
Cl2-Conf Ion
Concen: 16.26 ng/mL M5
RT: 20.189 min Scan# 1133
Delta R.T. 2.637 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:224 Resp: 24323

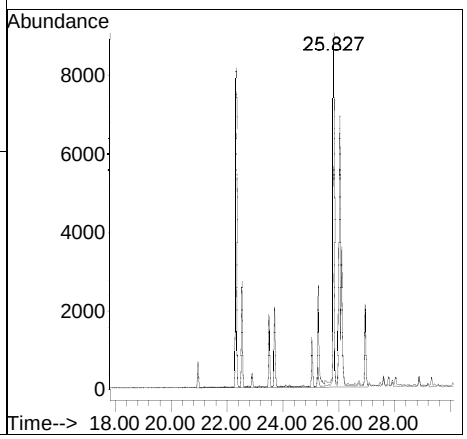


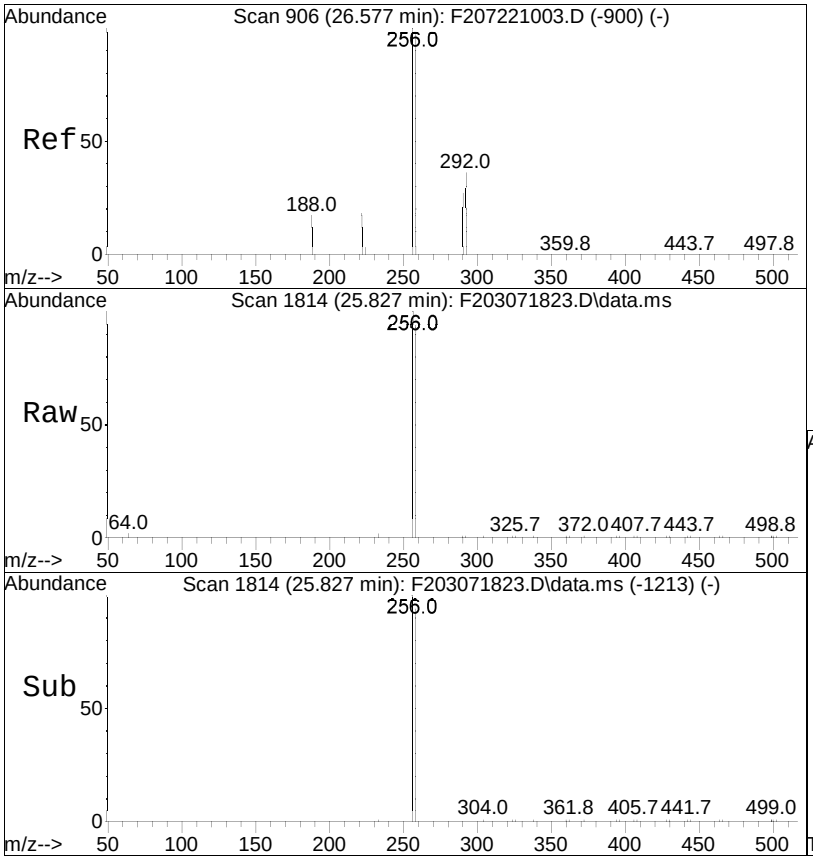


#33
Trichlorobiphenyls
Concen: 103.16 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:256 Resp: 111613

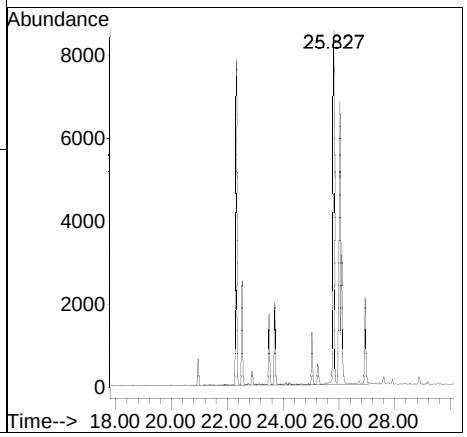
Ion	Ratio	Lower	Upper
256	100		
258	8.8	76.8	115.2#

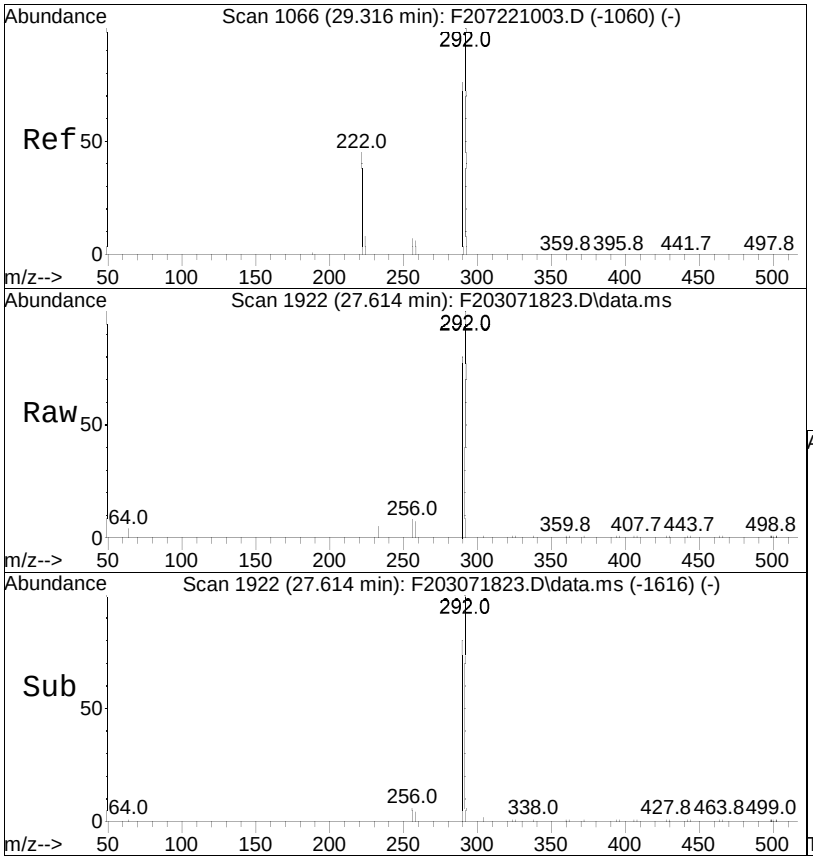




#34
Cl3- Conf Ion
Concen: 89.50 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:258 Resp: 96829

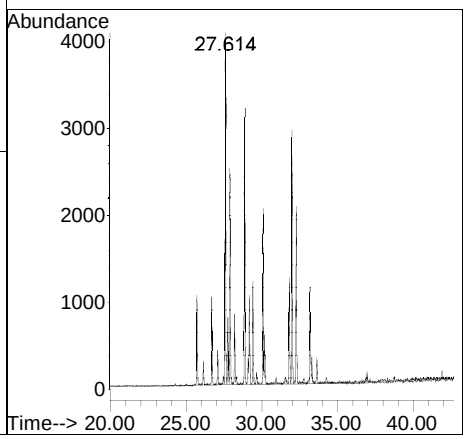


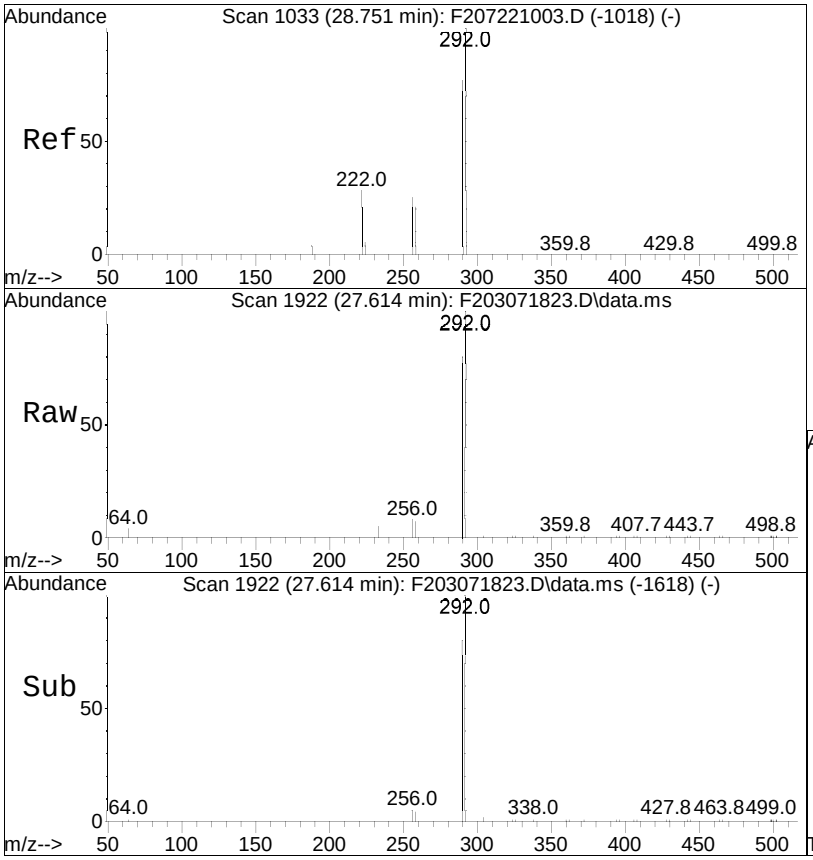


#36
Tetrachlorobiphenyls
Concen: 115.47 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:292 Resp: 96385

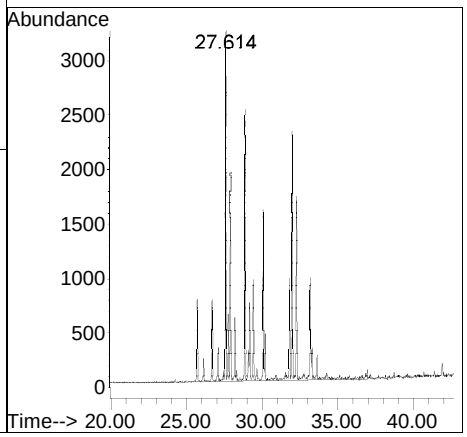
Ion	Ratio	Lower	Upper
292	100		
290	2.3	61.0	91.4#

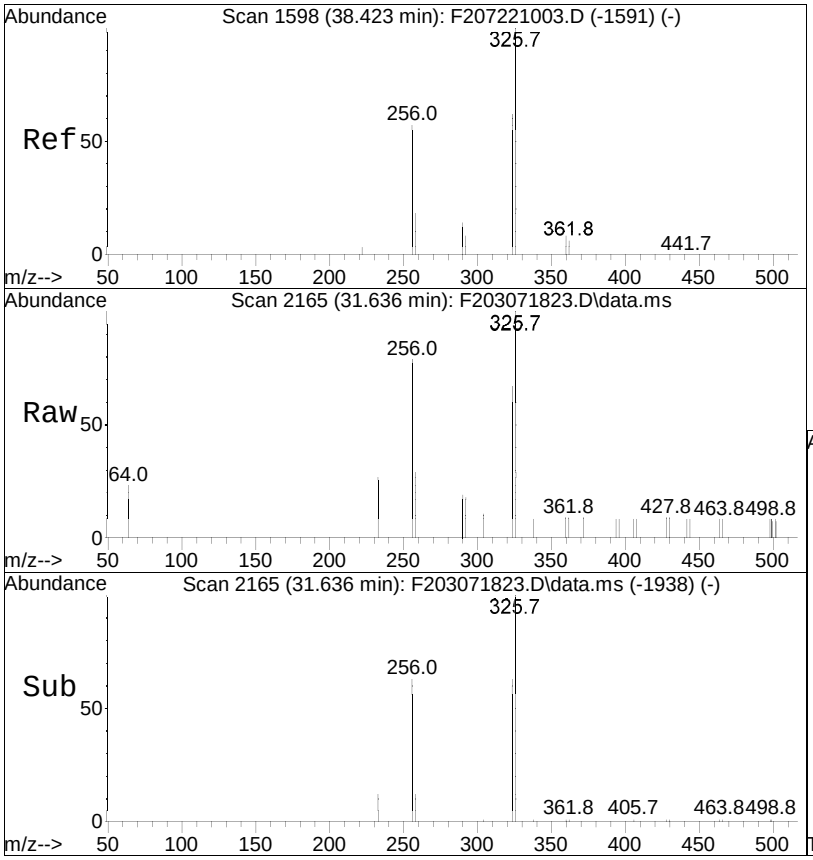




#37
Cl4-Conf Ion
Concen: 96.54 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:290 Resp: 80583

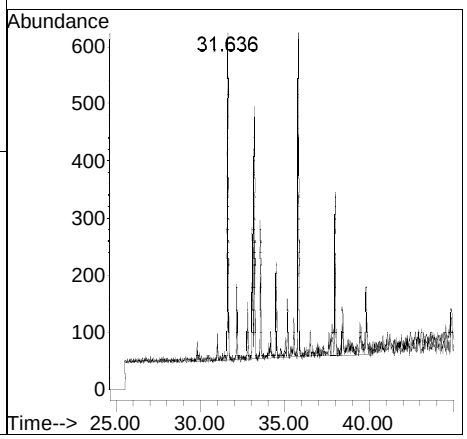


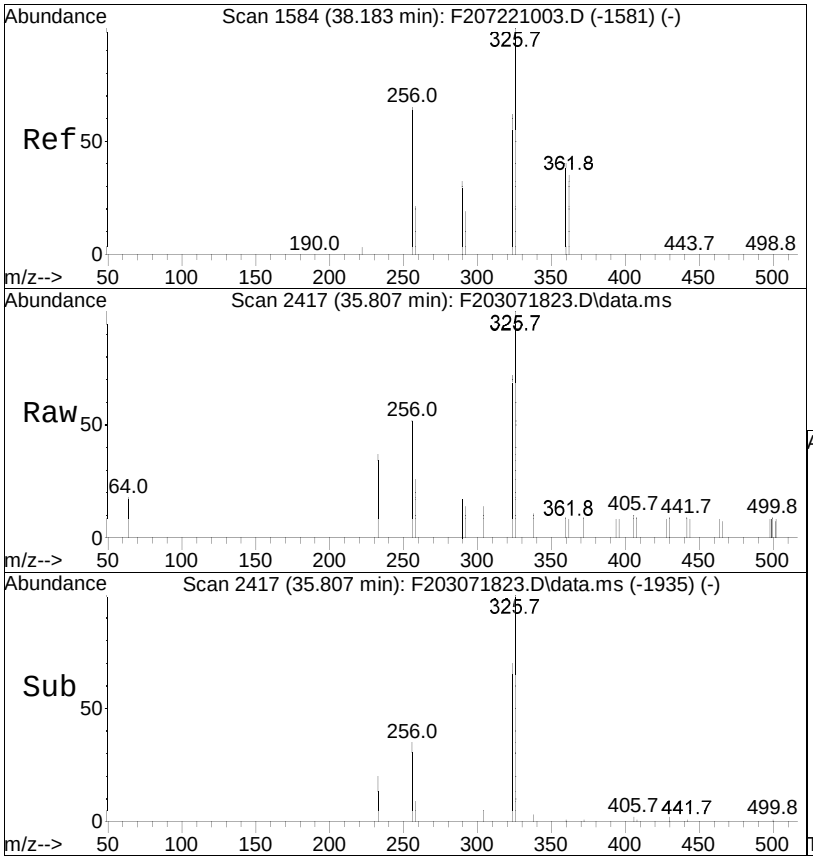


#106
Pentachlorobiphenyls
Concen: 13.77 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:326 Resp: 14214

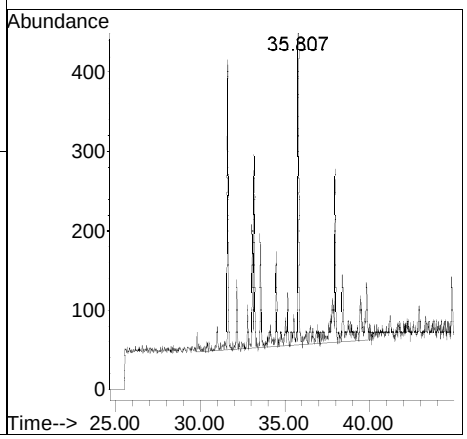
Ion	Ratio	Lower	Upper
326	100		
324	3.0	48.7	73.1#

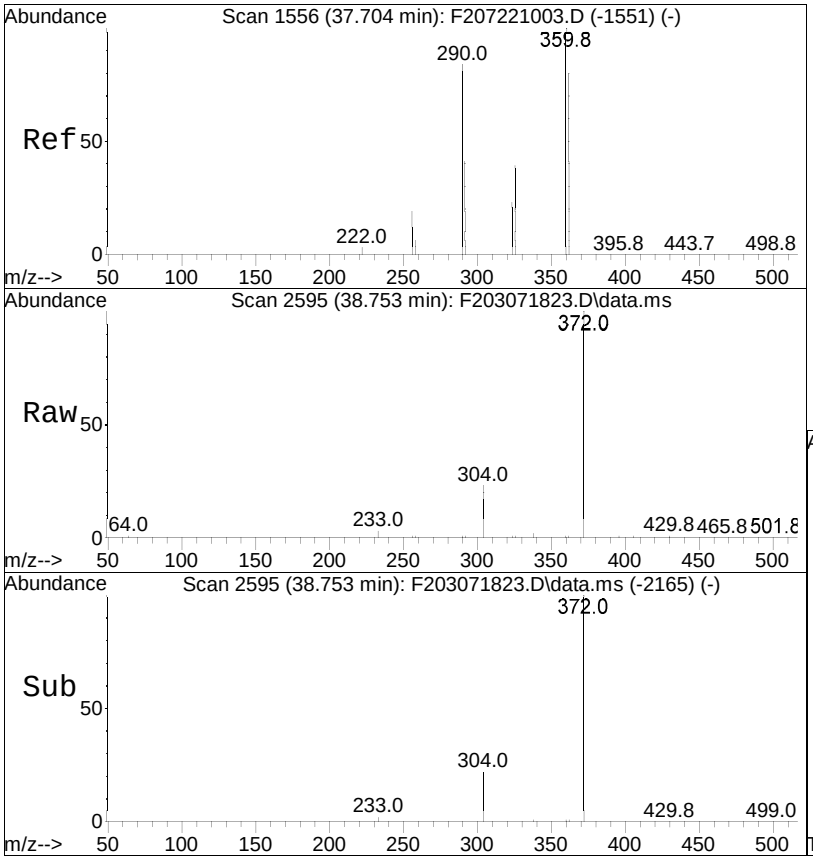




#107
Cl5-Conf Ion
Concen: 11.17 ng/mL M5
RT: 35.807 min Scan# 2417
Delta R.T. -1.841 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:324 Resp: 11529

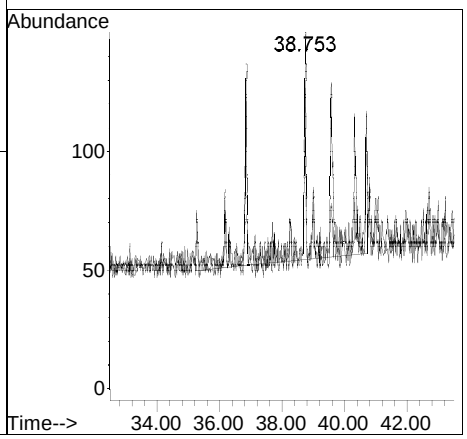


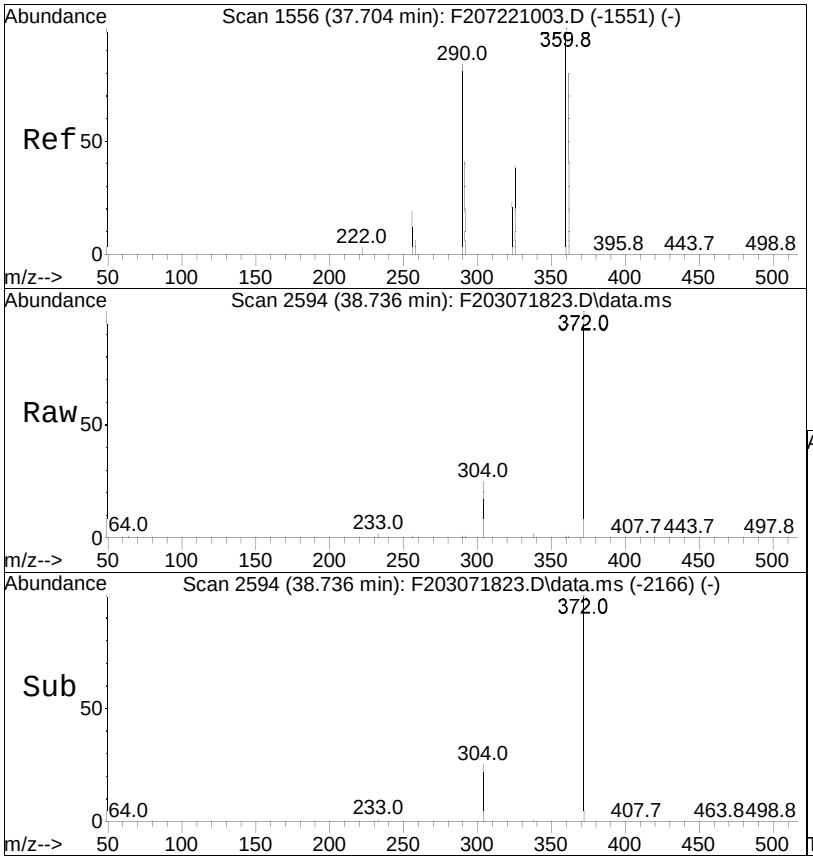


#112
Hexachlorobiphenyls
Concen: 2.92 ng/mL M5
RT: 38.753 min Scan# 2595
Delta R.T. 1.633 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:360 Resp: 2897

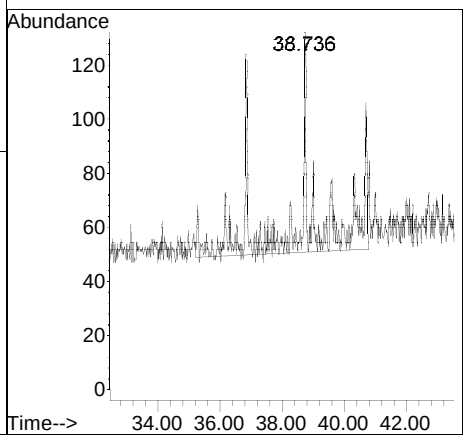
Ion	Ratio	Lower	Upper
360	100		
362	10.6	63.7	95.5#

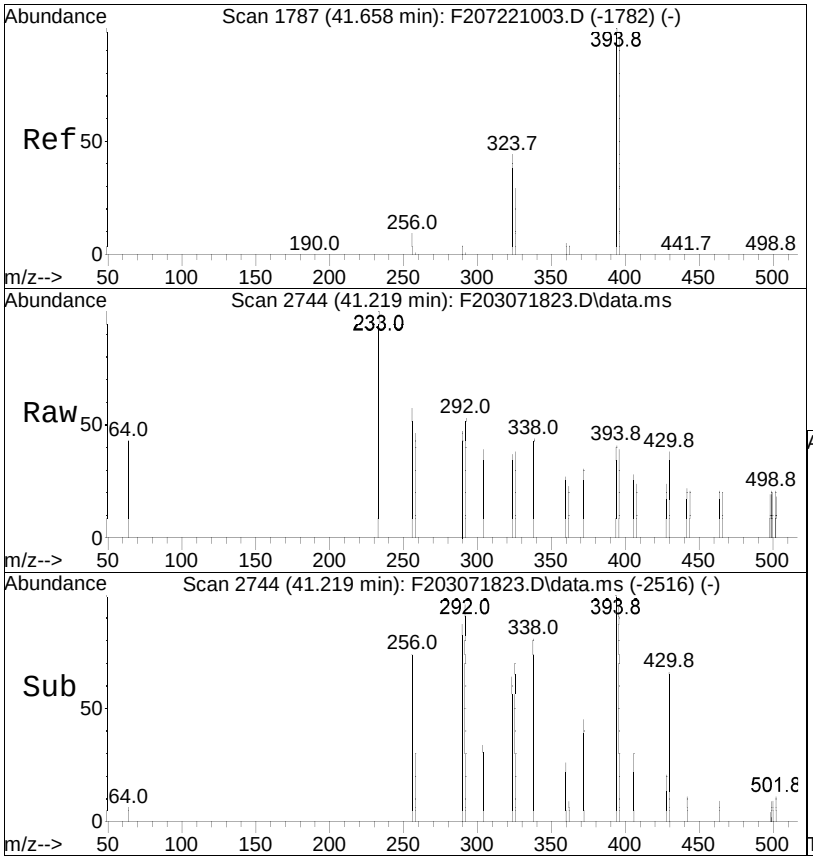




#113
Cl6-Conf Ion
Concen: 2.57 ng/mL M5
RT: 38.736 min Scan# 2594
Delta R.T. 1.616 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:362 Resp: 2553

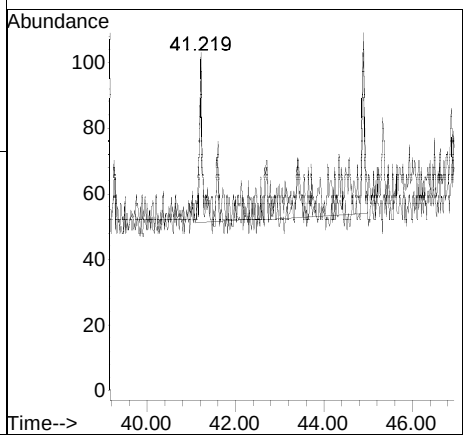


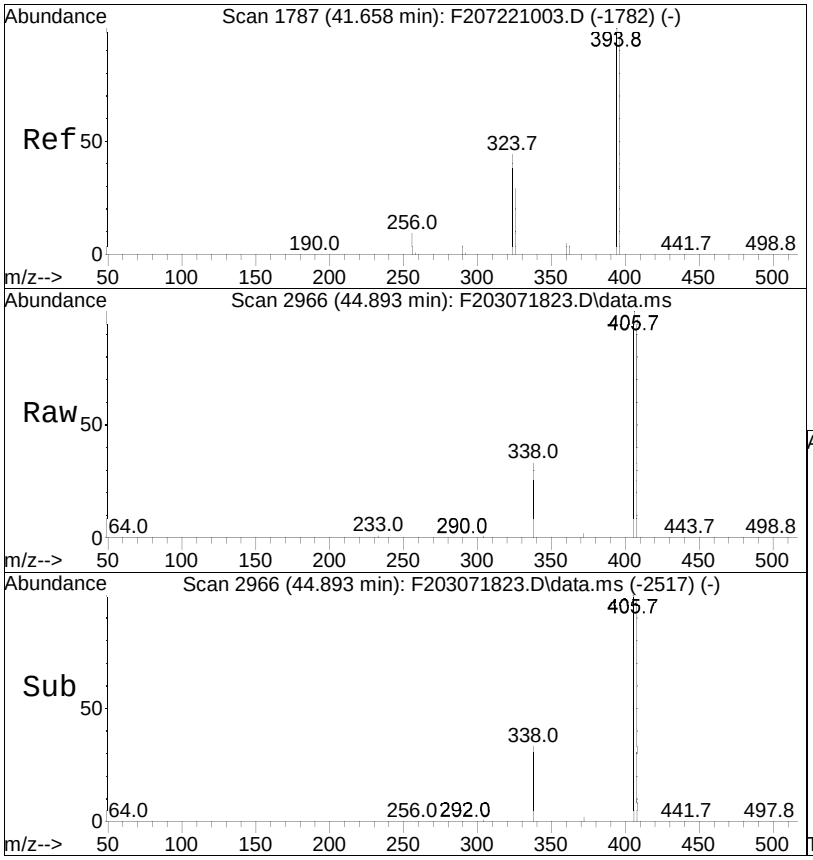


#135
Heptachlorobiphenyls
Concen: 1.76 ng/mL M5
RT: 41.219 min Scan# 2744
Delta R.T. 0.120 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:394 Resp: 1778

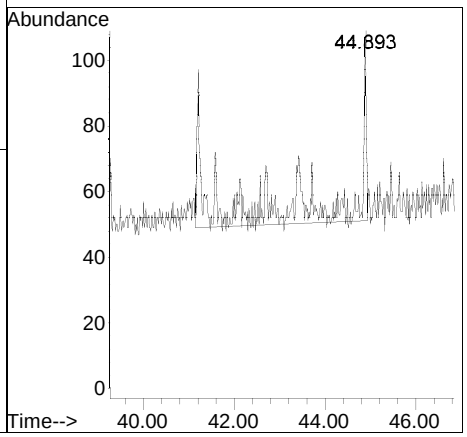
Ion	Ratio	Lower	Upper
394	100		
396	11.6	78.6	118.0#





#136
Cl7-Conf Ion
Concen: 1.35 ng/mL M5
RT: 44.893 min Scan# 2966
Delta R.T. 3.794 min
Lab File: F203071823.D
Acq: 8 Mar 2018 1:18 pm

Tgt Ion:396 Resp: 1370



Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071824.D
Acq On : 8 Mar 2018 2:32 pm
Operator : BNA2:MJS
Sample : L1806872-12,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 09 13:57:11 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.864	234	382828	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	201376	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	56779	84.343	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 84.34%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	87699	89.128	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 89.13%			
151) Cl6-BZ#153-C13 (surr)	38.720	372	87986	95.061	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 95.06%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	81569	86.007	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 86.01%			
Target Compounds						Qvalue
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
14) Dichlorobiphenyls	20.188	222	41284M5	27.176	ng/mL	
15) Cl2-Conf Ion	20.188	224	26178M5	17.232	ng/mL	
33) Trichlorobiphenyls	25.827	256	112362M5	102.256	ng/mL	
34) Cl3- Conf Ion	25.827	258	108230M5	98.495	ng/mL	
36) Tetrachlorobiphenyls	27.614	292	100272M5	118.277	ng/mL	
37) Cl4-Conf Ion	27.614	290	82430M5	97.231	ng/mL	
106) Pentachlorobiphenyls	31.636	326	11902M5	11.354	ng/mL	
107) Cl5-Conf Ion	31.636	324	10162M5	9.694	ng/mL	
112) Hexachlorobiphenyls	39.580	360	2767M5	2.746	ng/mL	
113) Cl6-Conf Ion	36.866	362	1898M5	1.883	ng/mL	
135) Heptachlorobiphenyls	41.202	394	1067M5	1.034	ng/mL	
136) Cl7-Conf Ion	44.876	396	985M5	0.954	ng/mL	
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

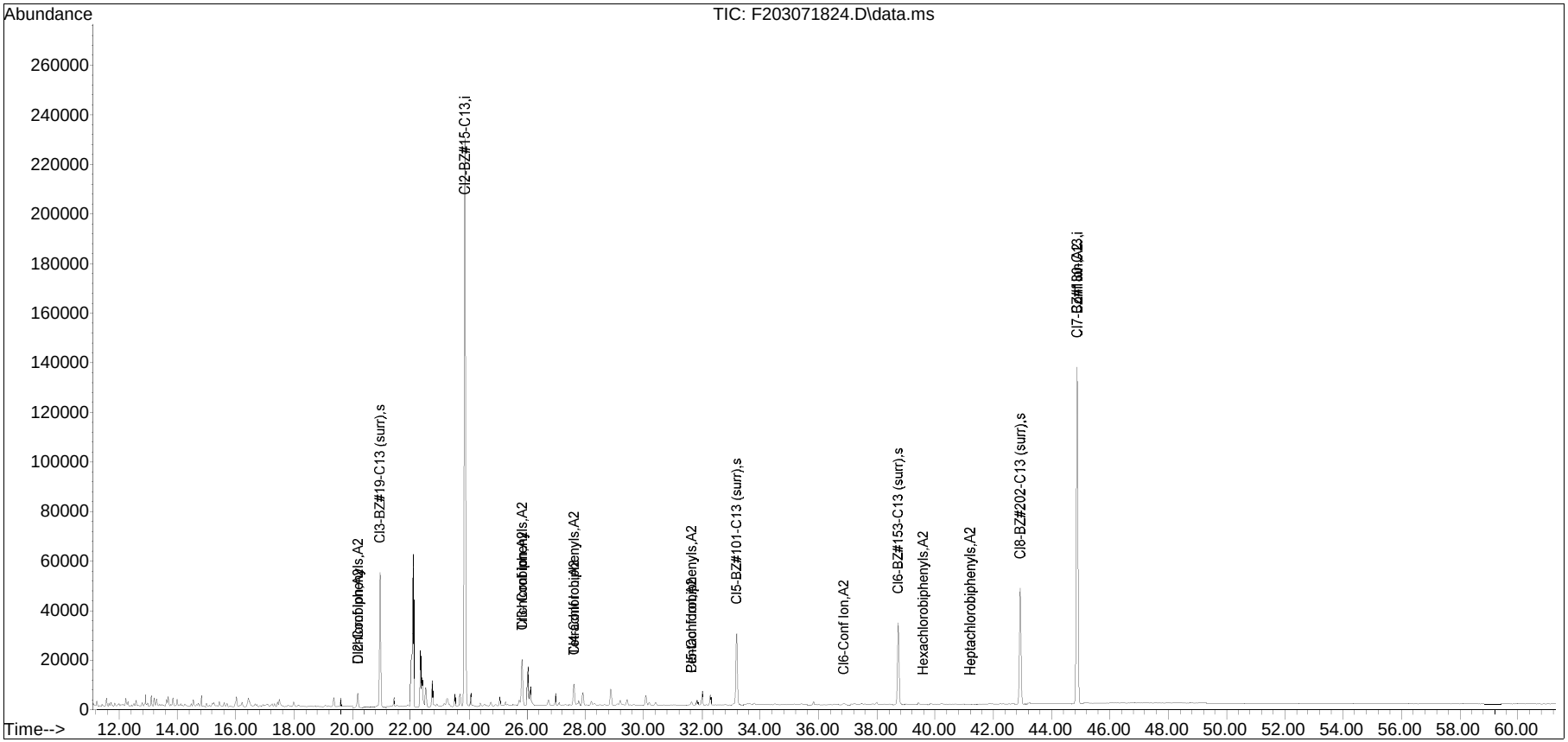
(#) = qualifier out of range (m) = manual integration (+) = signals summed

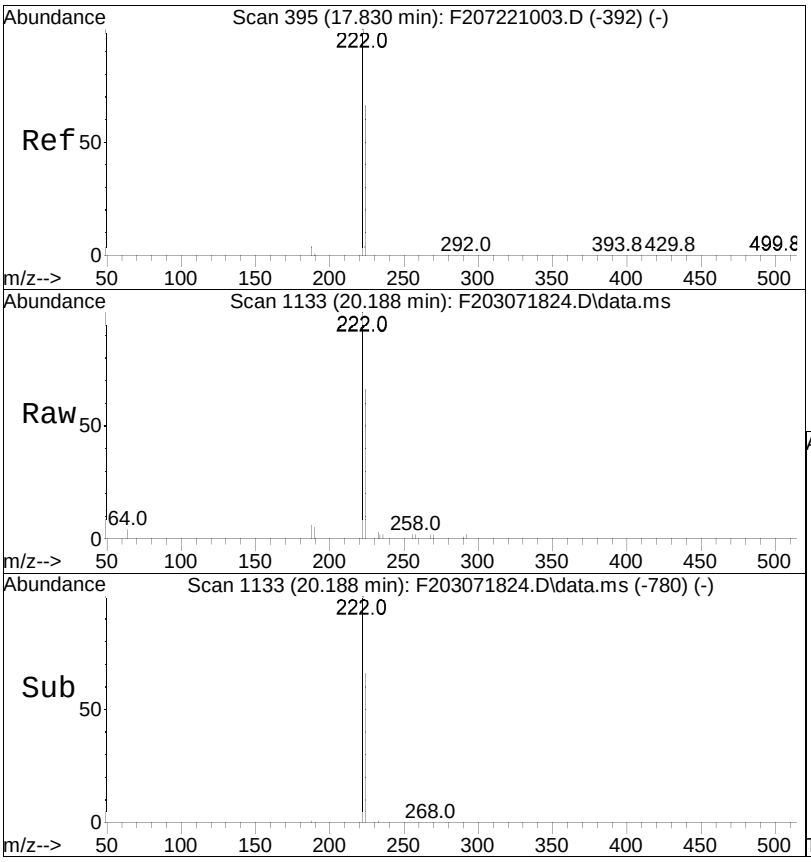
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071824.D
Acq On : 8 Mar 2018 2:32 pm
Operator : BNA2:MJS
Sample : L1806872-12,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 09 13:57:11 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

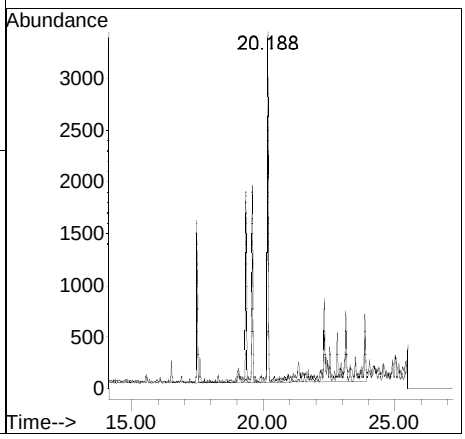


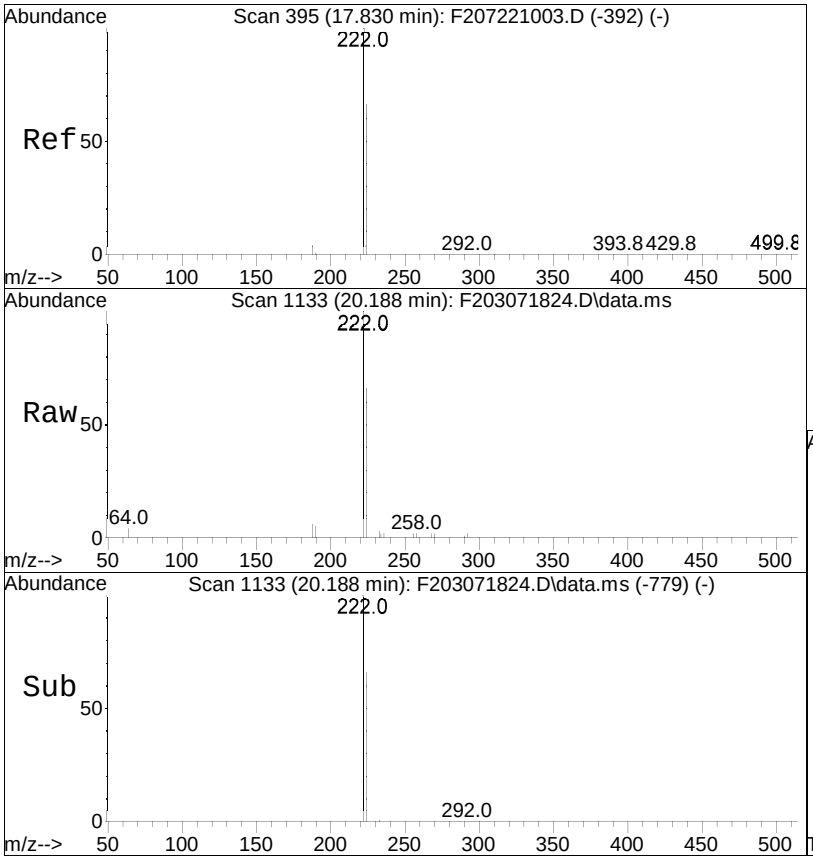


#14
Dichlorobiphenyls
Concen: 27.18 ng/mL M5
RT: 20.188 min Scan# 1133
Delta R.T. 2.636 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:222 Resp: 41284

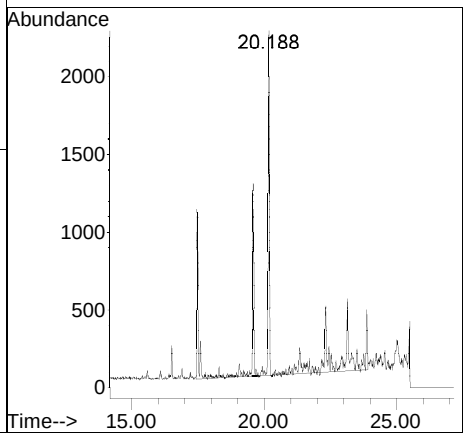
Ion	Ratio	Lower	Upper
222	100		
224	6.3	52.1	78.1#

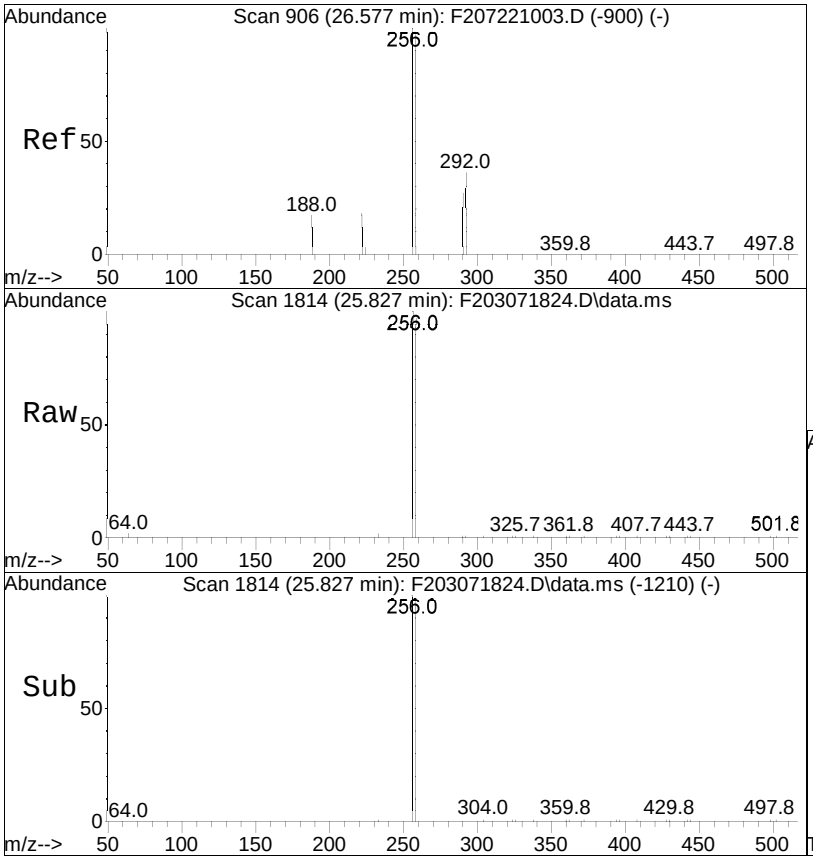




#15
Cl2-Conf Ion
Concen: 17.23 ng/mL M5
RT: 20.188 min Scan# 1133
Delta R.T. 2.636 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:224 Resp: 26178

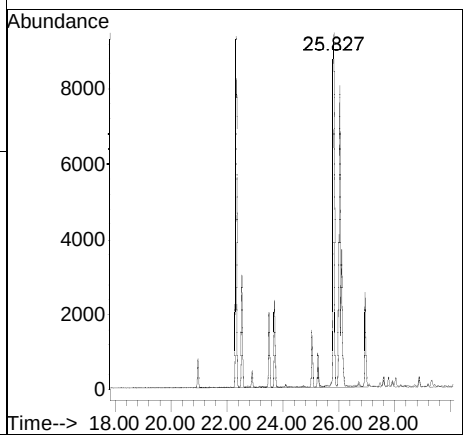


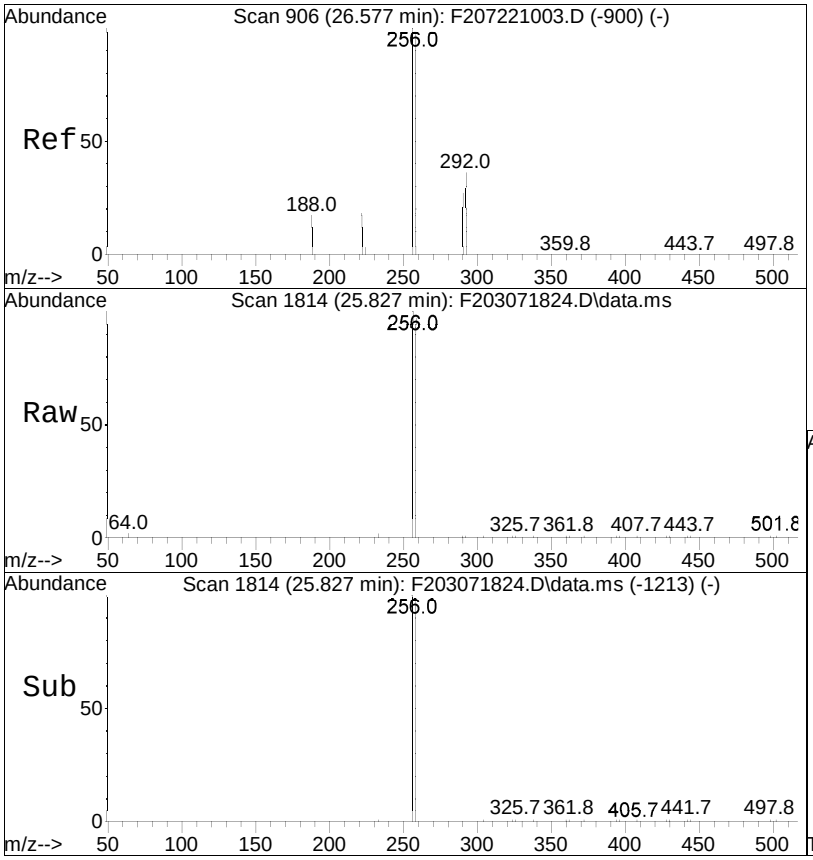


#33
Trichlorobiphenyls
Concen: 102.26 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:256 Resp: 112362

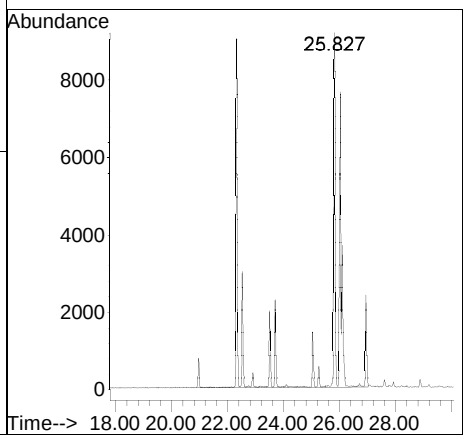
Ion	Ratio	Lower	Upper
256	100		
258	9.6	76.8	115.2#

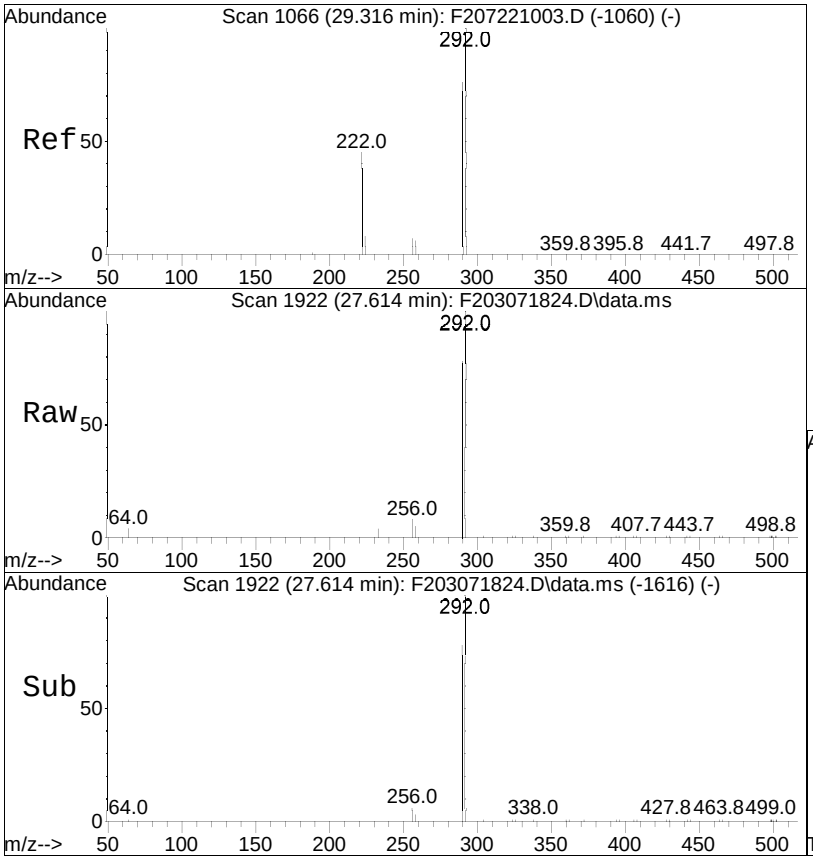




#34
Cl3- Conf Ion
Concen: 98.50 ng/mL M5
RT: 25.827 min Scan# 1814
Delta R.T. -0.383 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:258 Resp: 108230

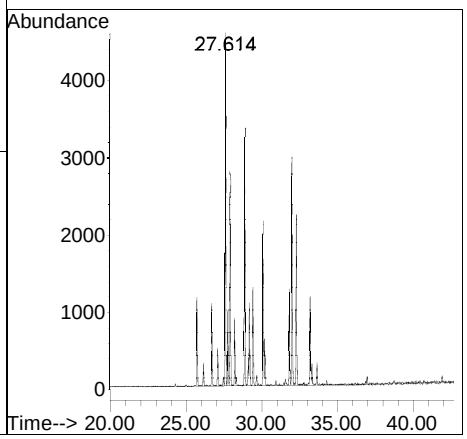


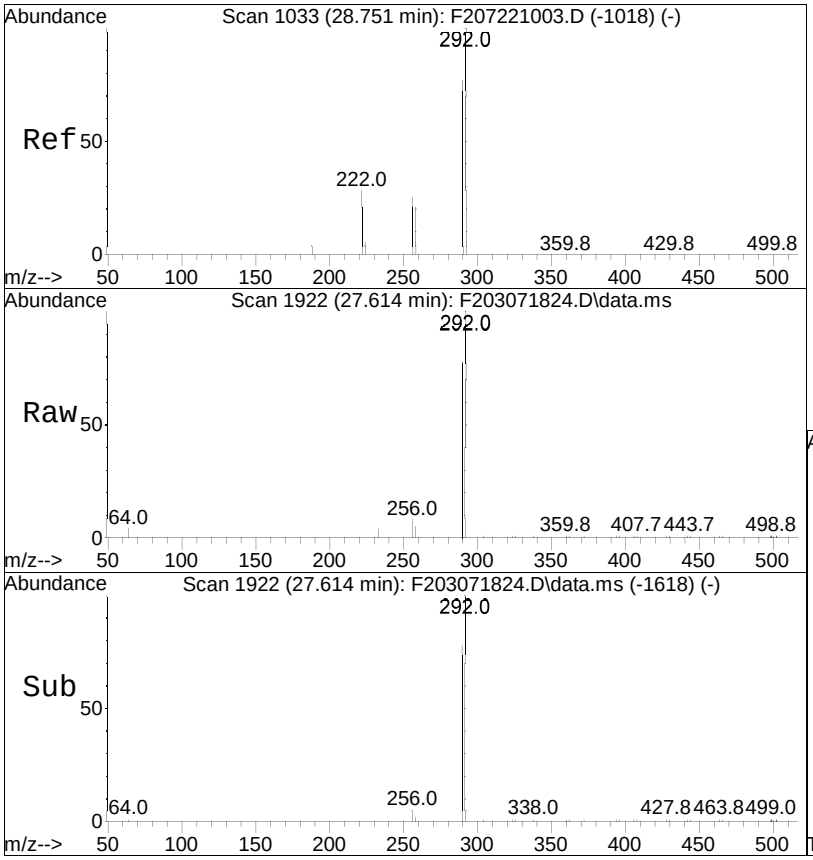


#36
Tetrachlorobiphenyls
Concen: 118.28 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.758 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:292 Resp: 100272

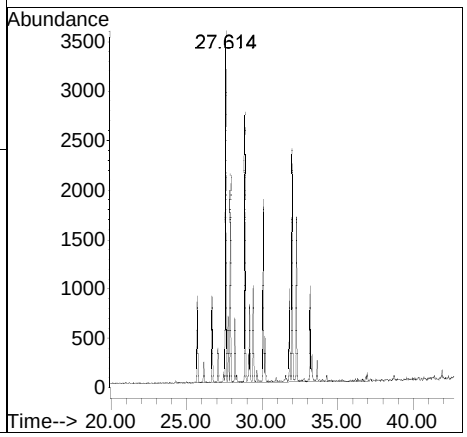
Ion	Ratio	Lower	Upper
292	100		
290	2.2	61.0	91.4#

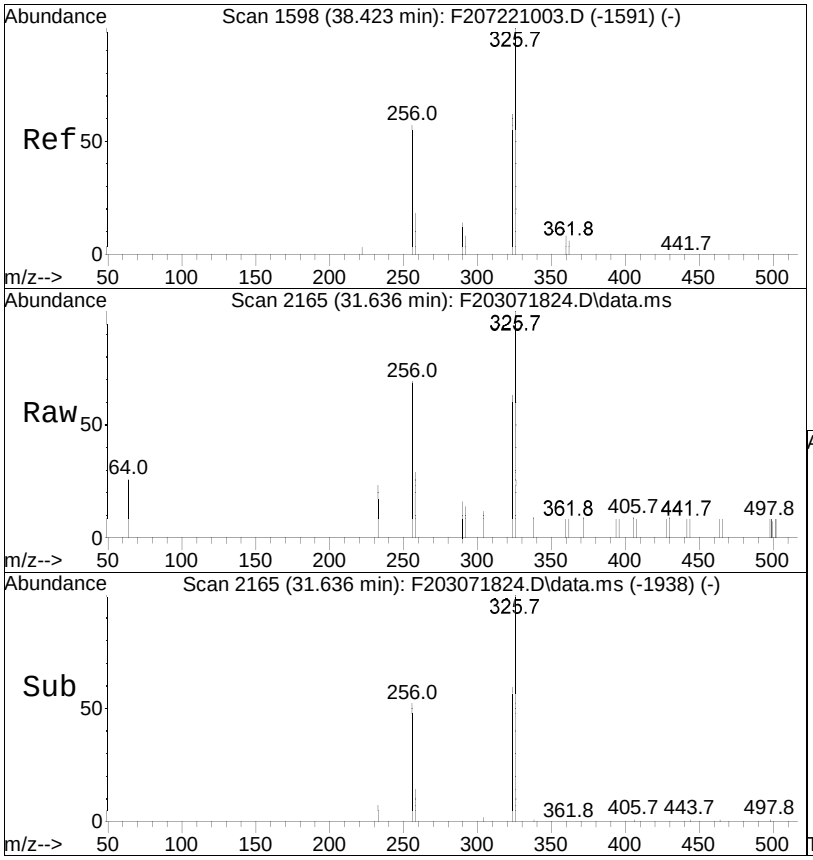




#37
Cl4-Conf Ion
Concen: 97.23 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:290 Resp: 82430

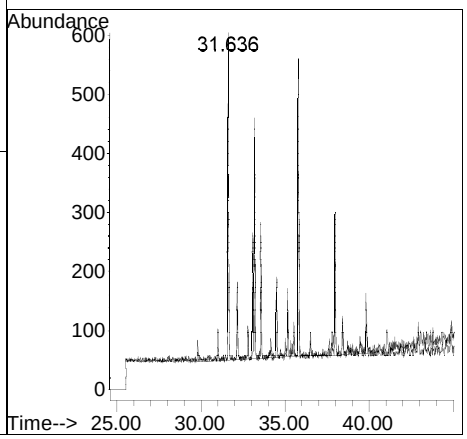


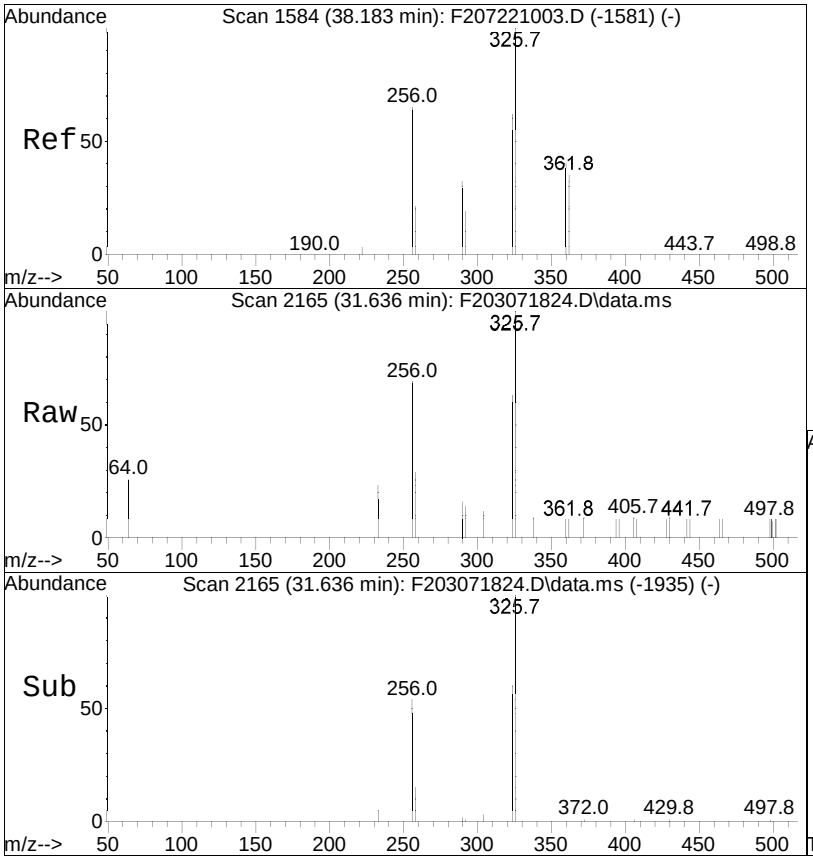


#106
Pentachlorobiphenyls
Concen: 11.35 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -2.628 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:326 Resp: 11902

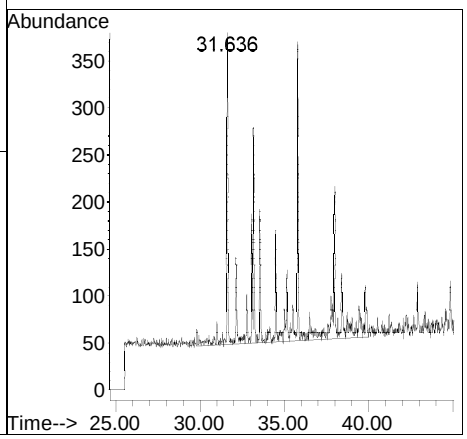
Ion	Ratio	Lower	Upper
326	100		
324	0.7	48.7	73.1#

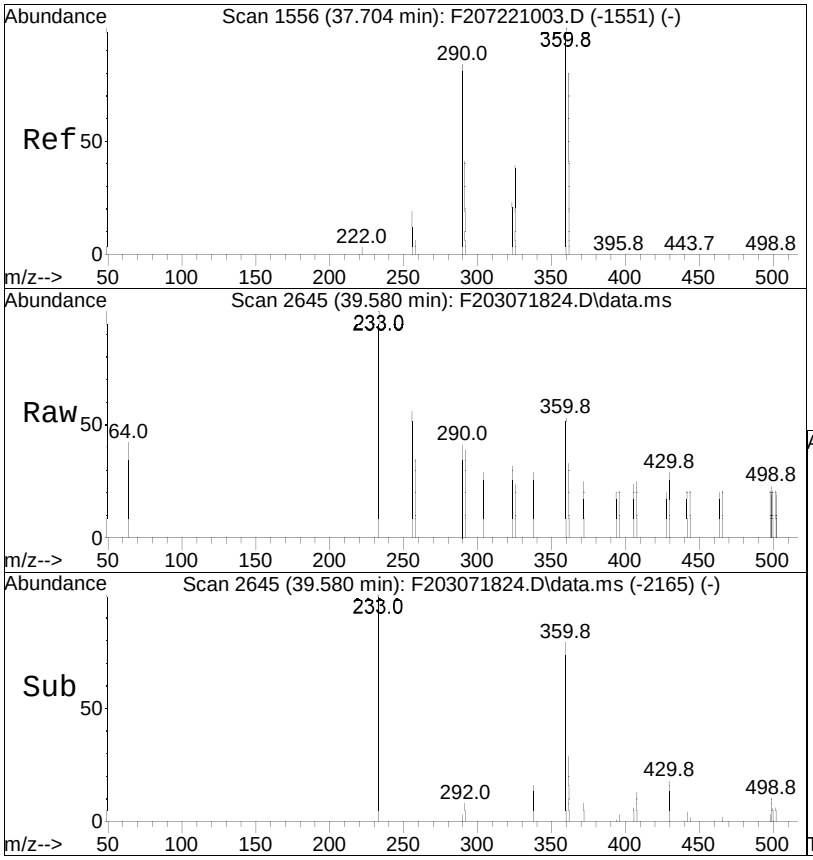




#107
Cl5-Conf Ion
Concen: 9.69 ng/mL M5
RT: 31.636 min Scan# 2165
Delta R.T. -6.012 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:324 Resp: 10162

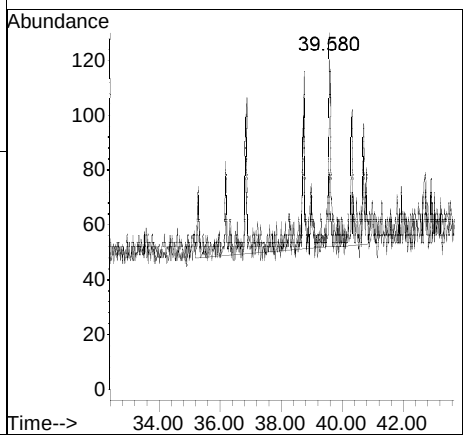


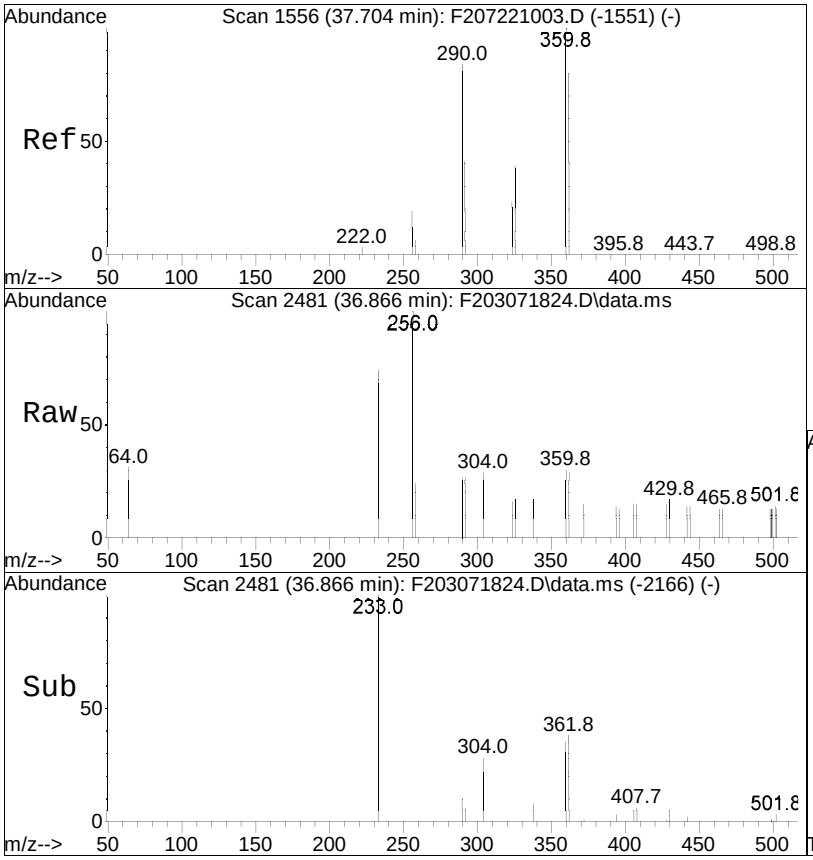


#112
Hexachlorobiphenyls
Concen: 2.75 ng/mL M5
RT: 39.580 min Scan# 2645
Delta R.T. 2.460 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:360 Resp: 2767

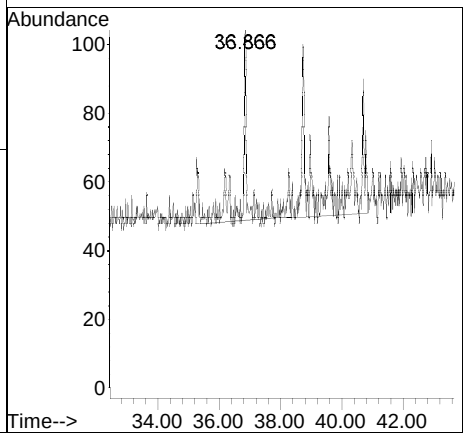
Ion	Ratio	Lower	Upper
360	100		
362	0.6	63.7	95.5#

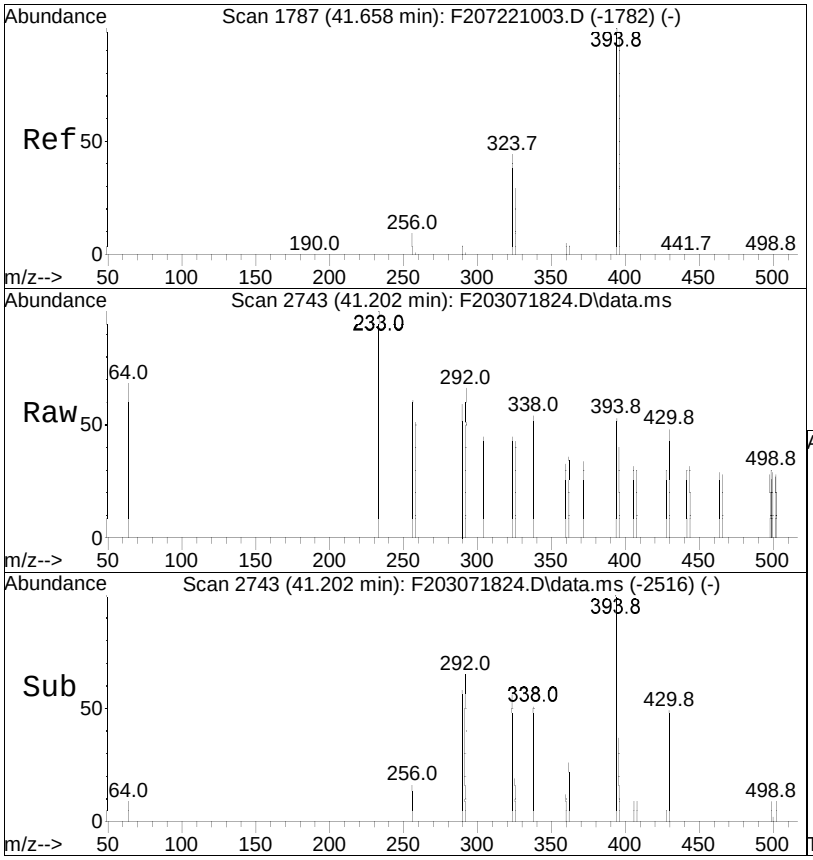




#113
Cl6-Conf Ion
Concen: 1.88 ng/mL M5
RT: 36.866 min Scan# 2481
Delta R.T. -0.254 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:362 Resp: 1898

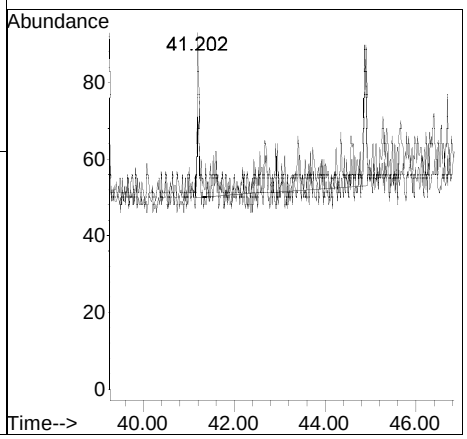


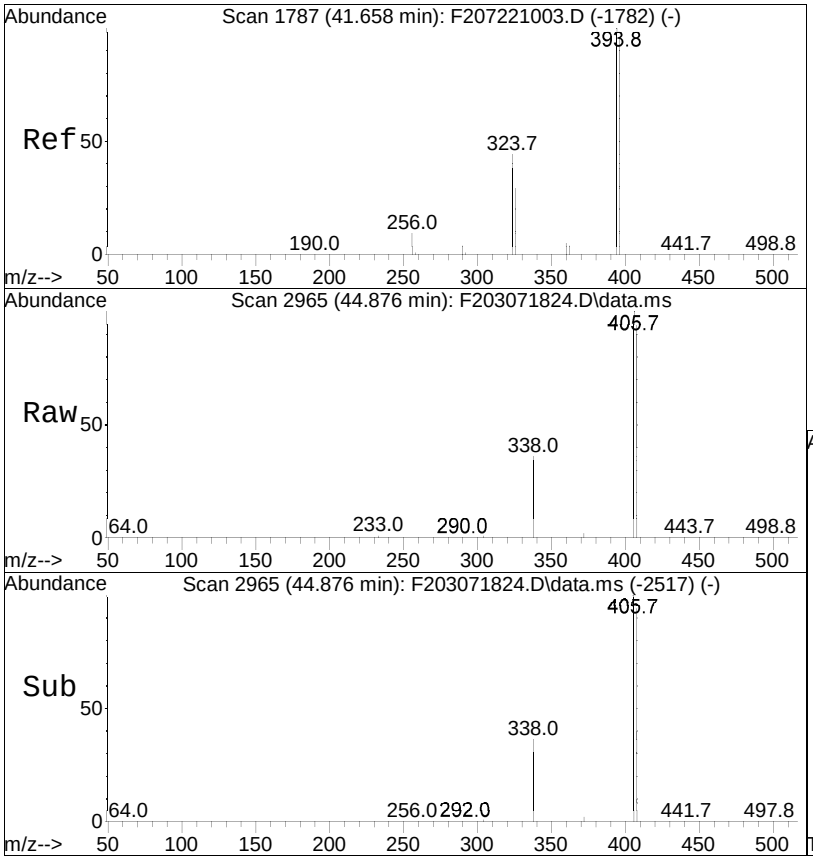


#135
Heptachlorobiphenyls
Concen: 1.03 ng/mL M5
RT: 41.202 min Scan# 2743
Delta R.T. 0.103 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:394 Resp: 1067

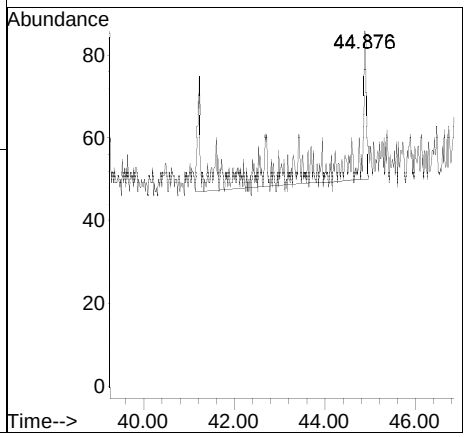
Ion	Ratio	Lower	Upper
394	100		
396	0.0	78.6	118.0#





#136
Cl7-Conf Ion
Concen: 0.95 ng/mL M5
RT: 44.876 min Scan# 2965
Delta R.T. 3.777 min
Lab File: F203071824.D
Acq: 8 Mar 2018 2:32 pm

Tgt Ion:396 Resp: 985



Batch Quality Control

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071803.D
Acq On : 7 Mar 2018 12:31 pm
Operator : BNA2:MJS
Sample : WG1094741-1,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 08 11:19:48 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.863	234	367914	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.876	406	191336	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.944	268	56010	86.573	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 86.57%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	88561	93.652	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 93.65%			
151)	Cl6-BZ#153-C13 (surr)	38.719	372	80329	91.343	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 91.34%			
177)	Cl8-BZ#202-C13 (surr)	42.923	442	74554	82.736	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 82.74%			
	Target Compounds						Qvalue
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
14)	Dichlorobiphenyls	0.000		0	N.D.	d	
15)	Cl2-Conf Ion	0.000		0	N.D.		
33)	Trichlorobiphenyls	25.826	256	298M5	0.282	ng/mL	
34)	Cl3- Conf Ion	25.826	258	307M5	0.291	ng/mL	
36)	Tetrachlorobiphenyls	27.597	292	271M5	0.333	ng/mL	
37)	Cl4-Conf Ion	27.614	290	219M5	0.269	ng/mL	
106)	Pentachlorobiphenyls	0.000		0	N.D.	d	
107)	Cl5-Conf Ion	0.000		0	N.D.	d	
112)	Hexachlorobiphenyls	0.000		0	N.D.	d	
113)	Cl6-Conf Ion	0.000		0	N.D.	d	
135)	Heptachlorobiphenyls	0.000		0	N.D.	d	
136)	Cl7-Conf Ion	0.000		0	N.D.	d	
181)	Octachlorobiphenyls	0.000		0	N.D.	d	
182)	Cl8-Conf Ion	0.000		0	N.D.	d	
208)	Nonachlorobiphenyls	0.000		0	N.D.	d	
209)	Cl9-Conf Ion	0.000		0	N.D.	d	
211)	Decachlorobiphenyl	0.000		0	N.D.	d	
212)	Cl10-Conf Ion	0.000		0	N.D.	d	

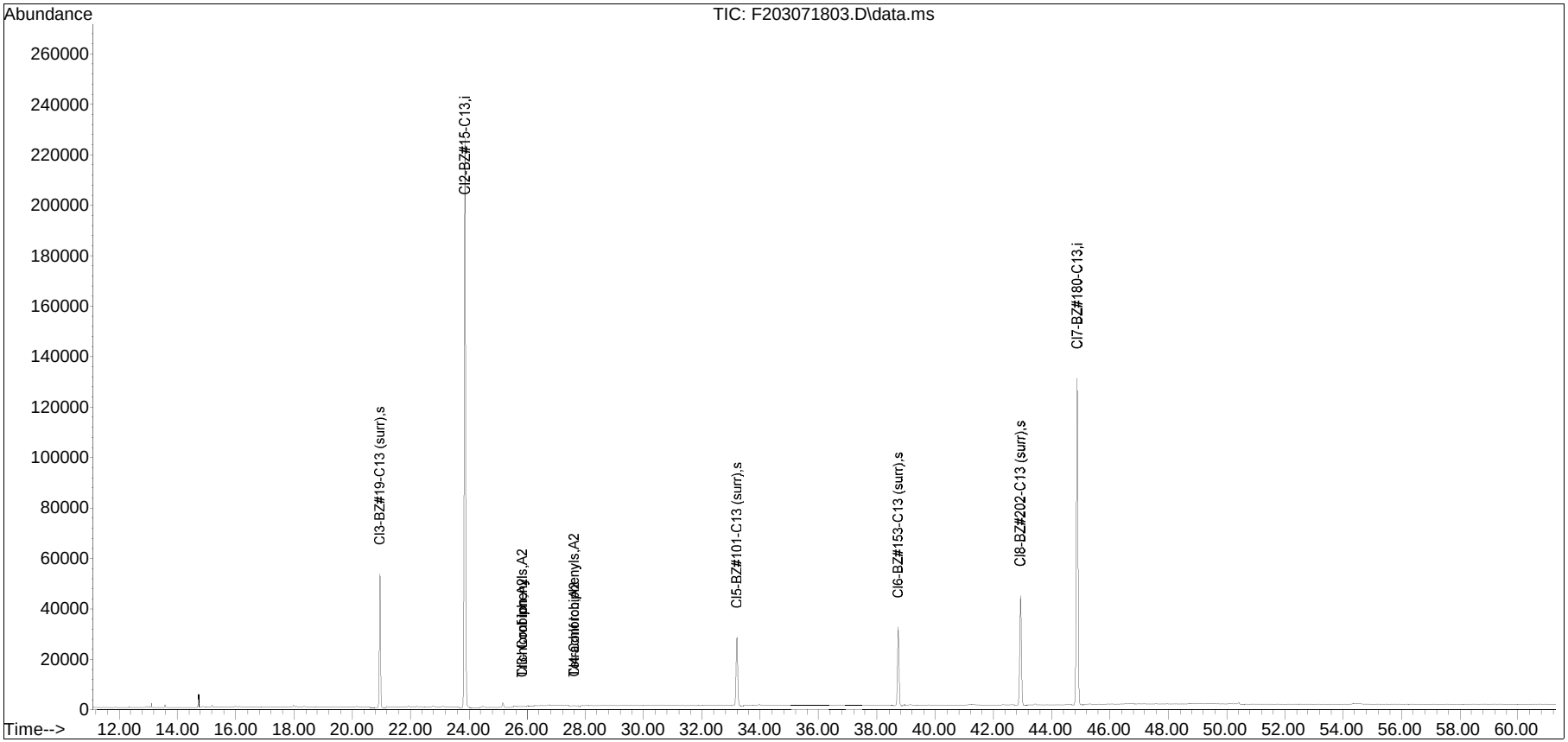
(#) = qualifier out of range (m) = manual integration (+) = signals summed

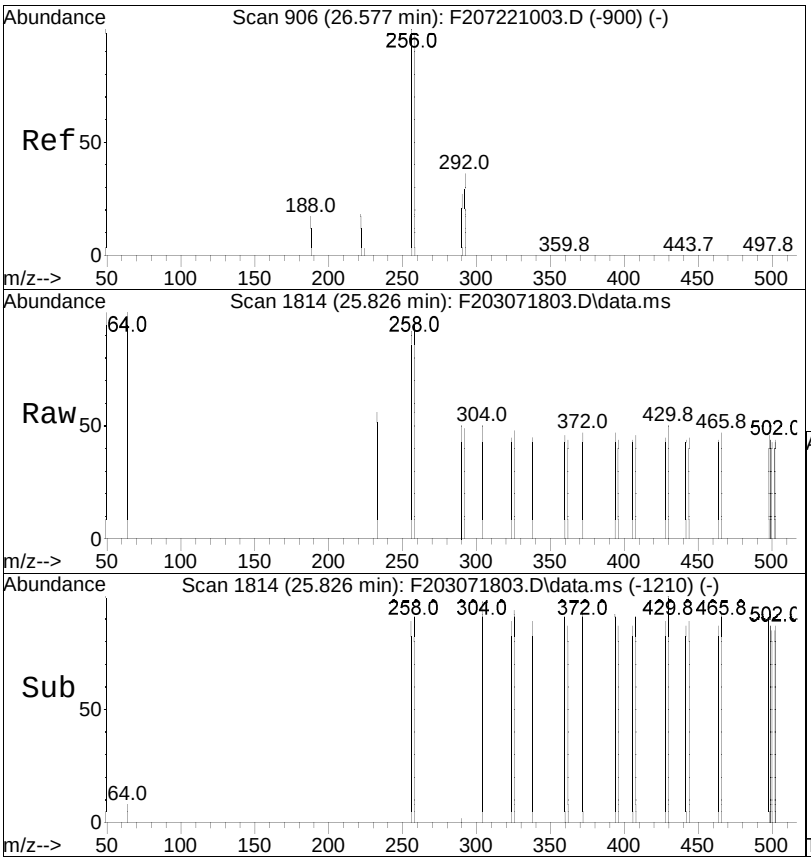
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071803.D
Acq On : 7 Mar 2018 12:31 pm
Operator : BNA2:MJS
Sample : WG1094741-1,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 08 11:19:48 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Homologs - Homologs Only

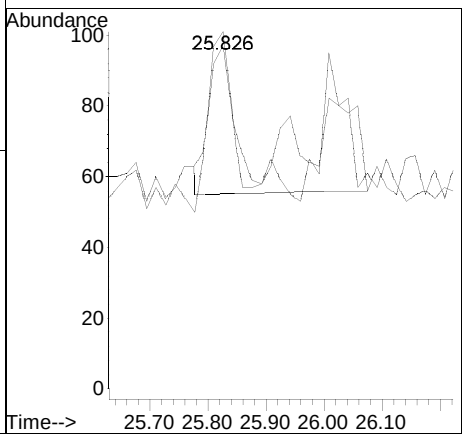


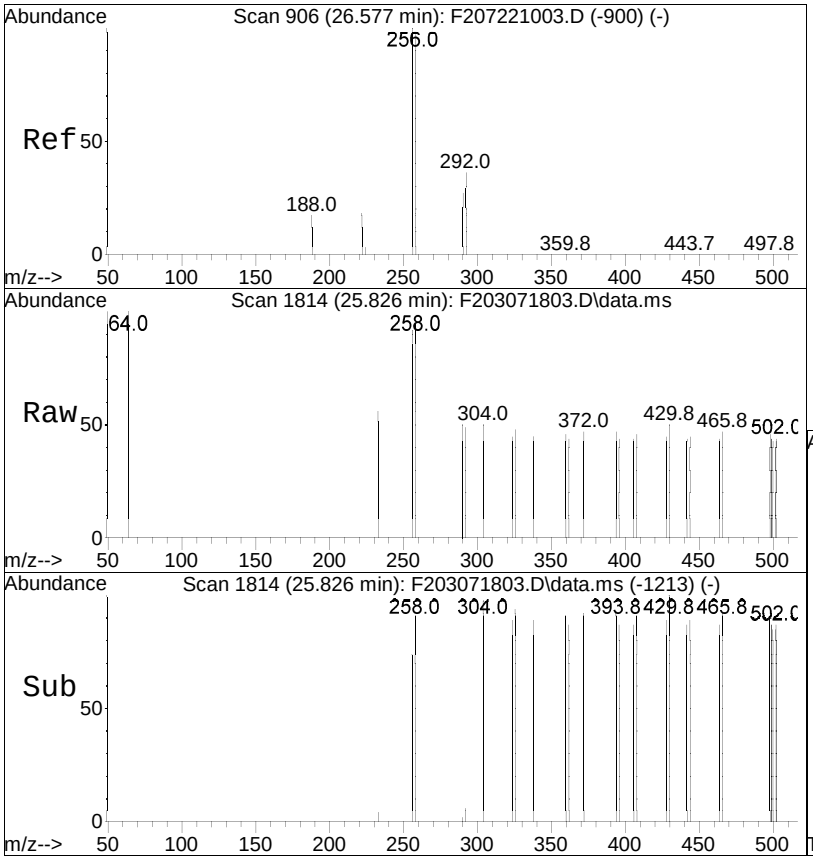


#33
Trichlorobiphenyls
Concen: 0.28 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071803.D
Acq: 7 Mar 2018 12:31 pm

Tgt Ion:256 Resp: 298

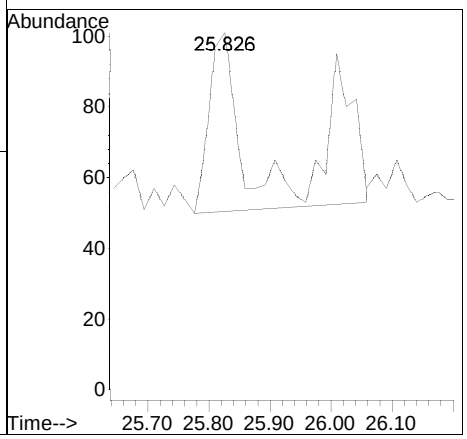
Ion	Ratio	Lower	Upper
256	100		
258	44.6	76.8	115.2#

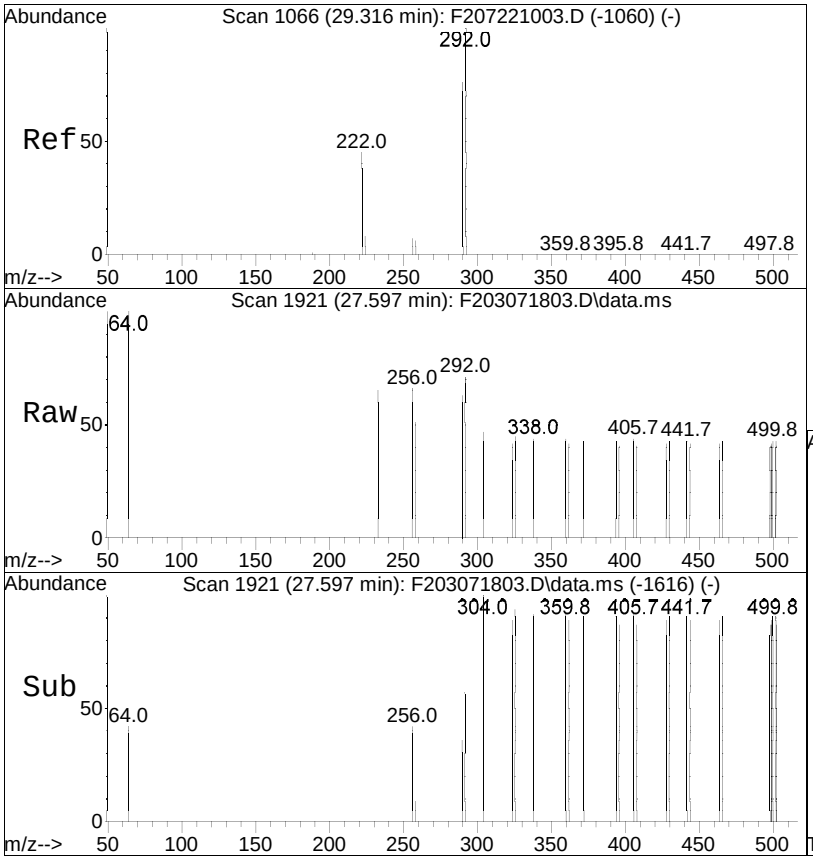




#34
Cl3- Conf Ion
Concen: 0.29 ng/mL M5
RT: 25.826 min Scan# 1814
Delta R.T. -0.384 min
Lab File: F203071803.D
Acq: 7 Mar 2018 12:31 pm

Tgt Ion:258 Resp: 307

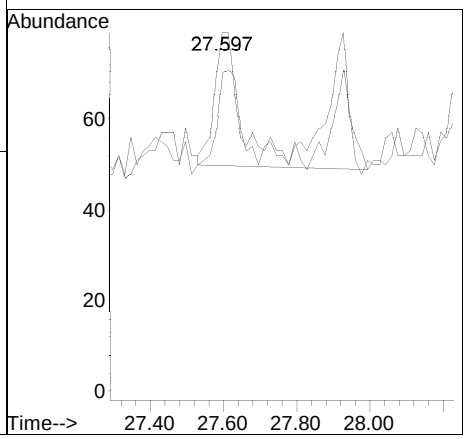


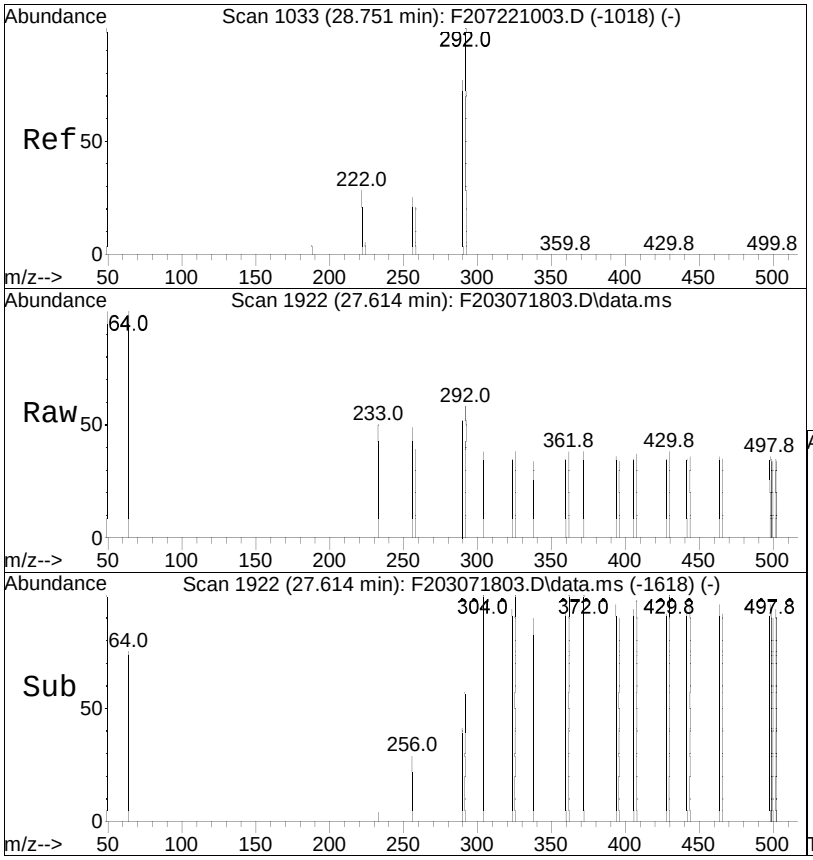


#36
Tetrachlorobiphenyls
Concen: 0.33 ng/mL M5
RT: 27.597 min Scan# 1921
Delta R.T. -0.775 min
Lab File: F203071803.D
Acq: 7 Mar 2018 12:31 pm

Tgt Ion:292 Resp: 271

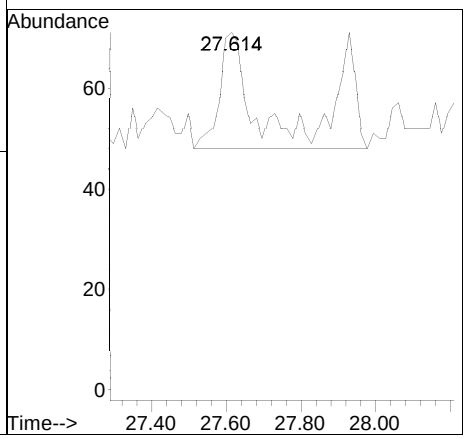
Ion	Ratio	Lower	Upper
292	100		
290	0.0	61.0	91.4#





#37
Cl4-Conf Ion
Concen: 0.27 ng/mL M5
RT: 27.614 min Scan# 1922
Delta R.T. -0.741 min
Lab File: F203071803.D
Acq: 7 Mar 2018 12:31 pm

Tgt Ion:290 Resp: 219



LCS Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
1)	Cl2-BZ#15-C13	23.864	234	309766	200.000	ng/mL	0.00
122)	Cl7-BZ#180-C13	44.877	406	168439	200.000	ng/mL	0.00
	System Monitoring Compounds						
2)	Cl3-BZ#19-C13 (surr)	20.953	268	48052	88.215	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 88.22%			
93)	Cl5-BZ#101-C13 (surr)	33.192	338	76757	96.406	ng/mL	0.02
	Spiked Amount 100.000	Range 50 - 125		Recovery = 96.41%			
151)	Cl6-BZ#153-C13 (surr)	38.720	372	78616	101.547	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 101.55%			
177)	Cl8-BZ#202-C13 (surr)	42.924	442	71619	90.283	ng/mL	0.00
	Spiked Amount 100.000	Range 50 - 125		Recovery = 90.28%			
	Target Compounds						Qvalue
3)	Cl1-BZ#1-Cal/RTW	14.551	188	122653	85.917	ng/mL	100
4)	Monochlorobiphenyls	0.000		0	N.D.	d	
5)	Cl1- conf Ion	0.000		0	N.D.	d	
6)	Cl1-BZ#2	16.626	188	124182	82.674	ng/mL	100
7)	Cl1-BZ#3-RTW	17.093	188	122294	82.928	ng/mL	100
8)	Cl2-BZ#4/#10-RTW	17.511	222	149134	172.931	ng/mL	99
9)	Cl2-BZ#9	19.071	222	93028	83.878	ng/mL	99
10)	Cl2-BZ#7	19.167	222	91695	84.848	ng/mL	100
11)	Cl2-BZ#6	19.594	222	98764	83.000	ng/mL	99
12)	Cl2-BZ#5	20.036	222	89965	83.219	ng/mL	99
13)	Cl2-BZ#8	20.189	222	103146	83.913	ng/mL	100
14)	Dichlorobiphenyls	0.000		0	N.D.	d	
15)	Cl2-Conf Ion	0.000		0	N.D.	d	
16)	Cl3-BZ#19-RTW	20.969	256	51025	84.038	ng/mL	99
17)	Cl2-BZ#14	21.105	222	98966	83.419	ng/mL	97
18)	Cl3-BZ#30	21.524	256	81909	84.521	ng/mL	100
19)	Cl3-BZ#18	22.336	256	55155	81.769	ng/mL	97
20)	Cl2-BZ#11	22.456	222	107648	84.546	ng/mL	99
21)	Cl3-BZ#17	22.537	256	52738	83.968	ng/mL	99
22)	Cl2-BZ#12	22.858	222	94379	83.793	ng/mL	98
23)	Cl3-BZ#27	22.899	256	73511	84.503	ng/mL	98
24)	Cl2-BZ#13	23.148	222	107372	82.738	ng/mL	99
25)	Cl3-BZ#24	23.172	256	76136	85.135	ng/mL	99
26)	Cl3-BZ#16	23.518	256	45220	82.401	ng/mL	95
27)	Cl3-BZ#32	23.719	256	80141	83.452	ng/mL	97
28)	Cl2-BZ#15-RTW	23.880	222	105757	80.425	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.105	256	75154	83.739	ng/mL	100
30) Cl3-BZ#23	24.290	256	75497	85.722	ng/mL	99
31) Cl4-BZ#54-RTW	24.298	292	70412	85.760	ng/mL	98
32) Cl3-BZ#29-Cal	24.515	256	74357	83.629	ng/mL	98
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.022	292	57820	84.288	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.054	256	83672	83.901	ng/mL	100
39) Cl3-BZ#25	25.255	256	80508	82.924	ng/mL	99
40) Cl4-BZ#53	25.744	292	63693	84.169	ng/mL	99
41) Cl3-BZ#-31	25.827	256	110551	82.450	ng/mL	97
42) Cl3-BZ#28	26.025	256	110444	83.621	ng/mL	98
43) Cl3-BZ#33	26.108	256	83069M4	88.232	ng/mL	
44) Cl3-BZ#21/#20	26.174	256	205162M4	172.062	ng/mL	
45) Cl4-BZ#51	26.158	292	72257	86.499	ng/mL	98
46) Cl4-BZ#45	26.720	292	55204	84.625	ng/mL	99
47) Cl3-BZ#22	26.952	256	98327	84.642	ng/mL	99
48) Cl4-BZ#73/#46	27.101	292	150928	173.123	ng/mL	100
49) Cl4-BZ#69	27.382	292	89140	85.566	ng/mL	98
50) Cl4-BZ#43	27.465	292	57917	84.181	ng/mL	99
51) Cl3-BZ#36	27.515	256	114587	88.655	ng/mL	98
52) Cl4-BZ#52	27.614	292	70784	83.561	ng/mL	98
53) Cl4-BZ#48	27.780	292	65806	87.429	ng/mL	99
54) Cl4-BZ#49	27.929	292	68293	84.350	ng/mL	99
55) Cl5-BZ#104-RTW	28.144	326	71873	85.975	ng/mL	98
56) Cl4-BZ#47	28.227	292	70621M4	80.884	ng/mL	
57) Cl4-BZ#65/#75/#62	28.326	292	271735	264.906	ng/mL	99
58) Cl3-BZ#39	28.376	256	101445	85.158	ng/mL	98
59) Cl3-BZ#38	28.491	256	102682	89.376	ng/mL	98
60) Cl4-BZ#44	28.889	292	59832	84.891	ng/mL	97
61) Cl4-BZ#59	29.104	292	85715	82.929	ng/mL	98
62) Cl4-BZ#42	29.203	292	59272	88.523	ng/mL	96
63) Cl4-BZ#71	29.435	292	92621	85.328	ng/mL	99
64) Cl3-BZ#35	29.551	256	103651	86.272	ng/mL	100
65) Cl4-BZ#41	29.666	292	57827	87.730	ng/mL	99
66) Cl4-BZ#72	29.782	292	101259	89.142	ng/mL	100
67) Cl5-BZ#96	29.815	326	79151	87.560	ng/mL	95
68) Cl5-BZ#103	29.931	326	63208	90.449	ng/mL	97
69) Cl4-BZ#68/#64	30.097	292	187365	178.123	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70)	Cl4-BZ#40	30.213	292	44392	86.661	ng/mL	98
71)	Cl3-BZ#37-RTW	30.428	256	137040	85.794	ng/mL	100
72)	Cl5-BZ#100	30.428	326	66552	88.377	ng/mL	99
73)	Cl5-BZ#94	30.527	326	50997	91.730	ng/mL	100
74)	Cl4-BZ#57	30.626	292	98263	86.926	ng/mL	98
75)	Cl4-BZ#67/#58	30.957	292	202119	177.658	ng/mL	100
76)	Cl5-BZ#102	31.007	326	72263	90.279	ng/mL	100
77)	Cl4-BZ#61	31.305	292	97588	87.093	ng/mL	99
78)	Cl5-BZ#98	31.338	326	65595	89.451	ng/mL	98
79)	Cl4-BZ#76	31.471	292	108890	91.962	ng/mL	99
80)	Cl5-BZ#93	31.454	326	52453	88.672	ng/mL	99
81)	Cl4-BZ#63	31.570	292	90521M4	85.212	ng/mL	
82)	Cl5-BZ#121/#95/#88	31.619	326	216265	275.474	ng/mL	100
83)	Cl4-BZ#74	31.835	292	102025	86.829	ng/mL	100
84)	Cl6-BZ#155-RTW	31.967	360	76991	88.467	ng/mL	100
85)	Cl4-BZ#70	32.000	292	107404	88.748	ng/mL	96
86)	Cl4-BZ#66	32.298	292	96756	88.314	ng/mL	99
87)	Cl5-BZ#91	32.166	326	60565	87.520	ng/mL	100
88)	Cl4-BZ#80	32.563	292	100932	87.984	ng/mL	98
89)	Cl4-BZ#55	32.745	292	104073	88.847	ng/mL	100
90)	Cl5-BZ#92	32.795	326	60497	89.616	ng/mL	98
91)	Cl5-BZ#89/#84	33.076	326	116420	179.960	ng/mL	97
92)	Cl5-BZ#101/#90	33.208	326	130014M4	174.450	ng/mL	
94)	Cl4-BZ#56	33.208	292	104142	89.865	ng/mL	99
95)	Cl5-BZ#113	33.308	326	85229	97.284	ng/mL	98
96)	Cl5-BZ#99	33.572	326	74143	88.098	ng/mL	99
97)	Cl6-BZ#150	33.639	360	83310	89.282	ng/mL	99
98)	Cl4-BZ#60	33.639	292	110393	89.148	ng/mL	99
99)	Cl6-BZ#152	34.003	360	88348	88.314	ng/mL	99
100)	Cl5-BZ#119	34.069	326	95901	94.078	ng/mL	97
101)	Cl5-BZ#83/#125/#112	34.218	326	236721M4	279.055	ng/mL	
102)	Cl5-BZ#86/#109	34.400	326	147544M4	174.941	ng/mL	
103)	Cl5-BZ#97	34.499	326	59191	94.142	ng/mL	97
104)	Cl5-BZ#116	34.963	326	76991	88.733	ng/mL	99
105)	Cl5-BZ#87/#111	35.261	326	159632M4	188.200	ng/mL	
106)	Pentachlorobiphenyls	0.000		0	N.D.	d	
107)	Cl5-Conf Ion	0.000		0	N.D.	d	
108)	Cl6-BZ#145	34.433	360	92497	89.561	ng/mL	100
109)	Cl6-BZ#148	34.632	360	63226	89.605	ng/mL	100
110)	Cl4-BZ#79	34.748	292	101989	89.411	ng/mL	99
111)	Cl6-BZ#154-Cal	35.161	360	73367	89.968	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.227	292	126259M4	89.423	ng/mL	
115) Cl6-BZ#136	35.310	360	81929M4	90.625	ng/mL	
116) Cl5-BZ#117	35.360	326	89744M4	83.598	ng/mL	
117) Cl5-BZ#115	35.443	326	107243M4	100.809	ng/mL	
118) Cl5-BZ#85	35.525	326	55727	83.868	ng/mL	99
119) Cl5-BZ#120	35.674	326	95327	91.668	ng/mL	100
120) Cl5-BZ#110	35.807	326	88520	88.189	ng/mL	99
121) Cl4-BZ#81	36.187	292	99671	87.040	ng/mL	99
123) Cl6-BZ#151	36.204	360	62746	87.138	ng/mL	99
124) Cl6-BZ#135	36.336	360	68640	90.370	ng/mL	99
125) Cl5-BZ#82	36.518	326	58954	90.740	ng/mL	98
126) Cl6-BZ#144	36.535	360	65897	88.993	ng/mL	99
127) Cl6-BZ#147/#149	36.849	360	140760	178.044	ng/mL	98
128) Cl4-BZ#77-RTW	36.949	292	92908M4	85.994	ng/mL	
129) Cl6-BZ#143/#139	37.081	360	137475	180.938	ng/mL	100
130) Cl5-BZ#124	37.230	326	92754	90.800	ng/mL	99
131) Cl5-BZ#108	37.528	326	102344	98.630	ng/mL	100
132) Cl5-BZ#107/#123	37.611	326	197744M4	178.738	ng/mL	
133) Cl6-BZ#140	37.263	360	66641	90.755	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.627	394	79309	91.844	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.710	360	56029	89.527	ng/mL	92
138) Cl5-BZ#106	37.743	326	97188M4	96.612	ng/mL	
139) Cl6-BZ#133	37.826	360	87627M4	102.873	ng/mL	
140) Cl6-BZ#142	37.876	360	41465M4	72.436	ng/mL	
141) Cl5-BZ#118	37.991	326	88874	91.022	ng/mL	98
142) Cl6-BZ#131	37.991	360	60044	91.045	ng/mL	100
143) Cl7-BZ#184	38.124	394	76446	89.579	ng/mL	98
144) Cl6-BZ#165	38.174	360	85709	92.373	ng/mL	97
145) Cl6-BZ#146	38.289	360	70381	86.648	ng/mL	99
146) Cl6-BZ#161	38.455	360	94610	91.554	ng/mL	99
147) Cl5-BZ#122	38.438	326	82764	92.007	ng/mL	100
148) Cl6-BZ#168	38.687	360	99266	99.967	ng/mL	99
149) Cl5-BZ#114	38.720	326	90271	91.385	ng/mL	99
150) Cl6-BZ#153	38.753	360	69040	78.092	ng/mL	97
152) Cl6-BZ#132	39.018	360	62770	88.468	ng/mL	99
153) Cl7-BZ#179	39.266	394	76056	86.322	ng/mL	98
154) Cl6-BZ#141	39.580	360	63275	89.142	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.762	394	73043	87.289	ng/mL	100
156) Cl5-BZ#105	39.829	326	103724	85.805	ng/mL#	81
157) Cl6-BZ#137	40.011	360	66235	91.037	ng/mL	98
158) Cl5-BZ#127	40.160	326	116248	87.668	ng/mL#	74
159) Cl7-BZ#186	40.093	394	84231	90.450	ng/mL	100
160) Cl6-BZ#130/#164	40.342	360	156230	184.076	ng/mL	99
161) Cl7-BZ#178	40.640	394	56343	88.293	ng/mL	99
162) Cl6-BZ#138	40.706	360	81258	94.186	ng/mL	98
163) Cl6-BZ#163/#160	40.822	360	181404M4	185.932	ng/mL	
164) Cl6-BZ#129/#158	41.004	360	143264M4	176.151	ng/mL	
165) Cl7-BZ#182/#175	41.037	394	135897	186.044	ng/mL	99
166) Cl7-BZ#187	41.219	394	65949	88.151	ng/mL	96
167) Cl7-BZ#183	41.600	394	63833	88.777	ng/mL	100
168) Cl6-BZ#166	41.964	360	93386	88.115	ng/mL	98
169) Cl6-BZ#159	42.228	360	95304	89.924	ng/mL	98
170) Cl5-BZ#126-RTW	42.444	326	116948	90.233	ng/mL	89
171) Cl7-BZ#185	42.477	394	59952	89.638	ng/mL	100
172) Cl6-BZ#162	42.559	360	91731	93.395	ng/mL	98
173) Cl7-BZ#174	42.708	394	59900	90.206	ng/mL	100
174) Cl6-BZ#128	42.708	360	66659	91.769	ng/mL	100
175) Cl6-BZ#167	43.006	360	116750	89.582	ng/mL	94
176) Cl8-BZ#202-RTW	42.957	428	68594	91.284	ng/mL	100
178) Cl7-BZ#181	43.089	394	69315	92.847	ng/mL	97
179) Cl7-BZ#177	43.420	394	58917	91.021	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.519	428	133744	181.244	ng/mL	99
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.735	394	57213	90.246	ng/mL	97
184) Cl7-BZ#173	43.950	394	55580	88.980	ng/mL	100
185) Cl7-BZ#172	44.397	394	59710	88.908	ng/mL	98
186) Cl7-BZ#192	44.595	394	82815	90.032	ng/mL	100
187) Cl6-BZ#156	44.612	360	91319	89.921	ng/mL	99
188) Cl6-BZ#157	44.860	360	92819	88.481	ng/mL	97
189) Cl7-BZ#180	44.893	394	73146	89.527	ng/mL	97
190) Cl7-BZ#193	44.992	394	73528	87.447	ng/mL	99
191) Cl8-BZ#197	44.032	428	68161	90.495	ng/mL	99
192) Cl7-BZ#191	45.323	394	77630	88.912	ng/mL	97
193) Cl8-BZ#199	45.141	428	65544	87.573	ng/mL	99
194) Cl8-BZ#198	46.681	428	54568	85.906	ng/mL	99
195) Cl8-BZ#201	46.780	428	48908	89.213	ng/mL	98
196) Cl7-BZ#170	46.896	394	55282	87.391	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.227	394	82614	89.726	ng/mL	98
198) Cl8-BZ#196	47.227	428	57983	97.530	ng/mL	99
199) Cl8-BZ#203	47.310	428	52518	81.763	ng/mL	100
200) Cl6-BZ#169-RTW	47.591	360	97505	86.924	ng/mL	99
201) Cl9-BZ#208-RTW	48.733	464	66172	83.305	ng/mL	99
202) Cl9-BZ#207	49.411	464	67391	86.927	ng/mL	96
203) Cl7-BZ#189-RTW	49.593	394	73347	87.511	ng/mL	99
204) Cl8-BZ#195	49.742	428	50141	85.821	ng/mL	95
205) Cl8-BZ#194	51.414	428	52570	84.046	ng/mL	97
206) Cl8-BZ#205-RTW	51.993	428	64185	83.733	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.029	464	52908	82.779	ng/mL	98
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.297	498	51751	81.637	ng/mL#	81
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

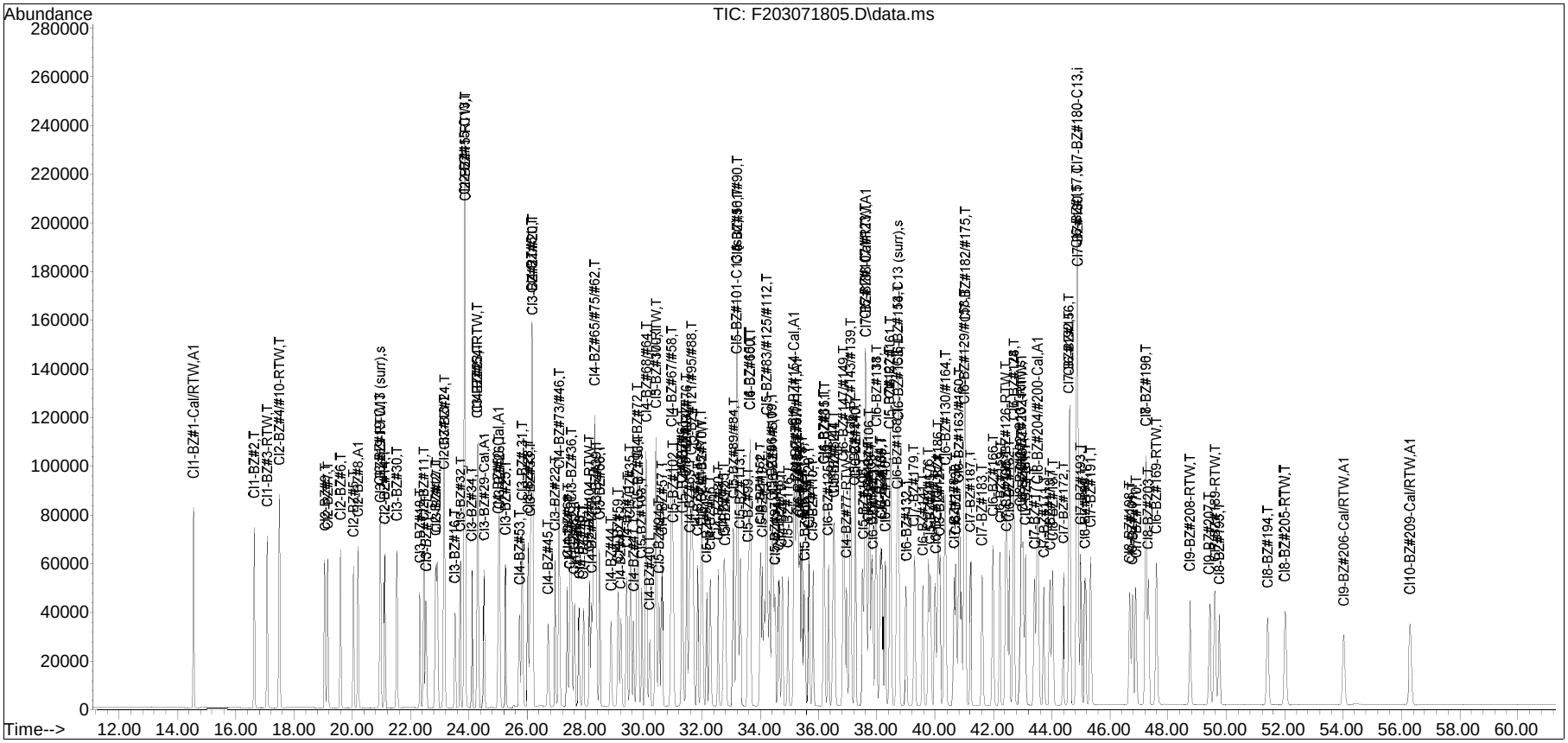
(#) = qualifier out of range (m) = manual integration (+) = signals summed

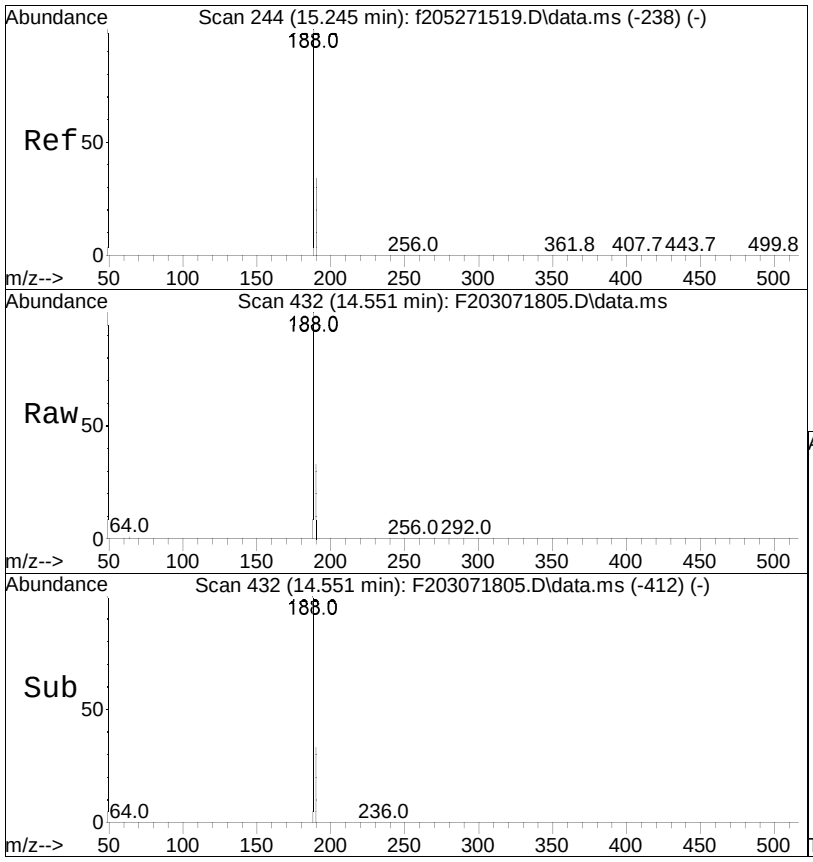
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071805.D
Acq On : 7 Mar 2018 3:13 pm
Operator : BNA2:MJS
Sample : WG1094741-2,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 09 12:21:40 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

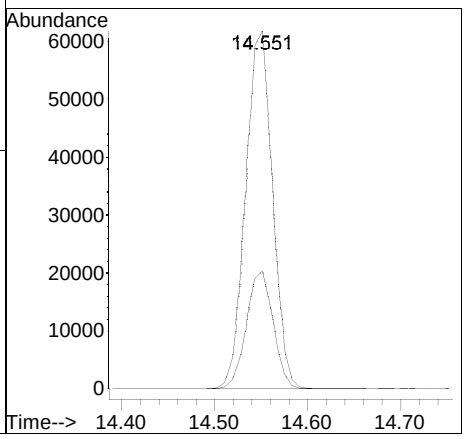


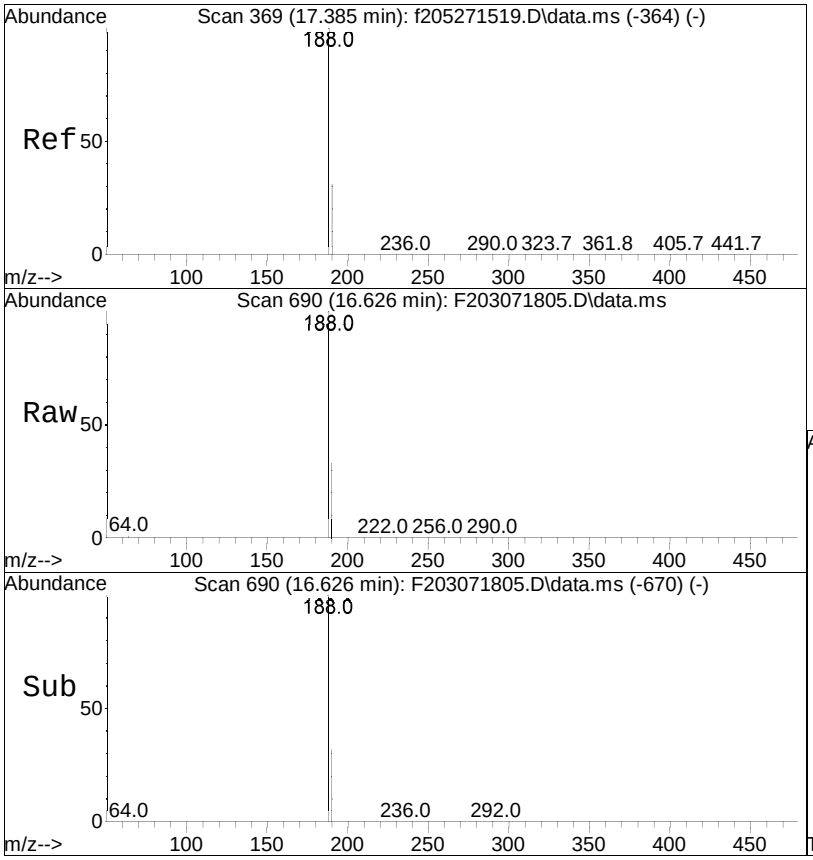


#3
Cl1-BZ#1-Cal/RTW
Concen: 85.92 ng/mL
RT: 14.551 min Scan# 432
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:188 Resp: 122653

Ion	Ratio	Lower	Upper
188	100		
190	33.0	26.2	39.4

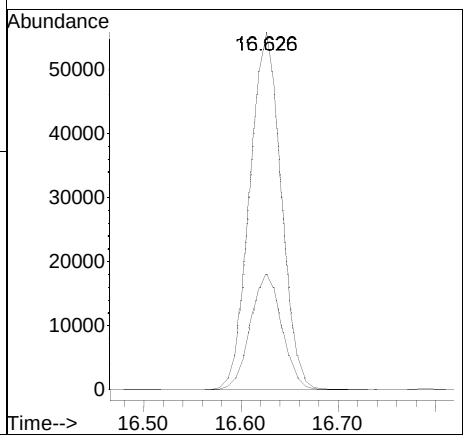


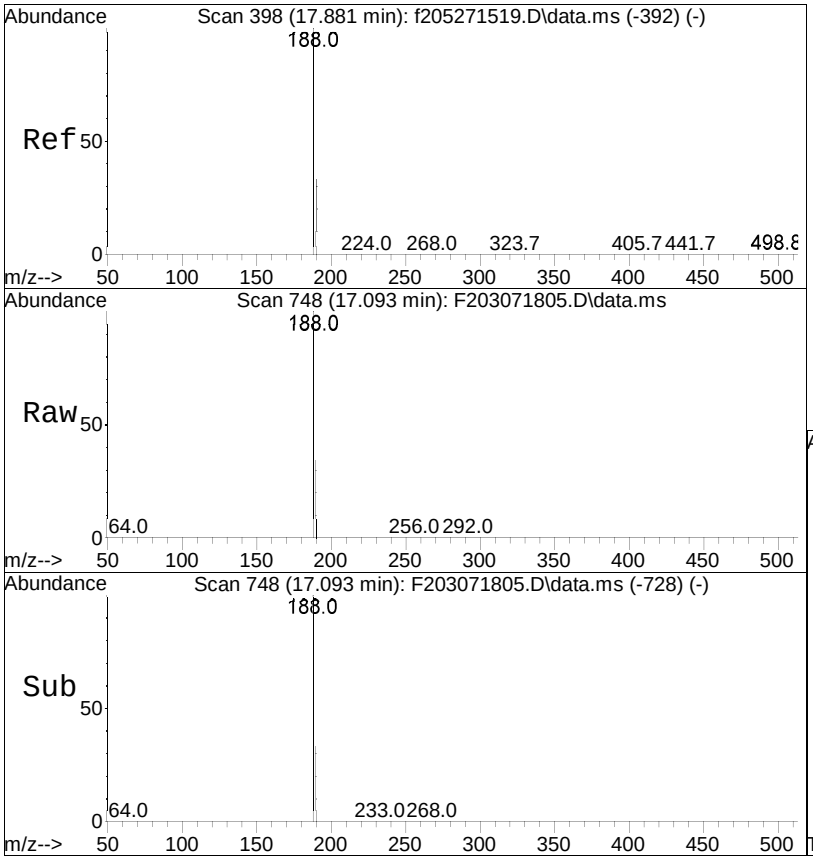


#6
Cl1-BZ#2
Concen: 82.67 ng/mL
RT: 16.626 min Scan# 690
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:188 Resp: 124182

Ion	Ratio	Lower	Upper
188	100		
190	32.5	26.1	39.1

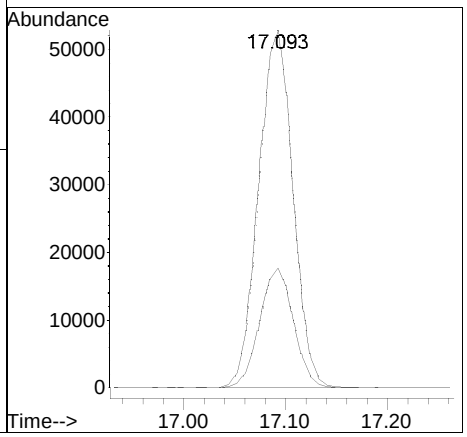


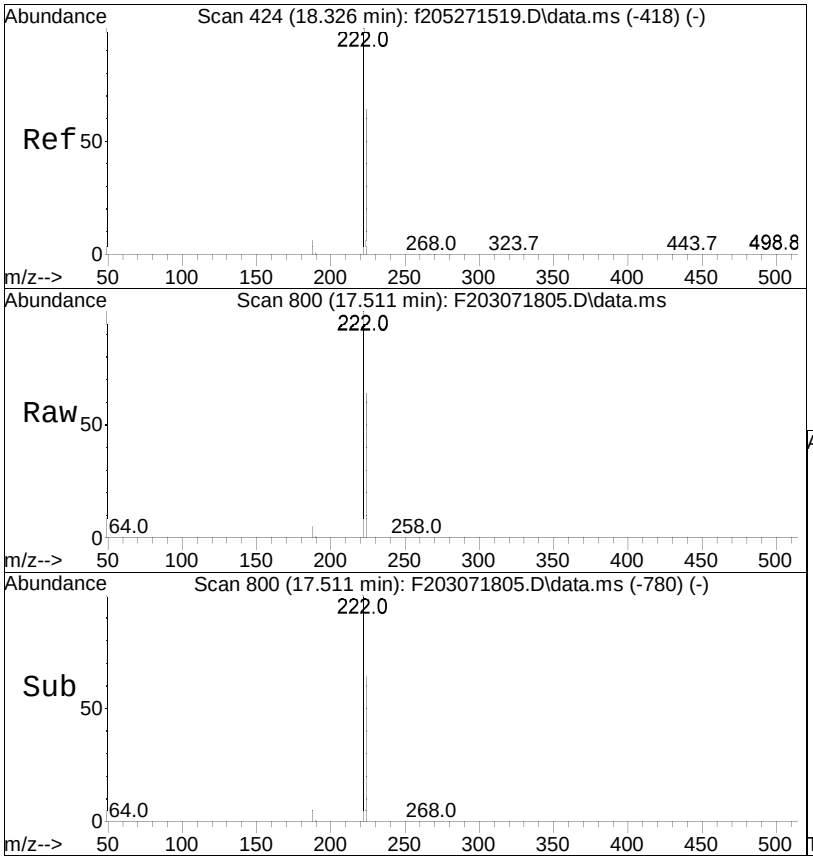


#7
Cl1-BZ#3-RTW
Concen: 82.93 ng/mL
RT: 17.093 min Scan# 748
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:188 Resp: 122294

Ion	Ratio	Lower	Upper
188	100		
190	33.6	26.7	40.1

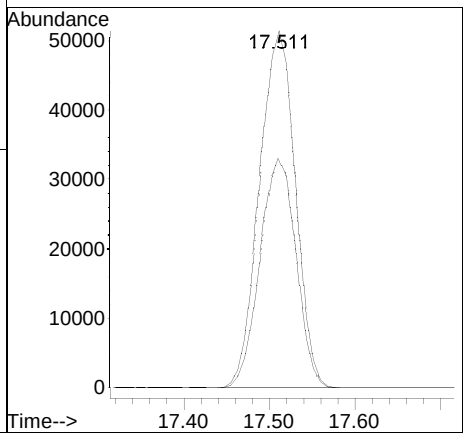


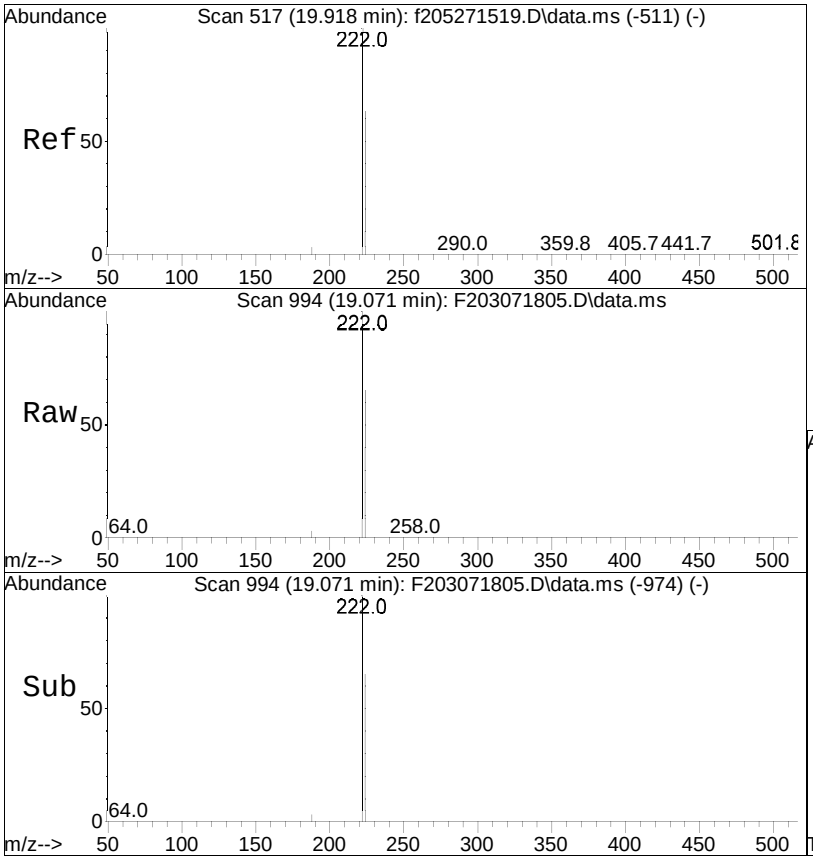


#8
Cl2-BZ#4/#10-RTW
Concen: 172.93 ng/mL
RT: 17.511 min Scan# 800
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 149134

Ion	Ratio	Lower	Upper
222	100		
224	64.6	52.4	78.6

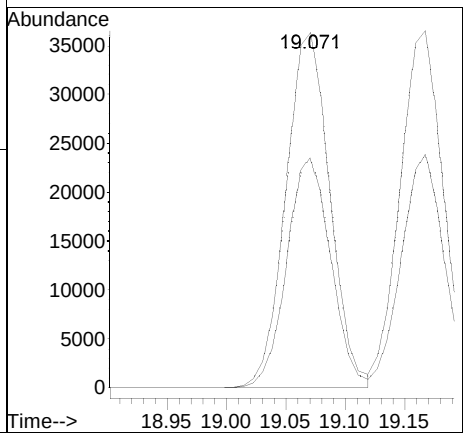


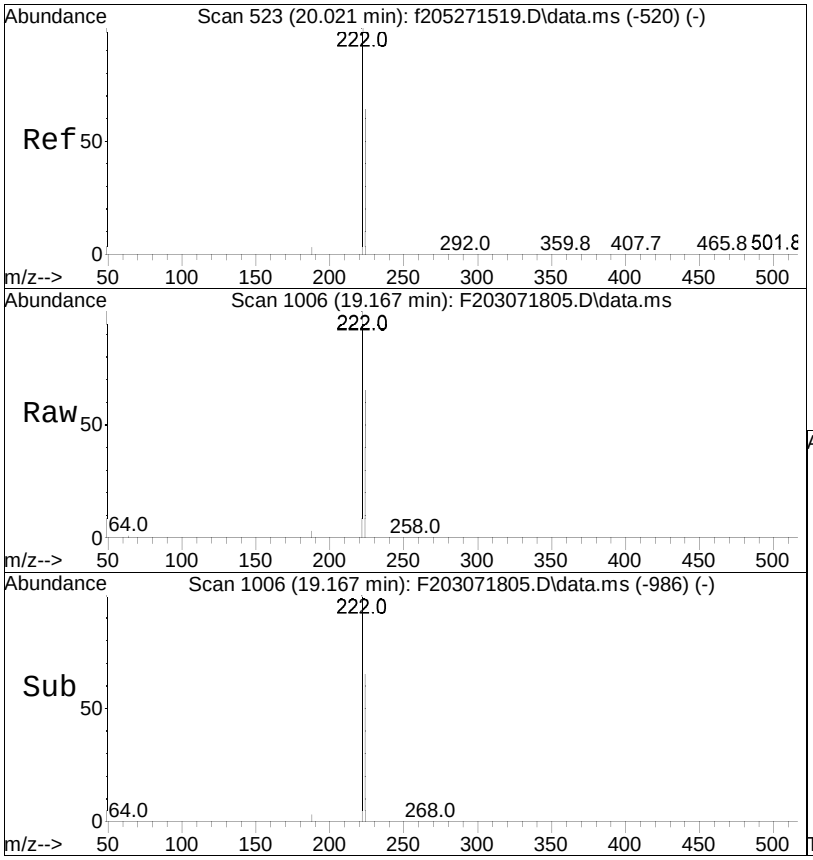


#9
Cl2-BZ#9
Concen: 83.88 ng/mL
RT: 19.071 min Scan# 994
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 93028

Ion	Ratio	Lower	Upper
222	100		
224	64.6	52.1	78.1

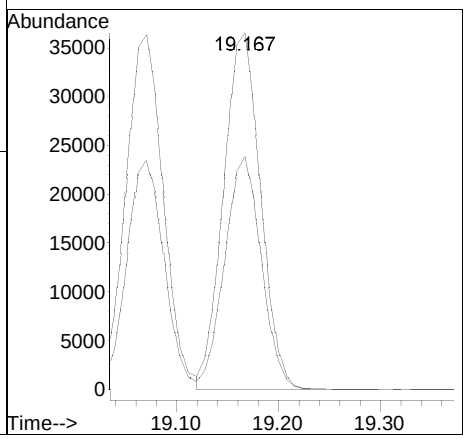


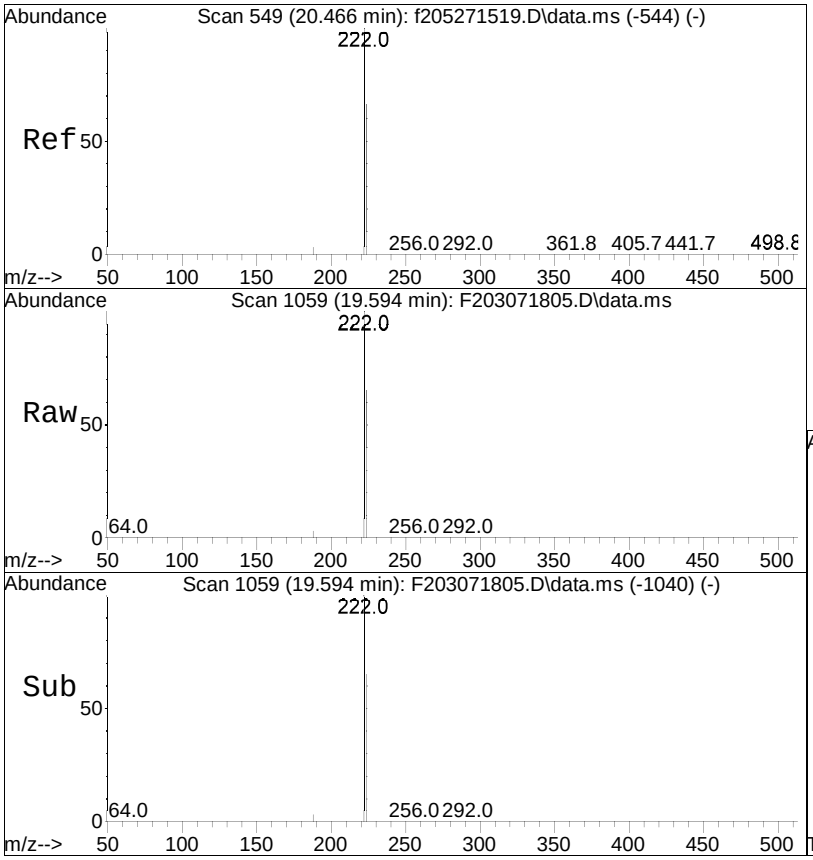


#10
Cl2-BZ#7
Concen: 84.85 ng/mL
RT: 19.167 min Scan# 1006
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 91695

Ion	Ratio	Lower	Upper
222	100		
224	65.4	52.3	78.5

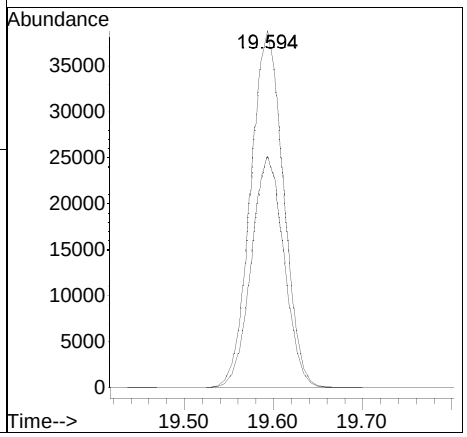


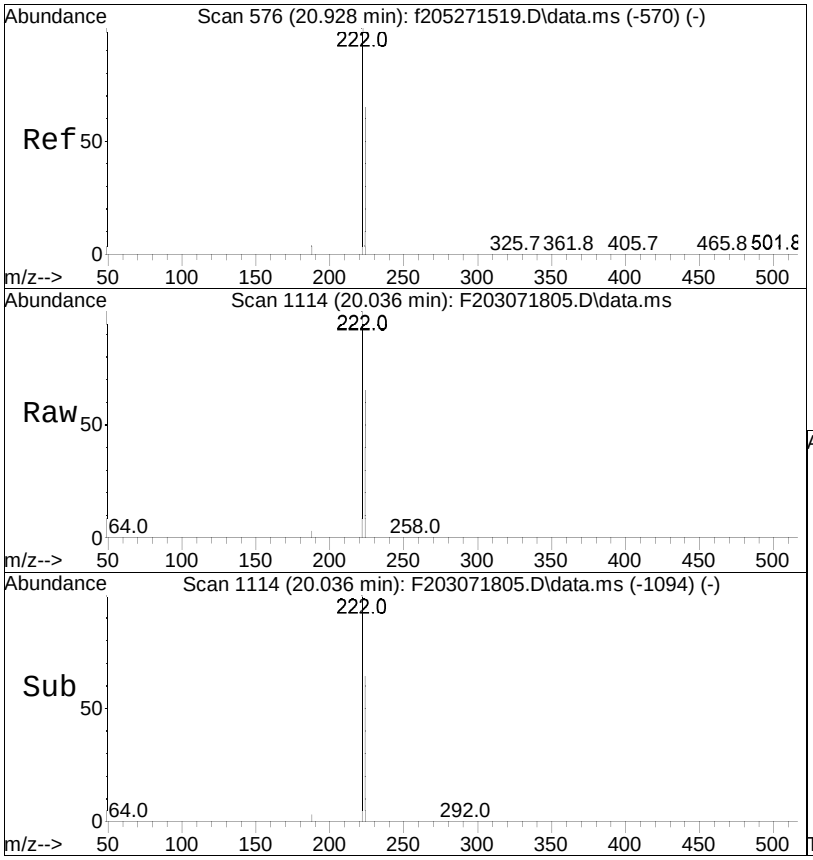


#11
Cl2-BZ#6
Concen: 83.00 ng/mL
RT: 19.594 min Scan# 1059
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 98764

Ion	Ratio	Lower	Upper
222	100		
224	64.9	51.1	76.7

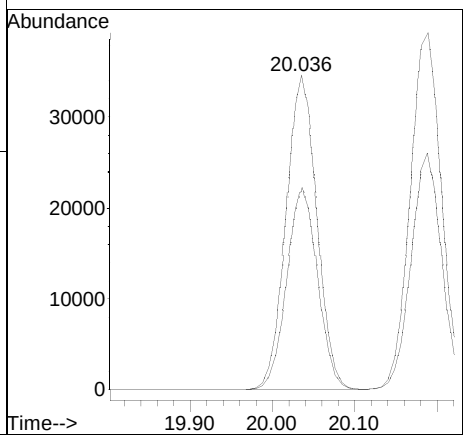


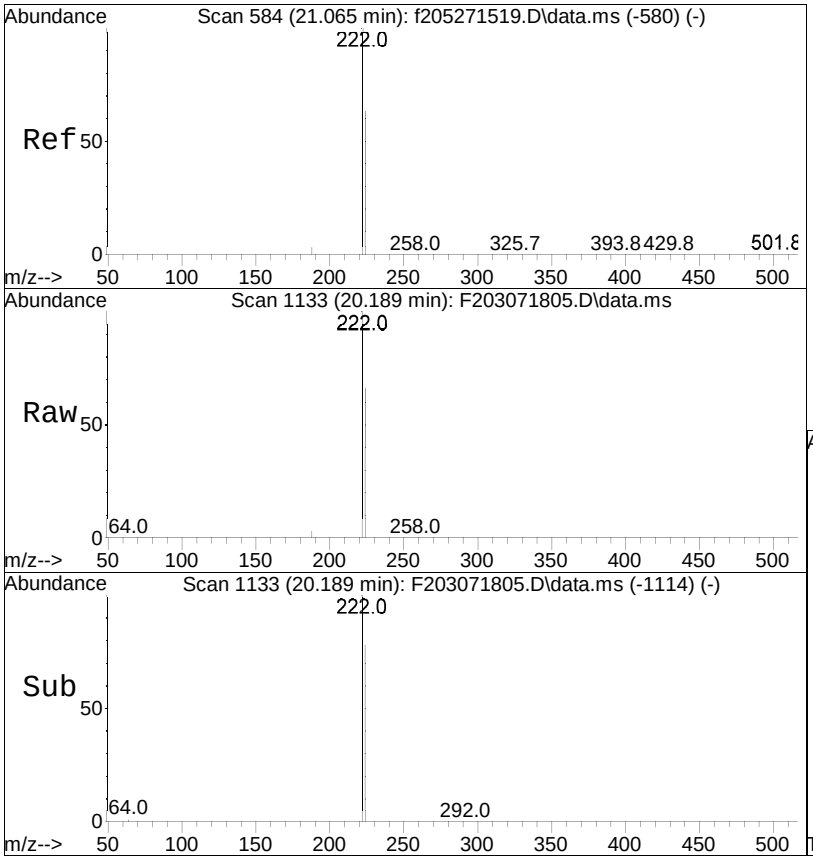


#12
Cl2-BZ#5
Concen: 83.22 ng/mL
RT: 20.036 min Scan# 1114
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 89965

Ion	Ratio	Lower	Upper
222	100		
224	64.2	51.8	77.6

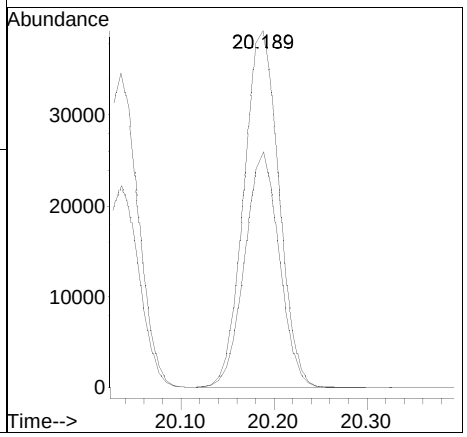


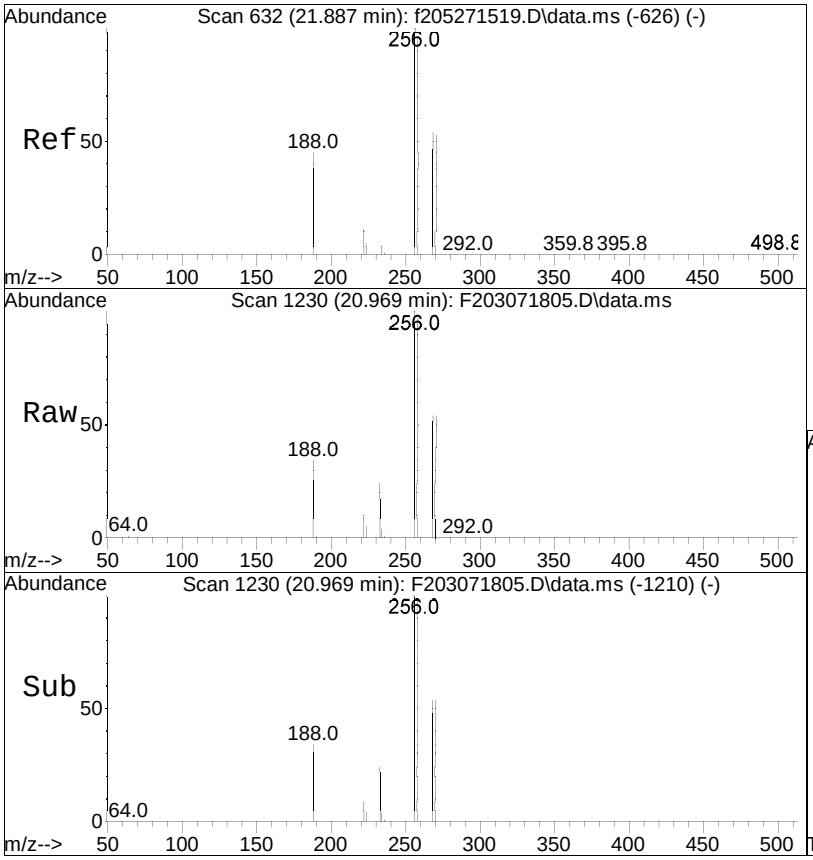


#13
Cl2-BZ#8
Concen: 83.91 ng/mL
RT: 20.189 min Scan# 1133
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 103146

Ion	Ratio	Lower	Upper
222	100		
224	65.1	52.2	78.4

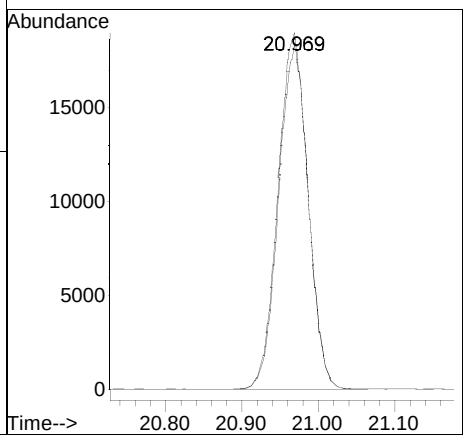


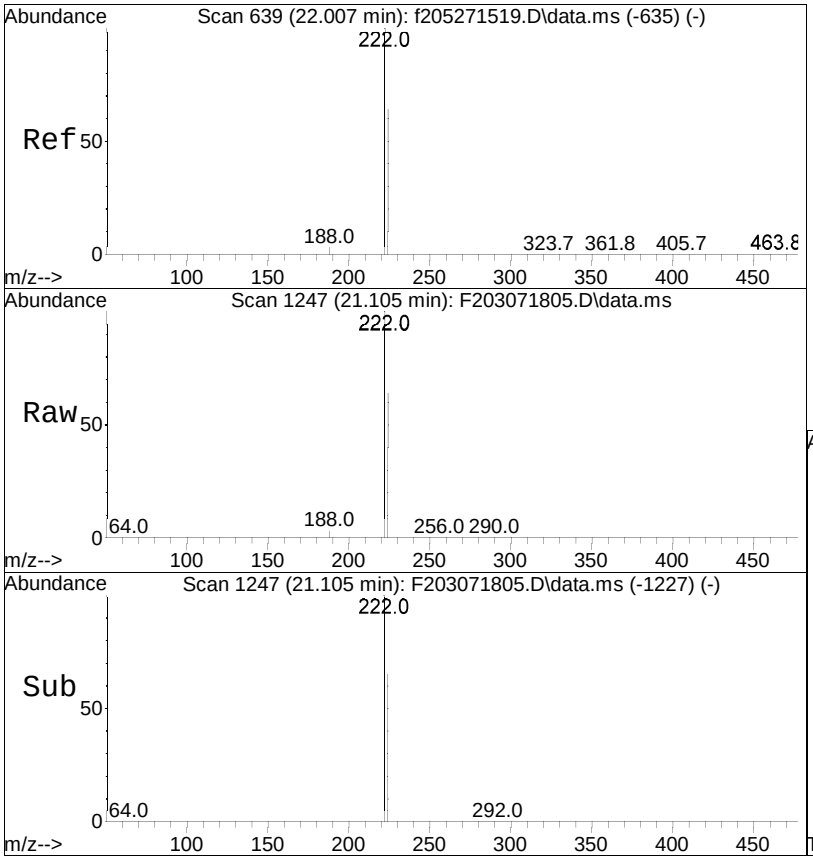


#16
Cl3-BZ#19-RTW
Concen: 84.04 ng/mL
RT: 20.969 min Scan# 1230
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 51025

Ion	Ratio	Lower	Upper
256	100		
258	96.8	76.5	114.7

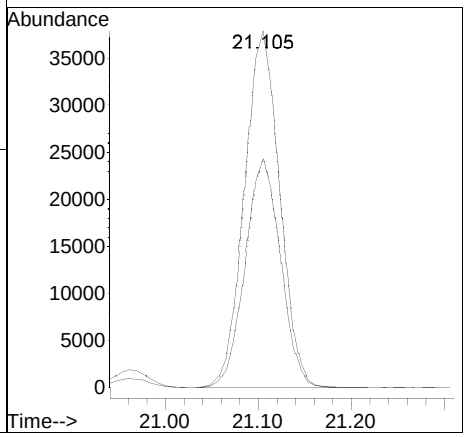


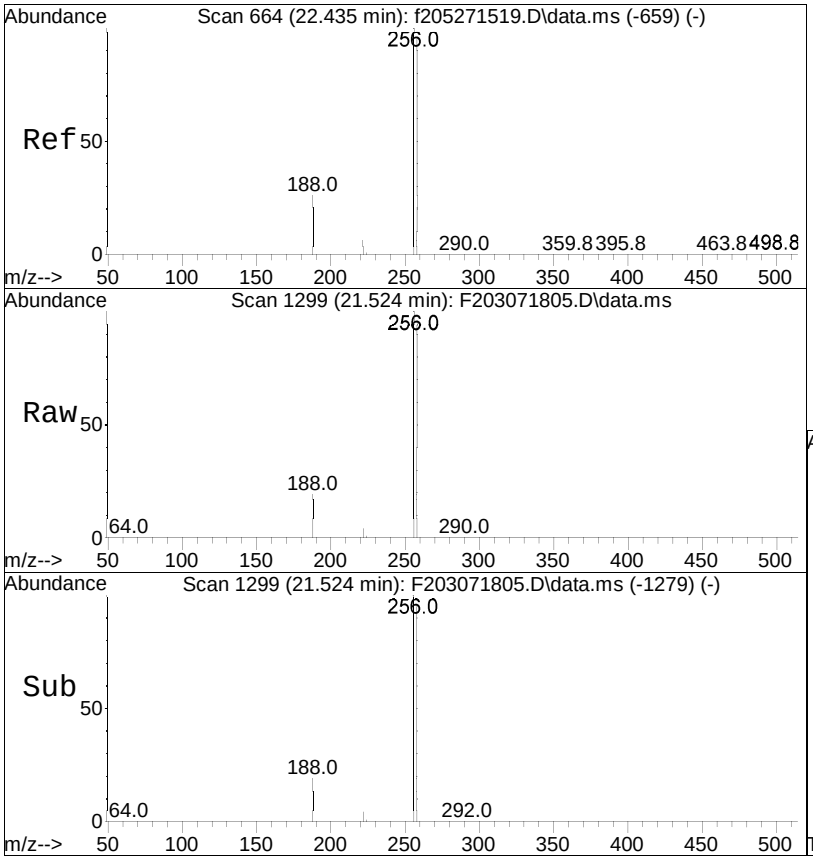


#17
Cl2-BZ#14
Concen: 83.42 ng/mL
RT: 21.105 min Scan# 1247
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 98966

Ion	Ratio	Lower	Upper
222	100		
224	64.5	53.3	79.9

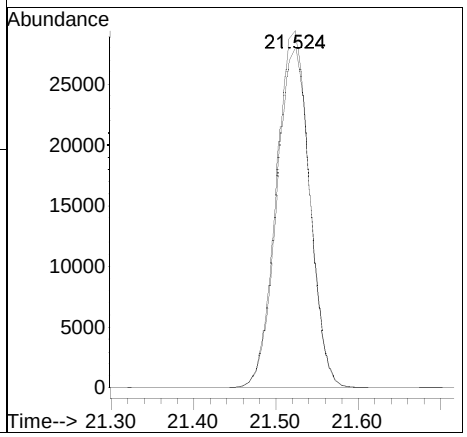


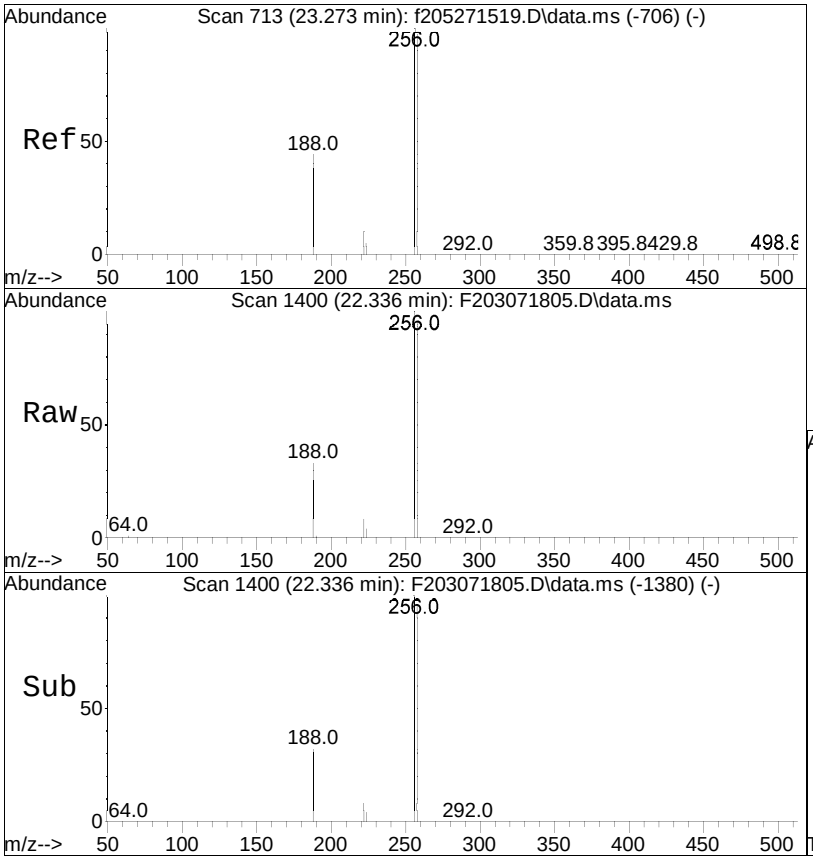


#18
Cl3-BZ#30
Concen: 84.52 ng/mL
RT: 21.524 min Scan# 1299
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 81909

Ion	Ratio	Lower	Upper
256	100		
258	95.9	76.4	114.6

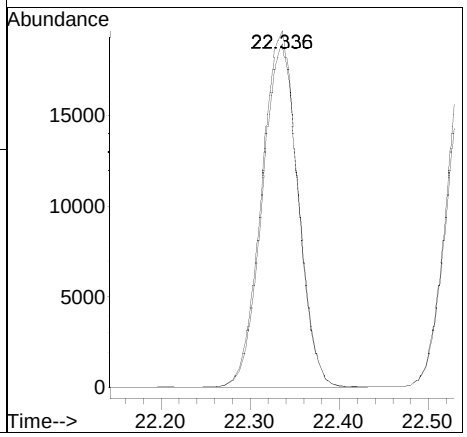


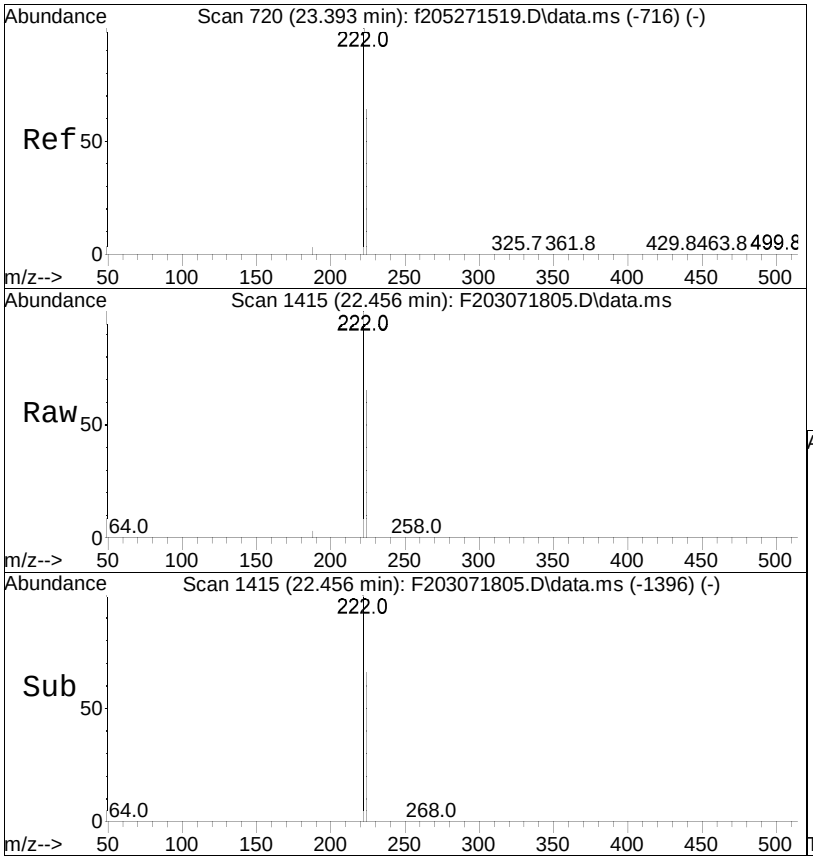


#19
Cl3-BZ#18
Concen: 81.77 ng/mL
RT: 22.336 min Scan# 1400
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 55155

Ion	Ratio	Lower	Upper
256	100		
258	96.4	74.7	112.1

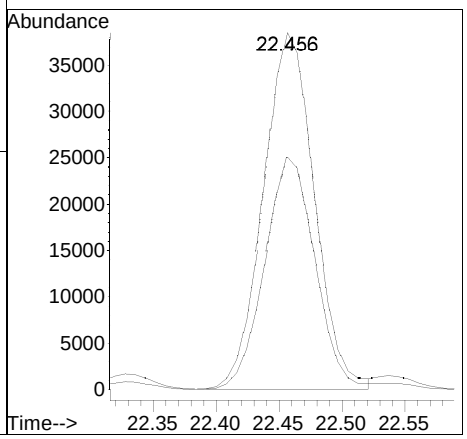


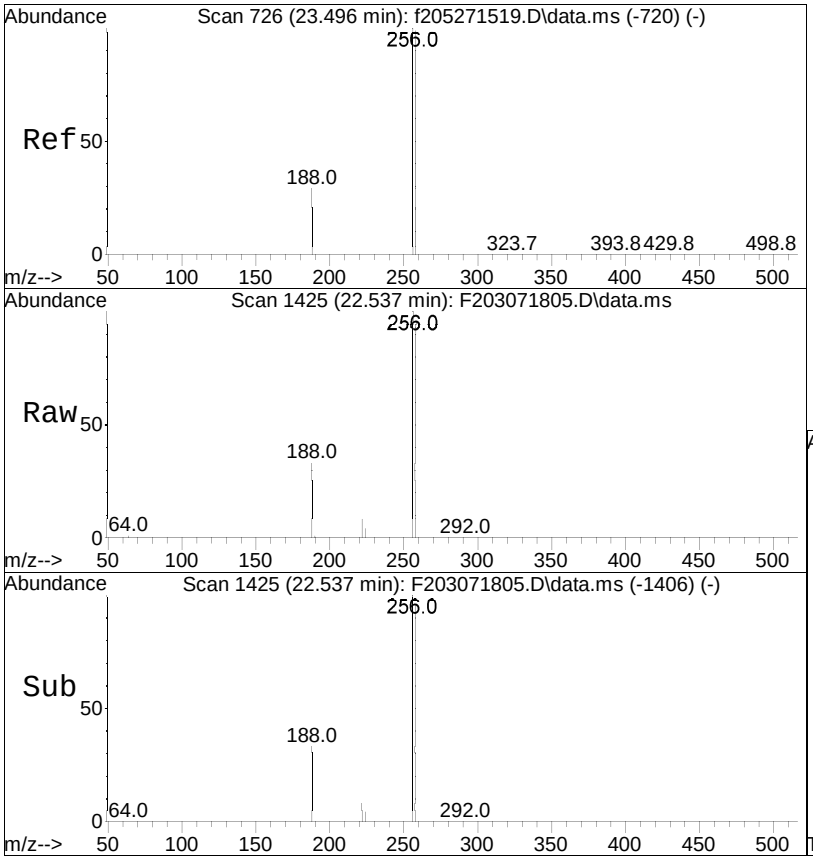


#20
Cl2-BZ#11
Concen: 84.55 ng/mL
RT: 22.456 min Scan# 1415
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 107648

Ion	Ratio	Lower	Upper
222	100		
224	64.1	50.9	76.3

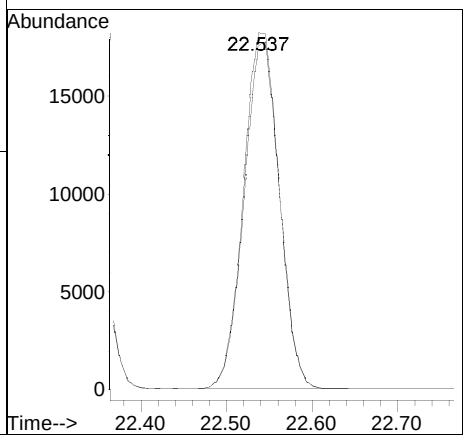


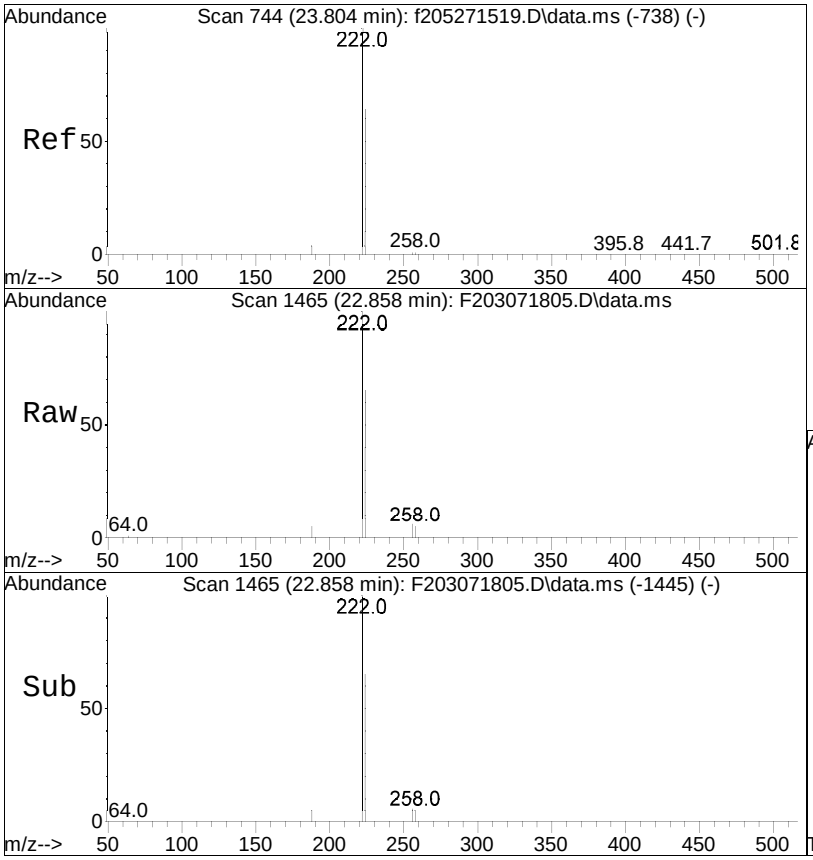


#21
Cl3-BZ#17
Concen: 83.97 ng/mL
RT: 22.537 min Scan# 1425
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 52738

Ion	Ratio	Lower	Upper
256	100		
258	96.3	76.3	114.5

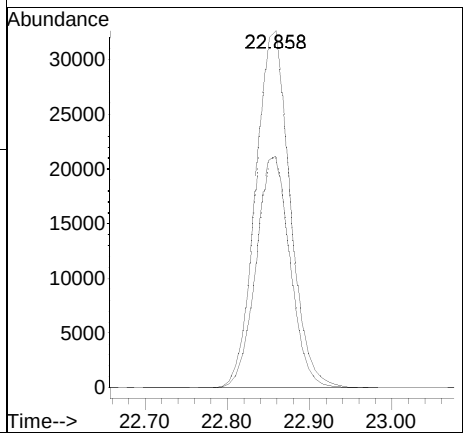


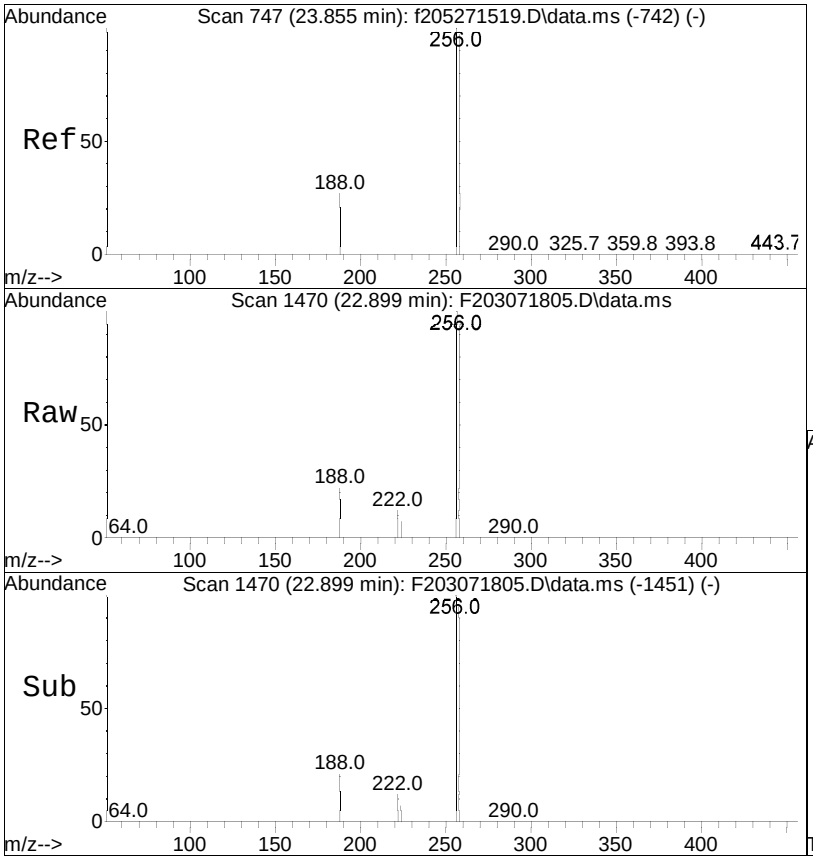


#22
Cl2-BZ#12
Concen: 83.79 ng/mL
RT: 22.858 min Scan# 1465
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 94379

Ion	Ratio	Lower	Upper
222	100		
224	64.1	52.2	78.4

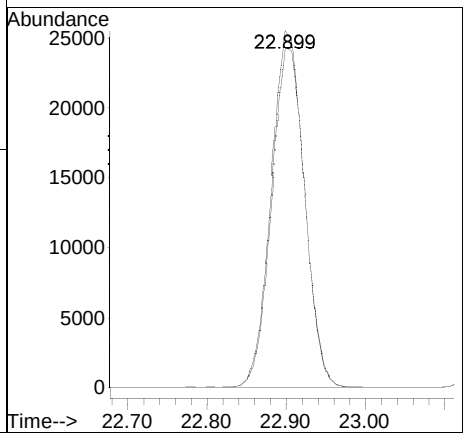


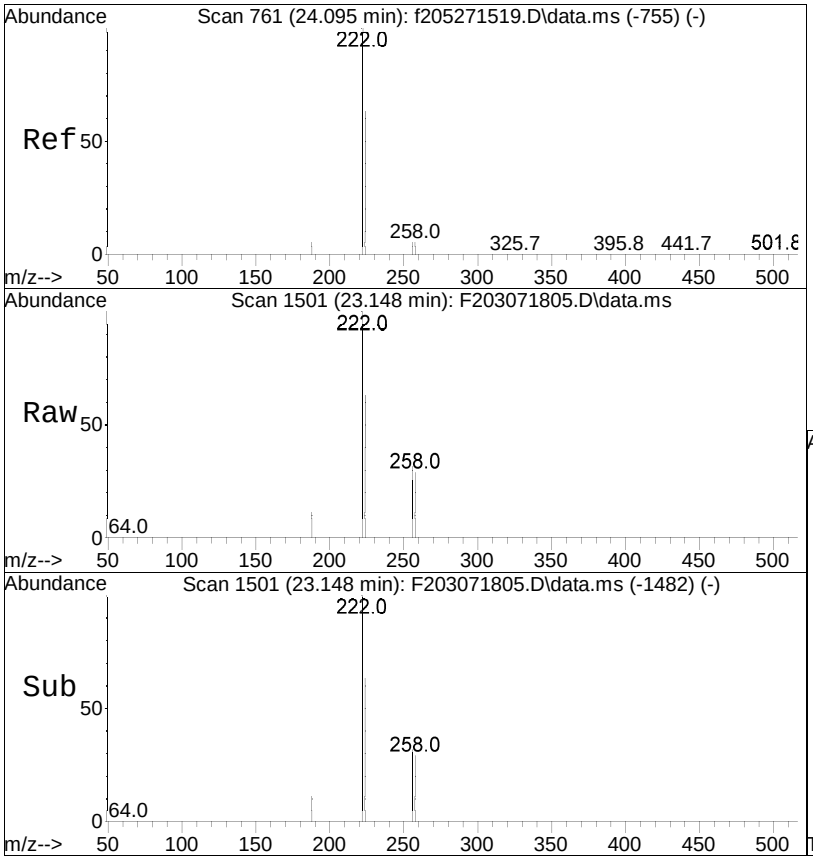


#23
Cl3-BZ#27
Concen: 84.50 ng/mL
RT: 22.899 min Scan# 1470
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 73511

Ion	Ratio	Lower	Upper
256	100		
258	96.0	75.5	113.3

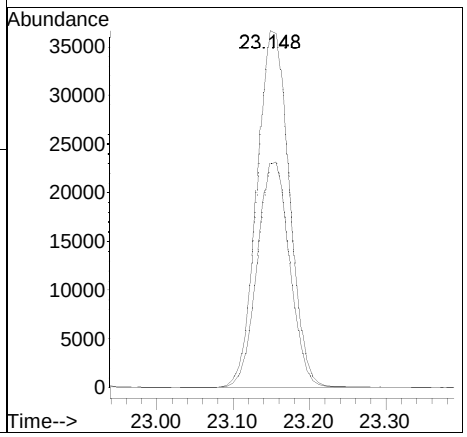


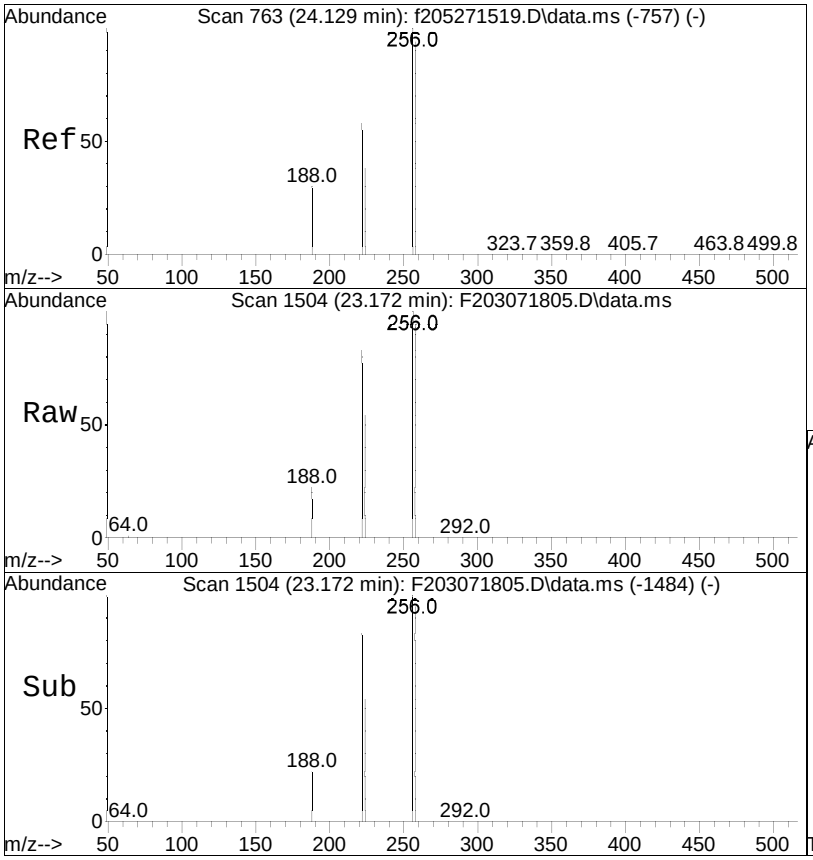


#24
Cl2-BZ#13
Concen: 82.74 ng/mL
RT: 23.148 min Scan# 1501
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 107372

Ion	Ratio	Lower	Upper
222	100		
224	63.3	51.4	77.2

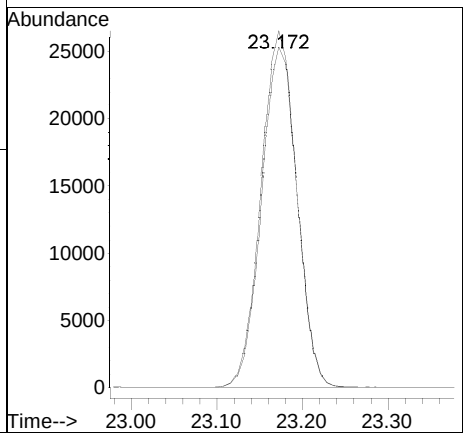


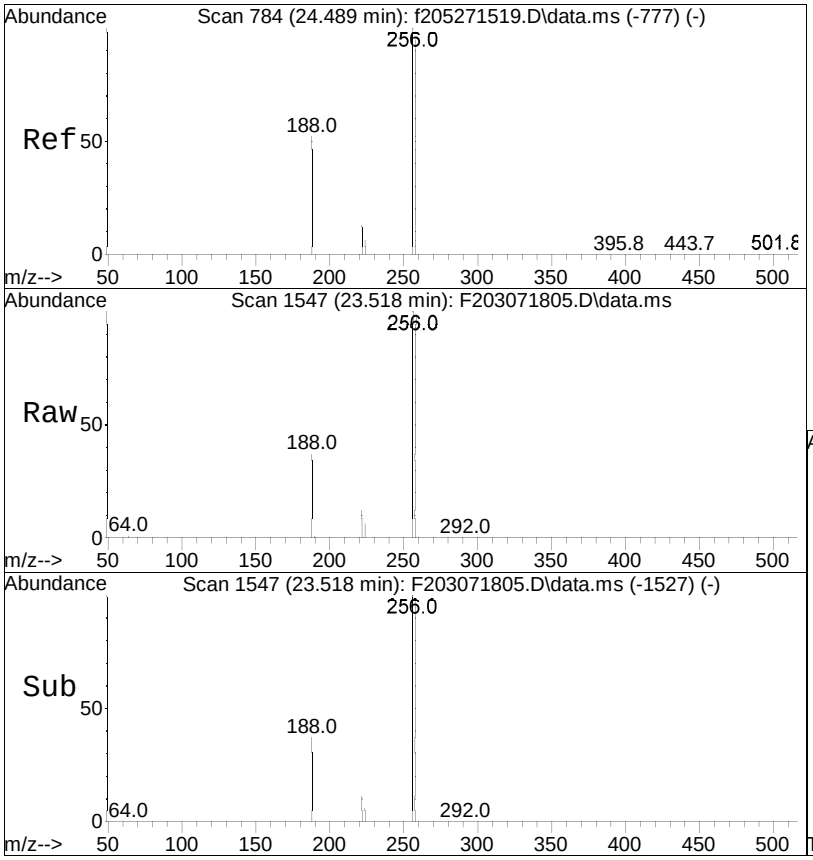


#25
Cl3-BZ#24
Concen: 85.14 ng/mL
RT: 23.172 min Scan# 1504
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 76136

Ion	Ratio	Lower	Upper
256	100		
258	96.0	75.8	113.6

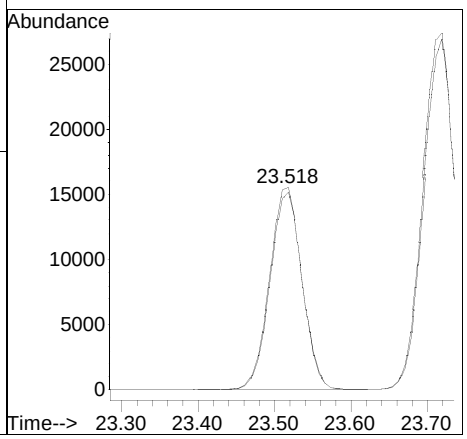


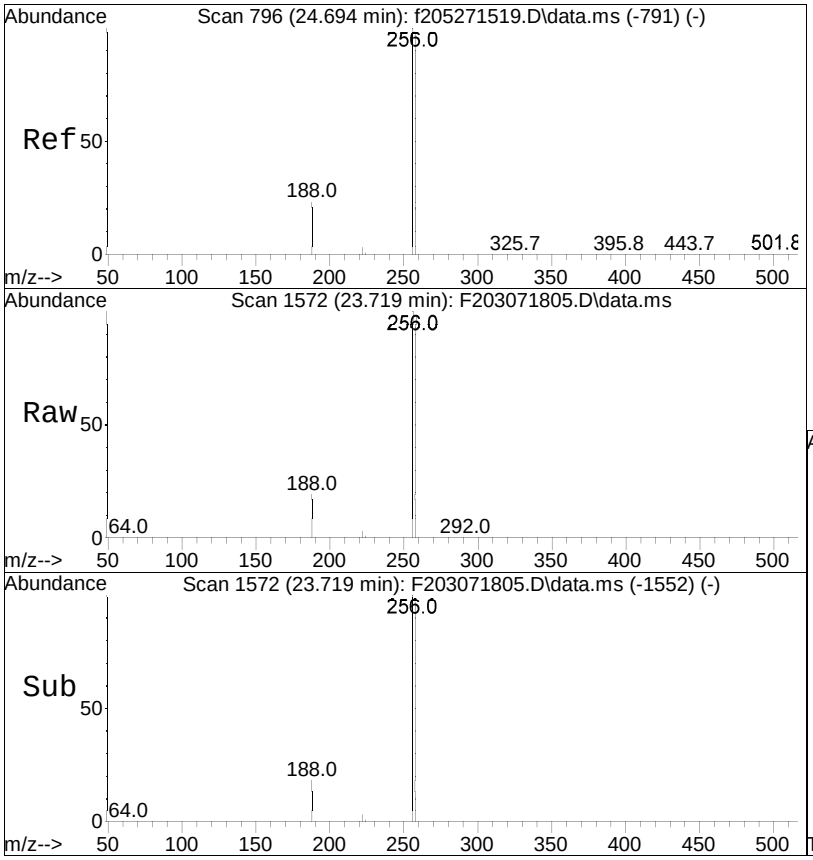


#26
Cl3-BZ#16
Concen: 82.40 ng/mL
RT: 23.518 min Scan# 1547
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 45220

Ion	Ratio	Lower	Upper
256	100		
258	97.1	74.2	111.4

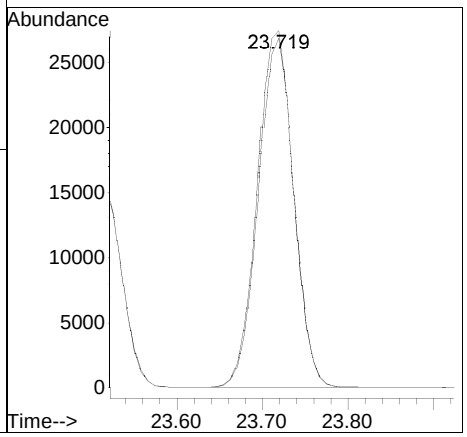


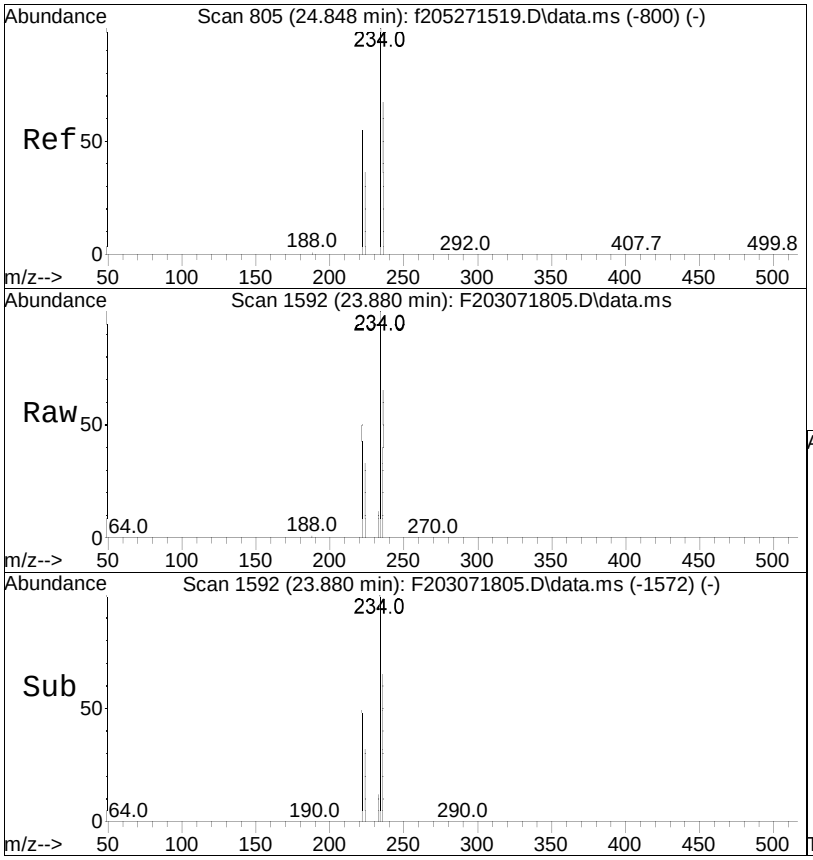


#27
Cl3-BZ#32
Concen: 83.45 ng/mL
RT: 23.719 min Scan# 1572
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 80141

Ion	Ratio	Lower	Upper
256	100		
258	96.2	75.0	112.4

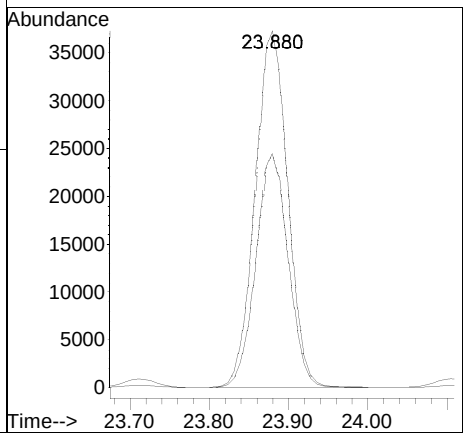


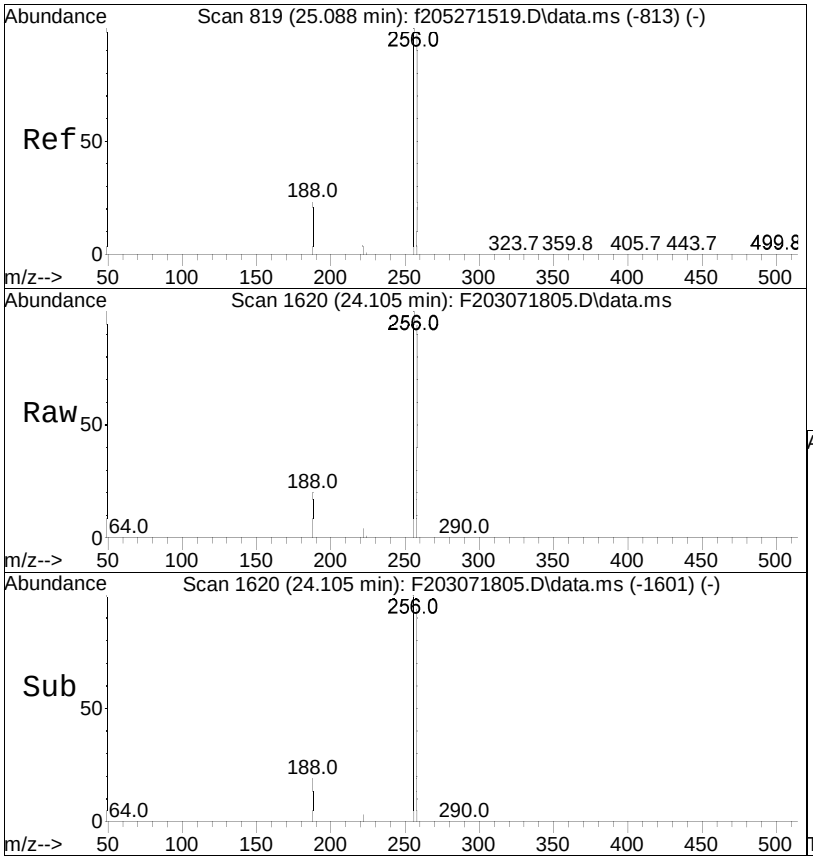


#28
Cl2-BZ#15-RTW
Concen: 80.42 ng/mL
RT: 23.880 min Scan# 1592
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:222 Resp: 105757

Ion	Ratio	Lower	Upper
222	100		
224	65.5	51.7	77.5

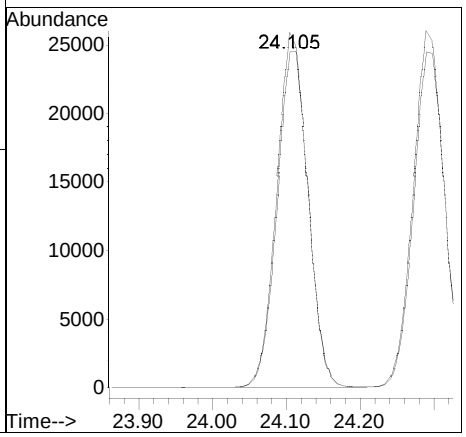


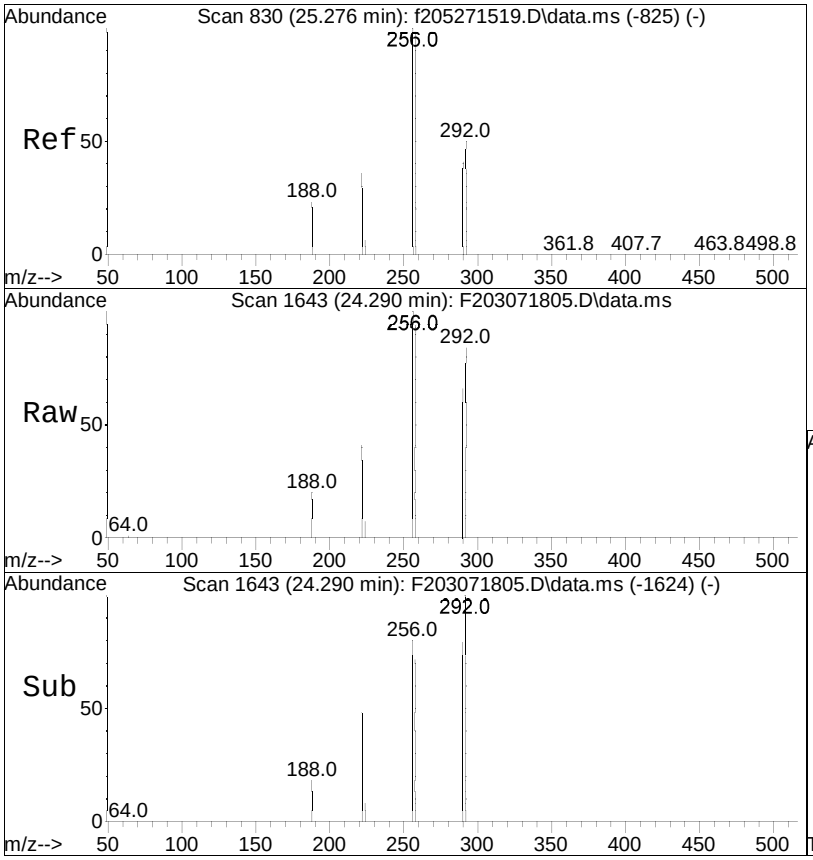


#29
Cl3-BZ#34
Concen: 83.74 ng/mL
RT: 24.105 min Scan# 1620
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 75154

Ion	Ratio	Lower	Upper
256	100		
258	96.0	77.1	115.7

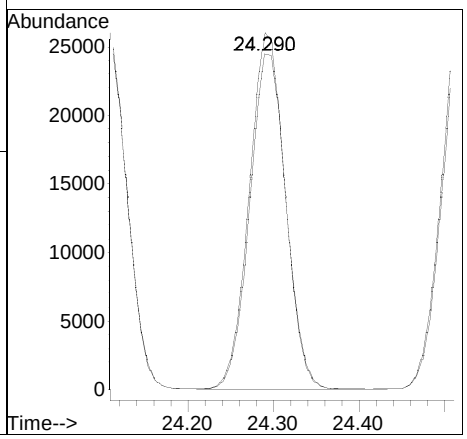


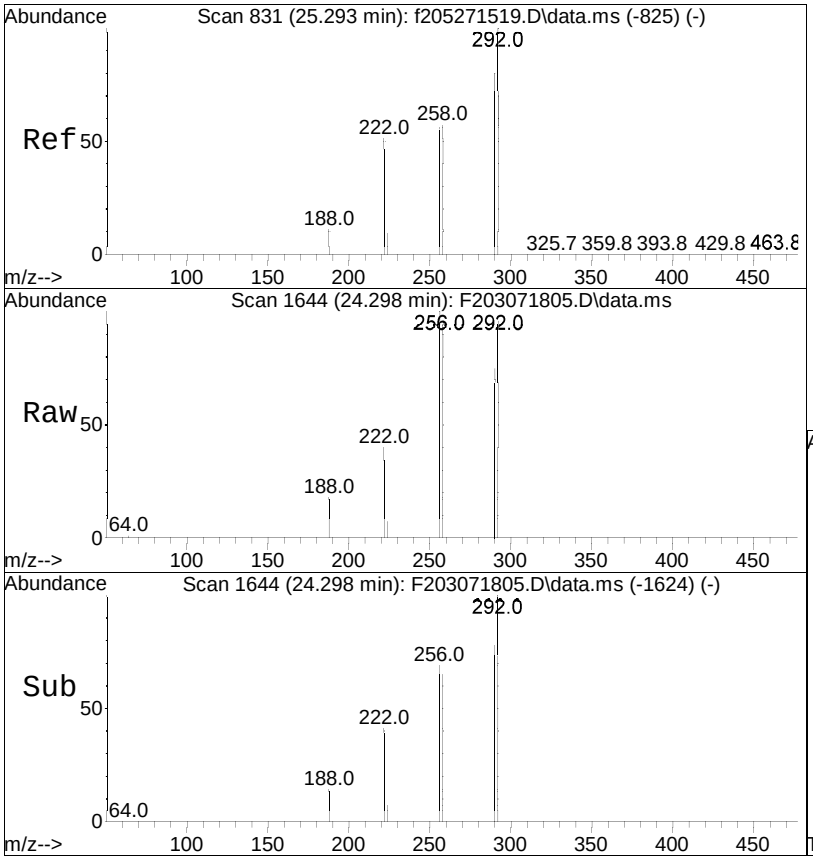


#30
Cl3-BZ#23
Concen: 85.72 ng/mL
RT: 24.290 min Scan# 1643
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 75497

Ion	Ratio	Lower	Upper
256	100		
258	95.3	76.7	115.1

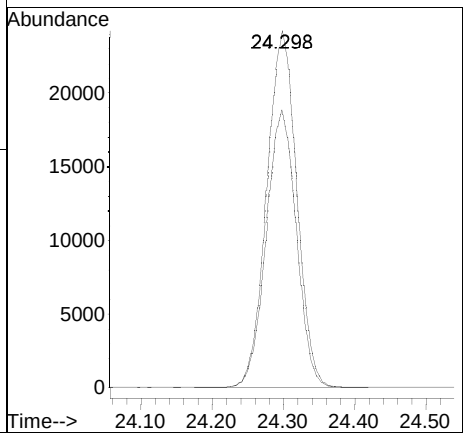


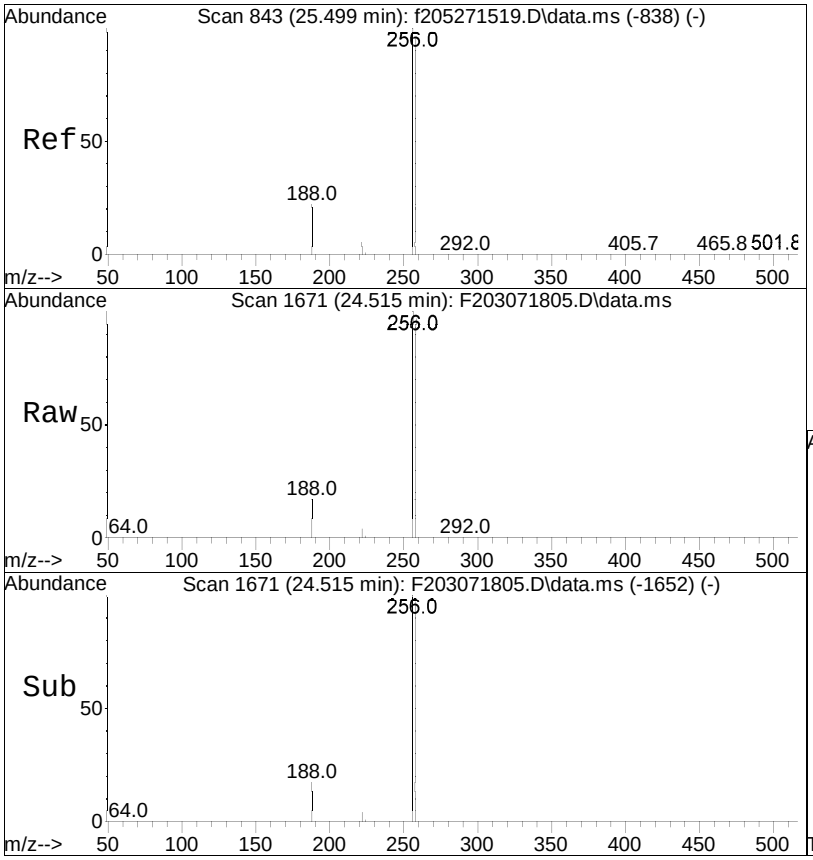


#31
Cl4-BZ#54-RTW
Concen: 85.76 ng/mL
RT: 24.298 min Scan# 1644
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 70412

Ion	Ratio	Lower	Upper
292	100		
290	78.1	63.5	95.3

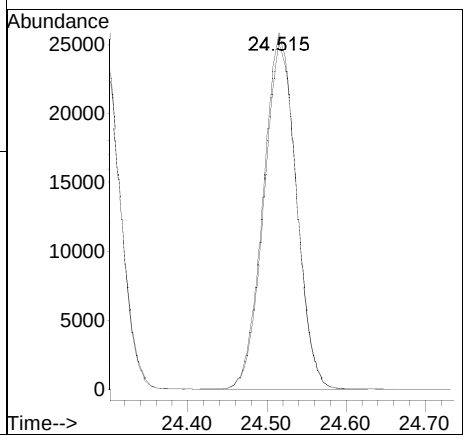


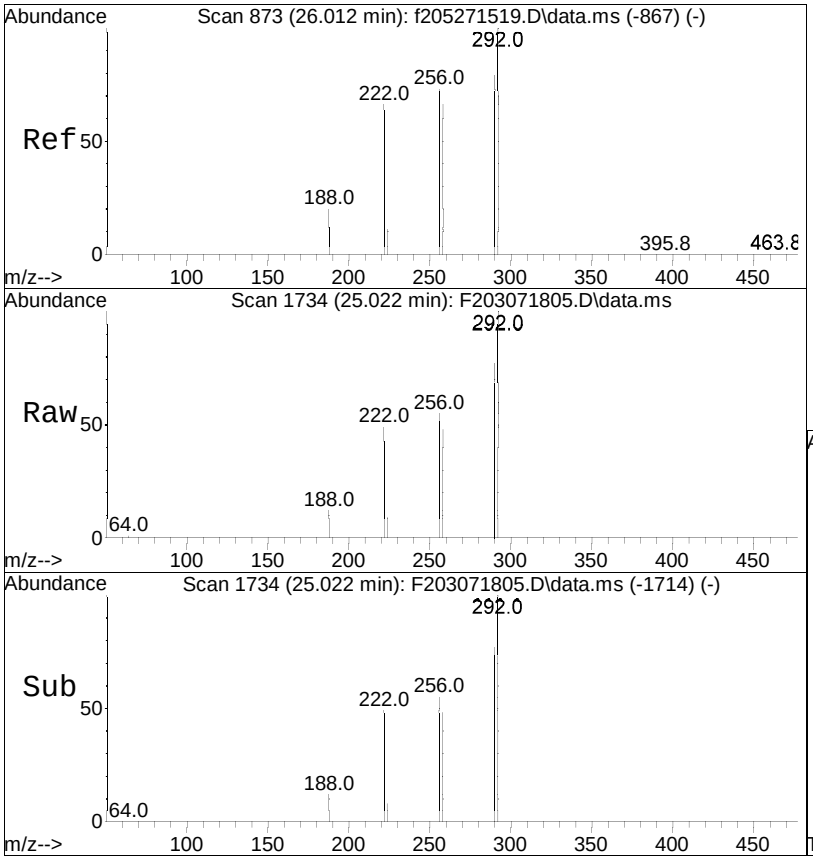


#32
Cl3-BZ#29-Cal
Concen: 83.63 ng/mL
RT: 24.515 min Scan# 1671
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 74357

Ion	Ratio	Lower	Upper
256	100		
258	97.3	76.6	115.0

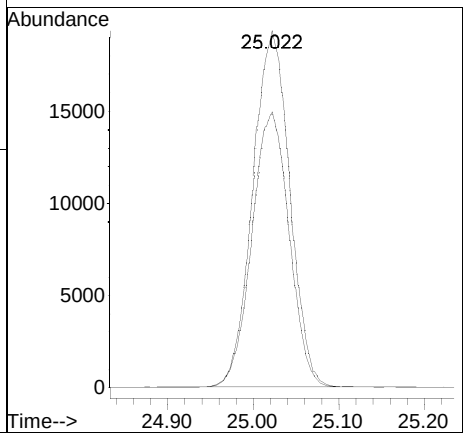


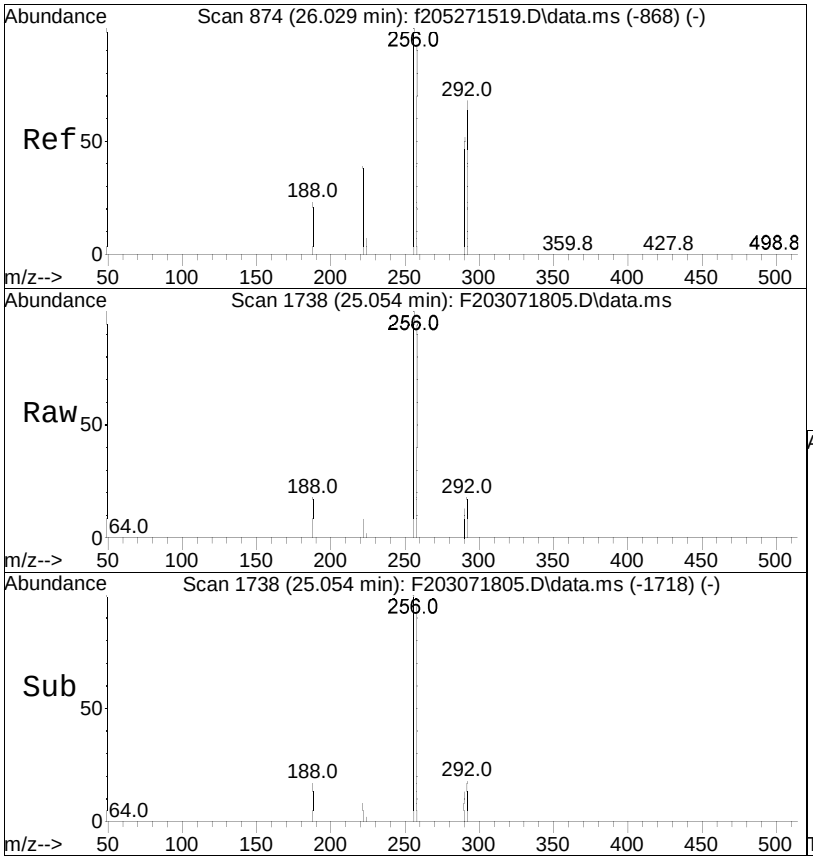


#35
Cl4-BZ#50-Cal
Concen: 84.29 ng/mL
RT: 25.022 min Scan# 1734
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 57820

Ion	Ratio	Lower	Upper
292	100		
290	77.8	63.6	95.4

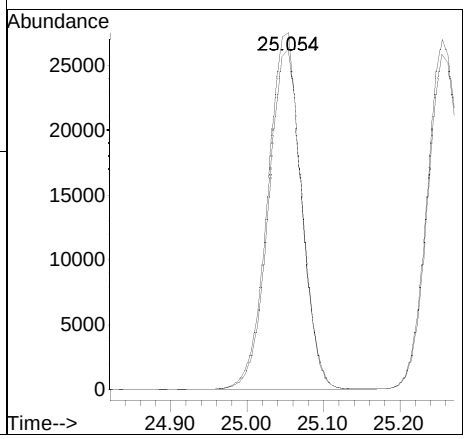


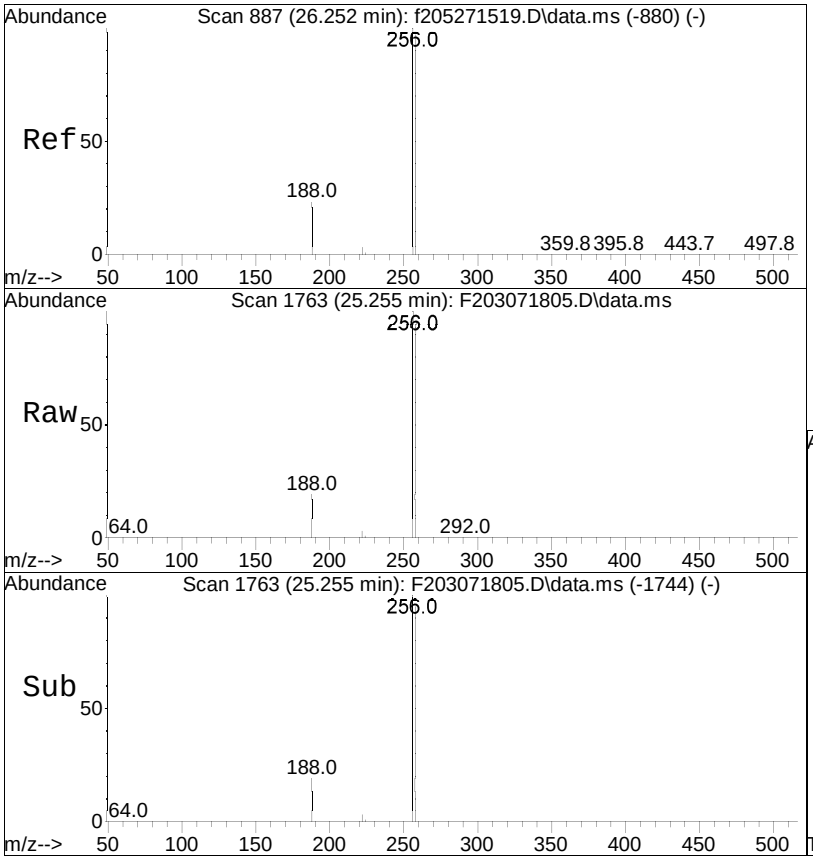


#38
Cl3-BZ#26
Concen: 83.90 ng/mL
RT: 25.054 min Scan# 1738
Delta R.T. 0.008 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 83672

Ion	Ratio	Lower	Upper
256	100		
258	95.4	76.6	115.0

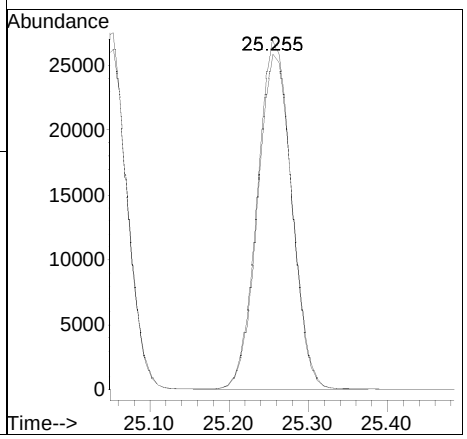


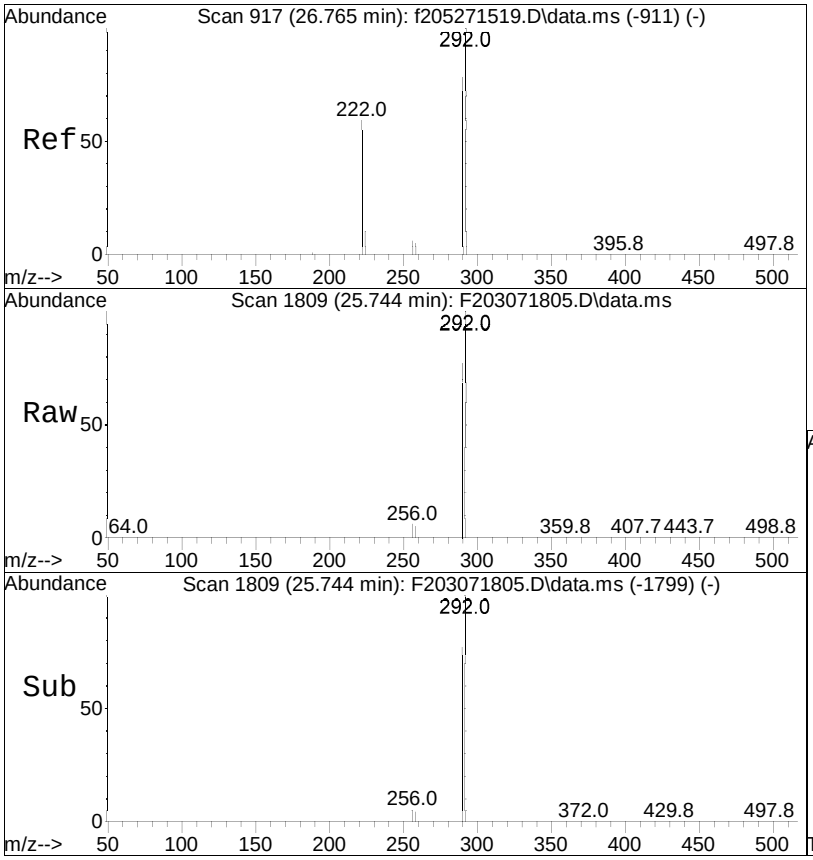


#39
Cl3-BZ#25
Concen: 82.92 ng/mL
RT: 25.255 min Scan# 1763
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 80508

Ion	Ratio	Lower	Upper
256	100		
258	95.7	77.5	116.3

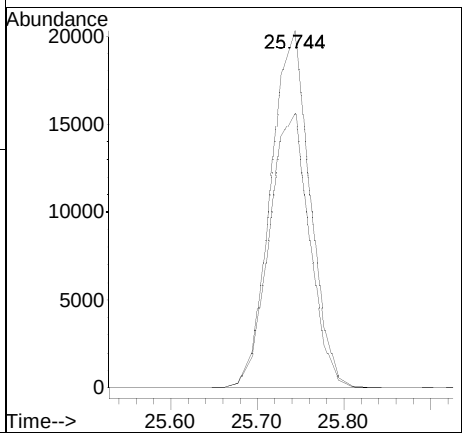


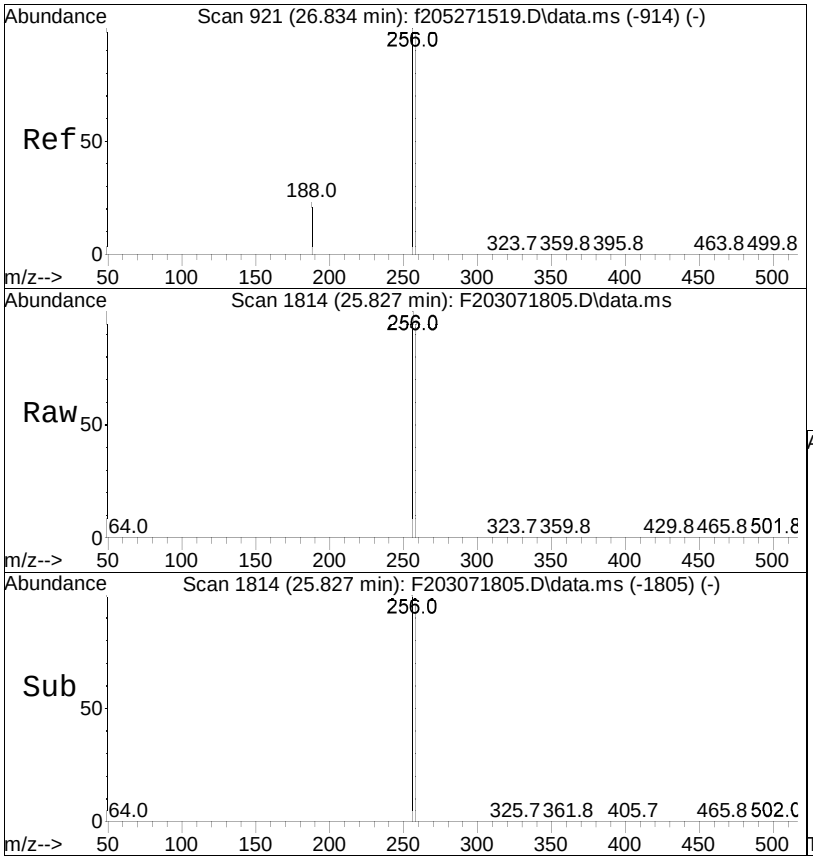


#40
Cl4-BZ#53
Concen: 84.17 ng/mL
RT: 25.744 min Scan# 1809
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 63693

Ion	Ratio	Lower	Upper
292	100		
290	78.5	62.4	93.6

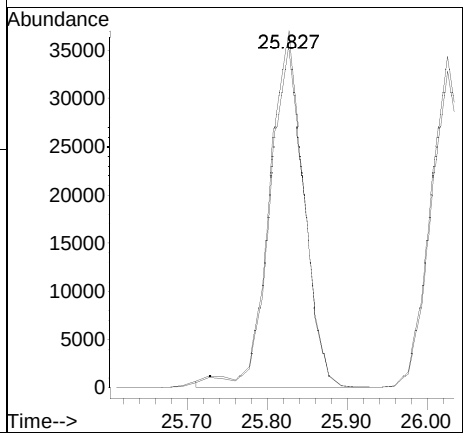


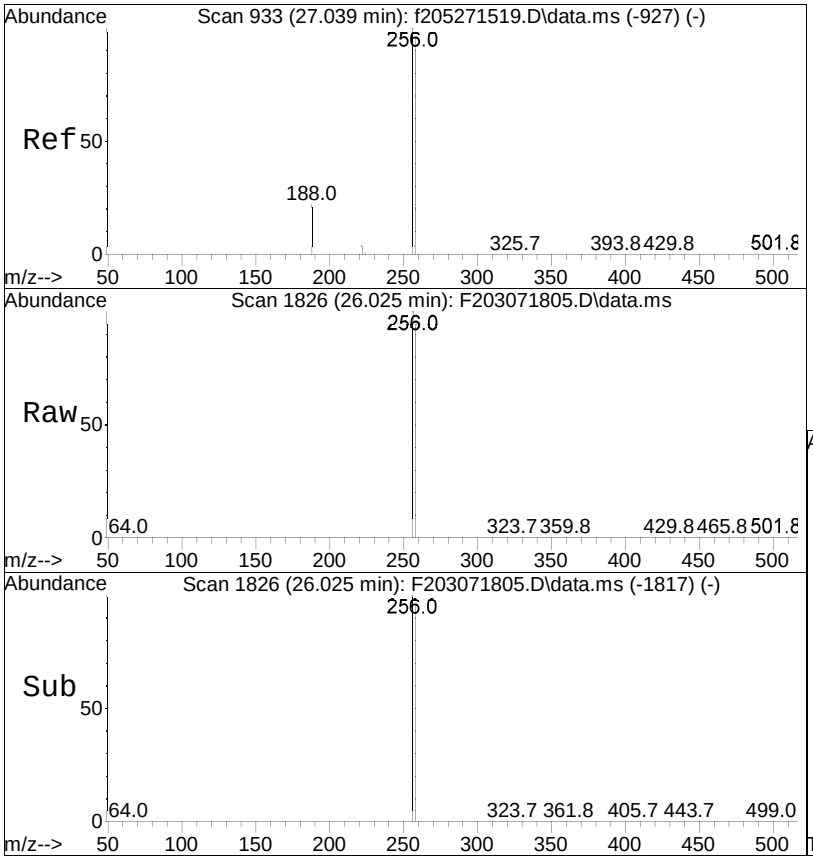


#41
Cl3-BZ#-31
Concen: 82.45 ng/mL
RT: 25.827 min Scan# 1814
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 110551

Ion	Ratio	Lower	Upper
256	100		
258	95.4	78.6	117.8

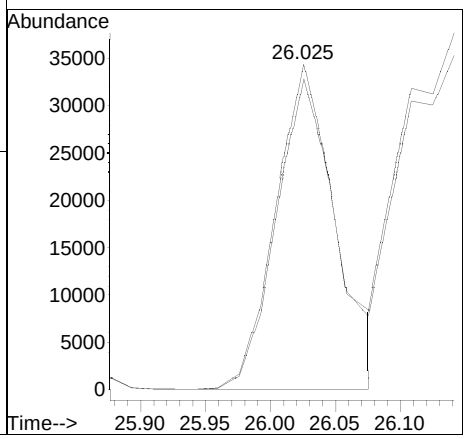


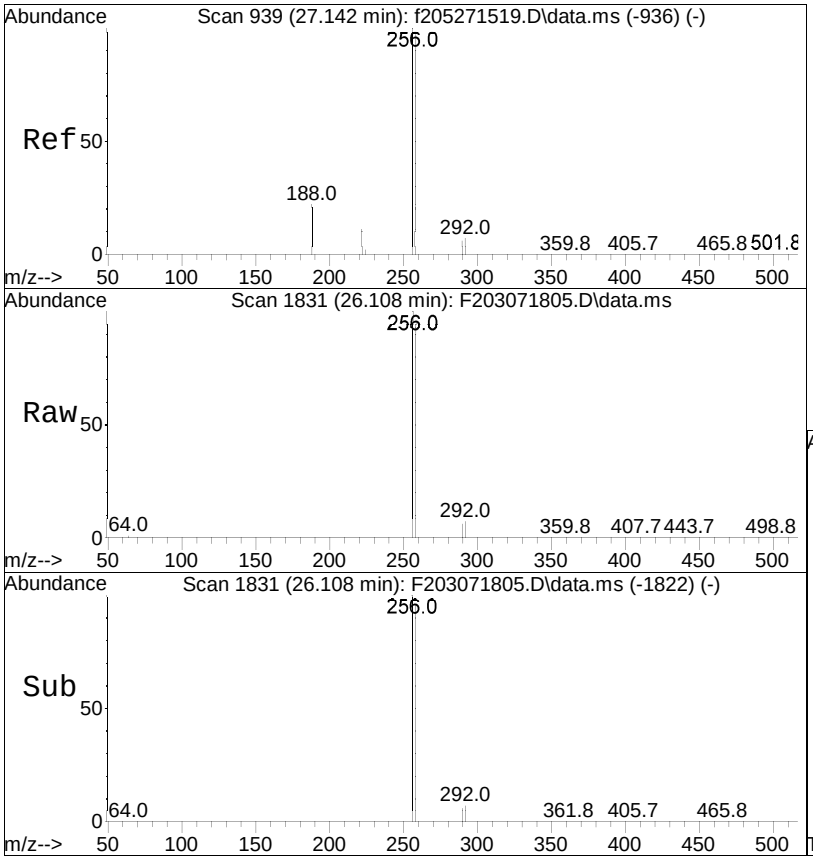


#42
Cl3-BZ#28
Concen: 83.62 ng/mL
RT: 26.025 min Scan# 1826
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 110444

Ion	Ratio	Lower	Upper
256	100		
258	95.3	77.5	116.3

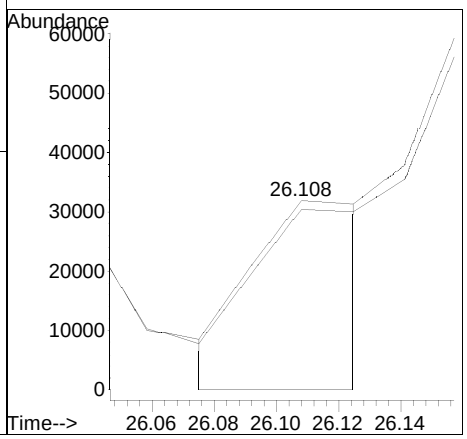


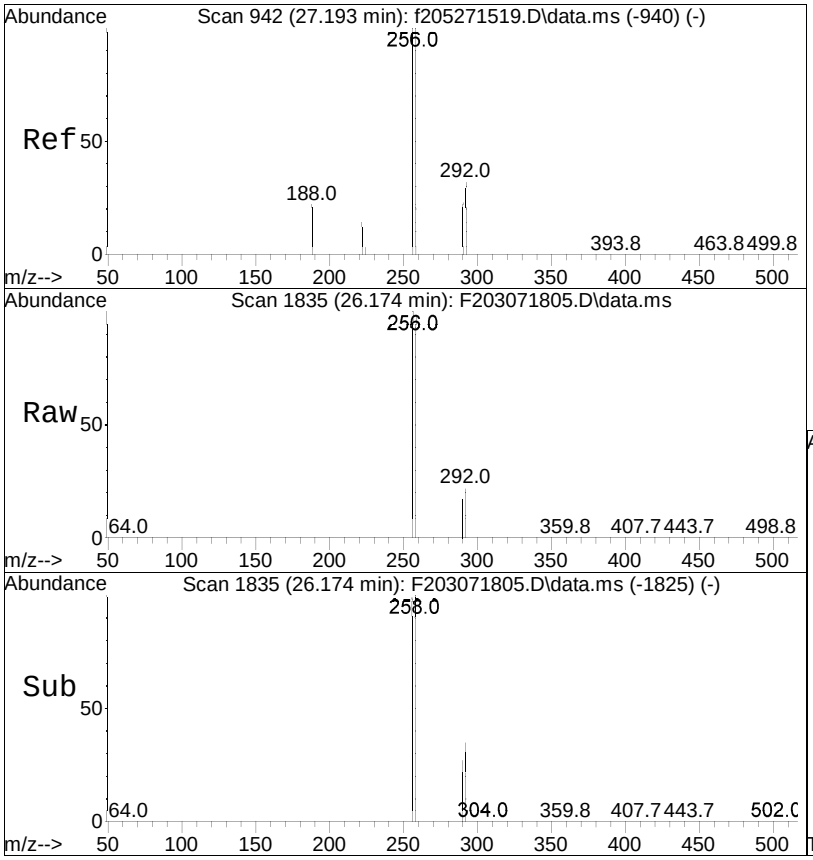


#43
Cl3-BZ#33
Concen: 88.23 ng/mL M4
RT: 26.108 min Scan# 1831
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 83069

Ion	Ratio	Lower	Upper
256	100		
258	95.5	76.2	114.4

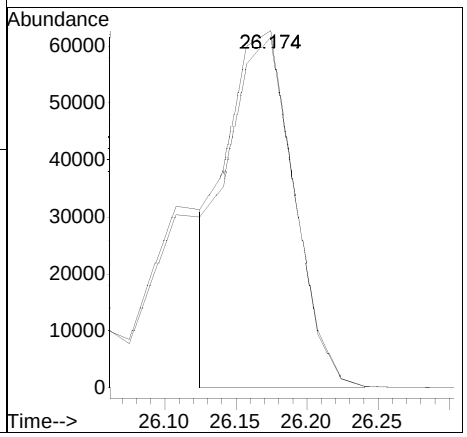


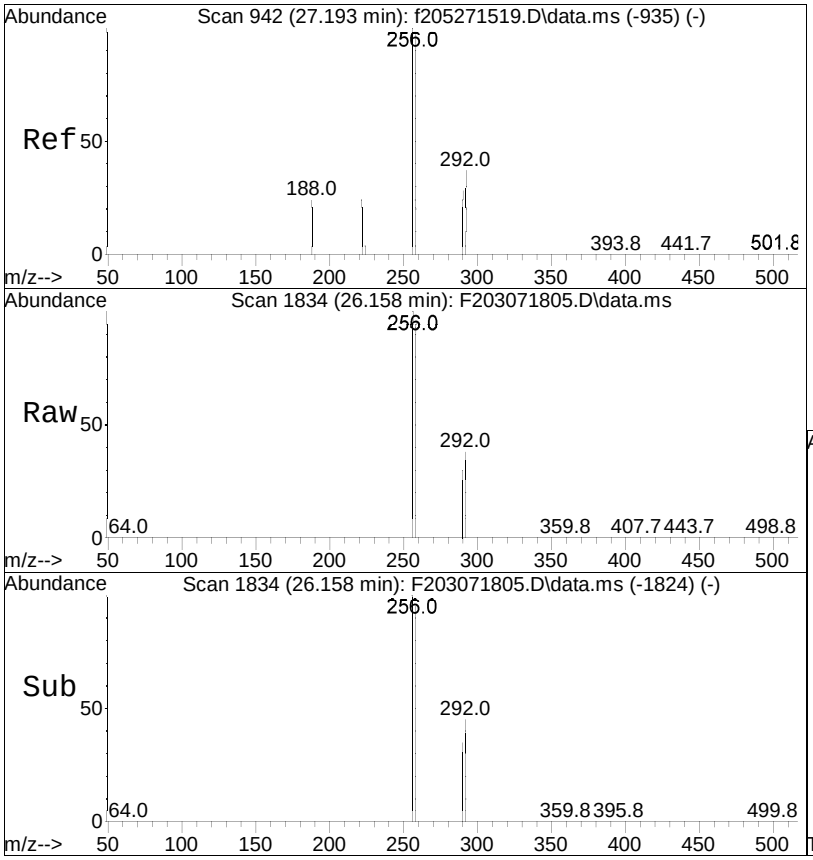


#44
Cl3-BZ#21/#20
Concen: 172.06 ng/mL M4
RT: 26.174 min Scan# 1835
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 205162

Ion	Ratio	Lower	Upper
256	100		
258	134.8	77.8	116.8#

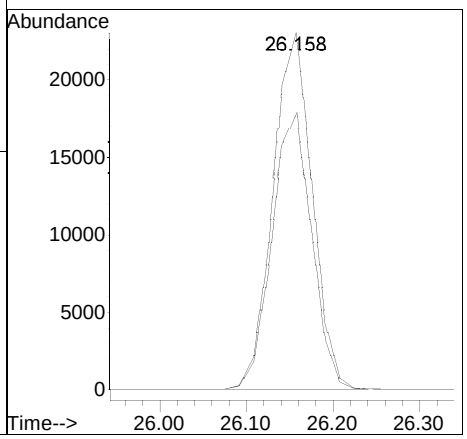


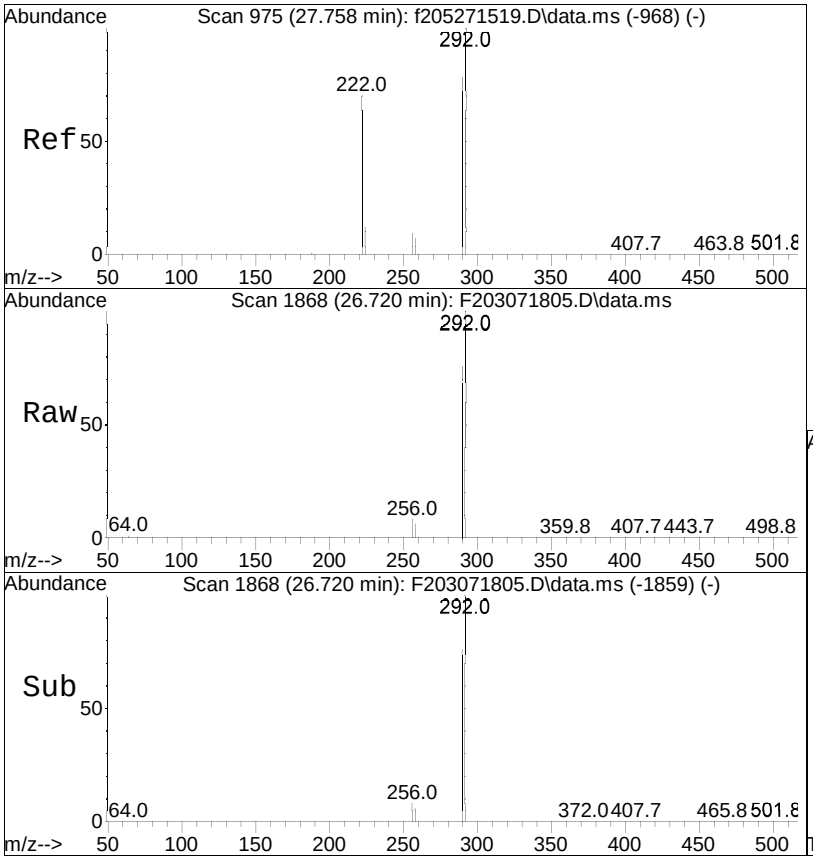


#45
Cl4-BZ#51
Concen: 86.50 ng/mL
RT: 26.158 min Scan# 1834
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 72257

Ion	Ratio	Lower	Upper
292	100		
290	78.6	61.4	92.2

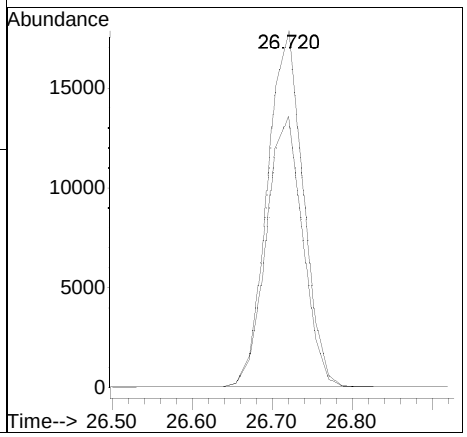


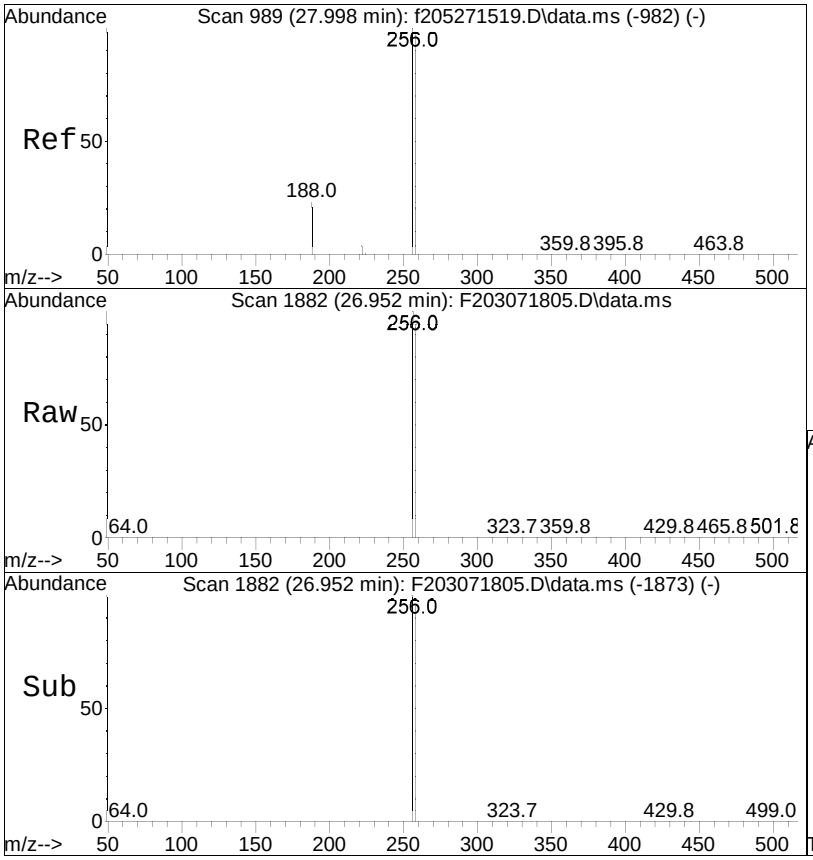


#46
Cl4-BZ#45
Concen: 84.62 ng/mL
RT: 26.720 min Scan# 1868
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 55204

Ion	Ratio	Lower	Upper
292	100		
290	77.5	62.6	93.8

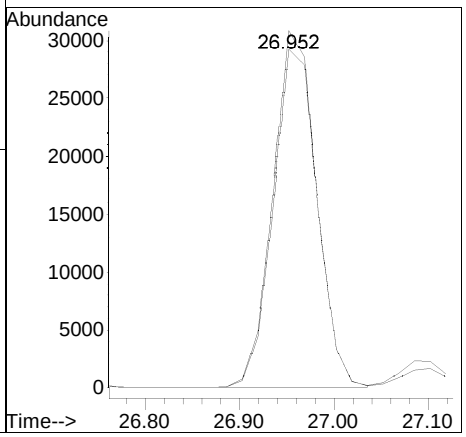


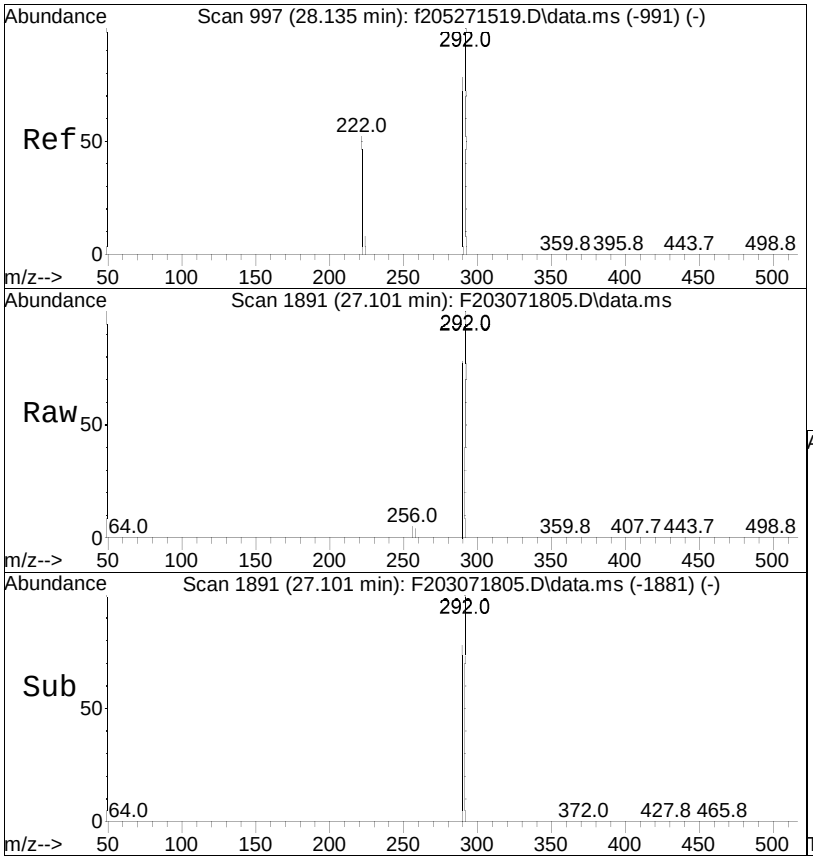


#47
Cl3-BZ#22
Concen: 84.64 ng/mL
RT: 26.952 min Scan# 1882
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 98327

Ion	Ratio	Lower	Upper
256	100		
258	94.8	75.4	113.0

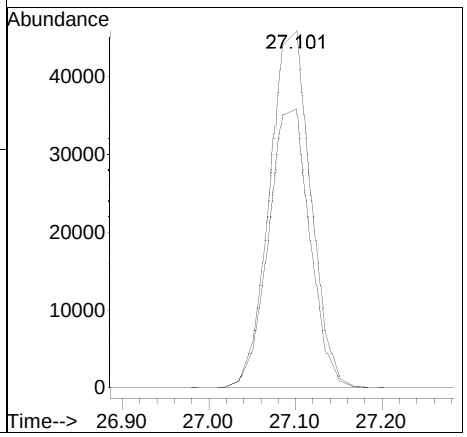


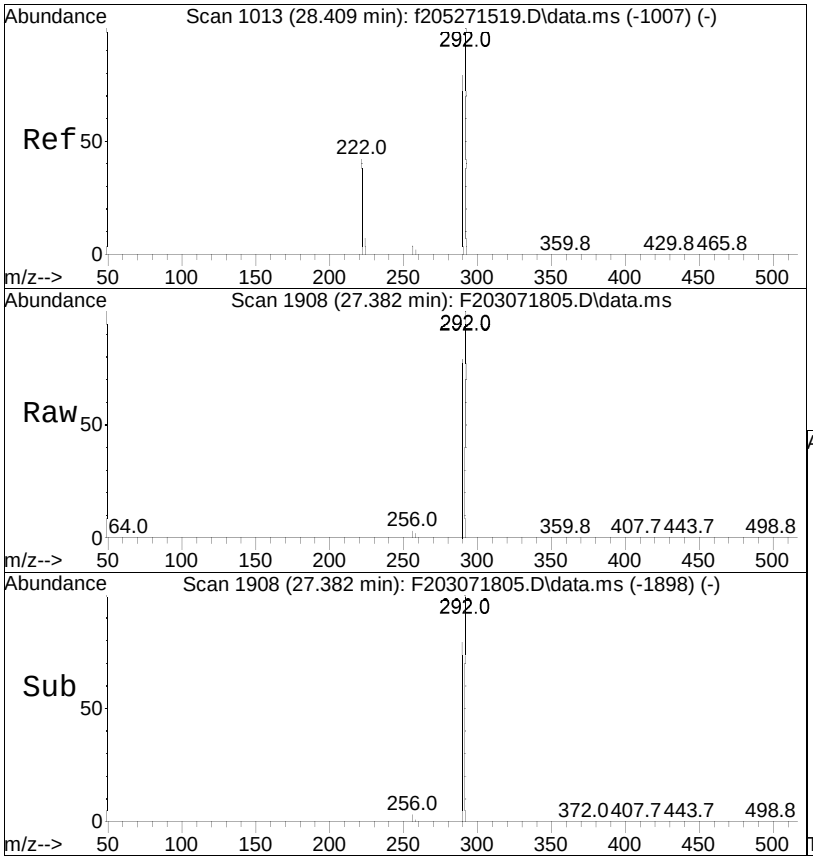


#48
Cl4-BZ#73/#46
Concen: 173.12 ng/mL
RT: 27.101 min Scan# 1891
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 150928

Ion	Ratio	Lower	Upper
292	100		
290	78.4	62.4	93.6

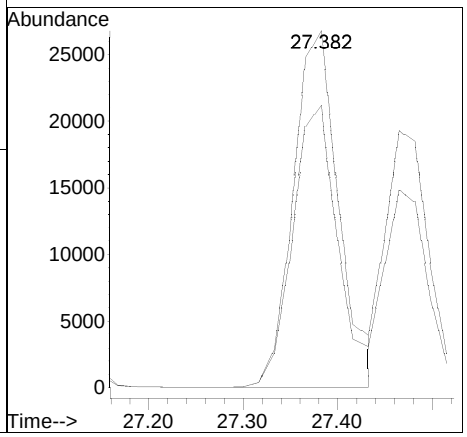


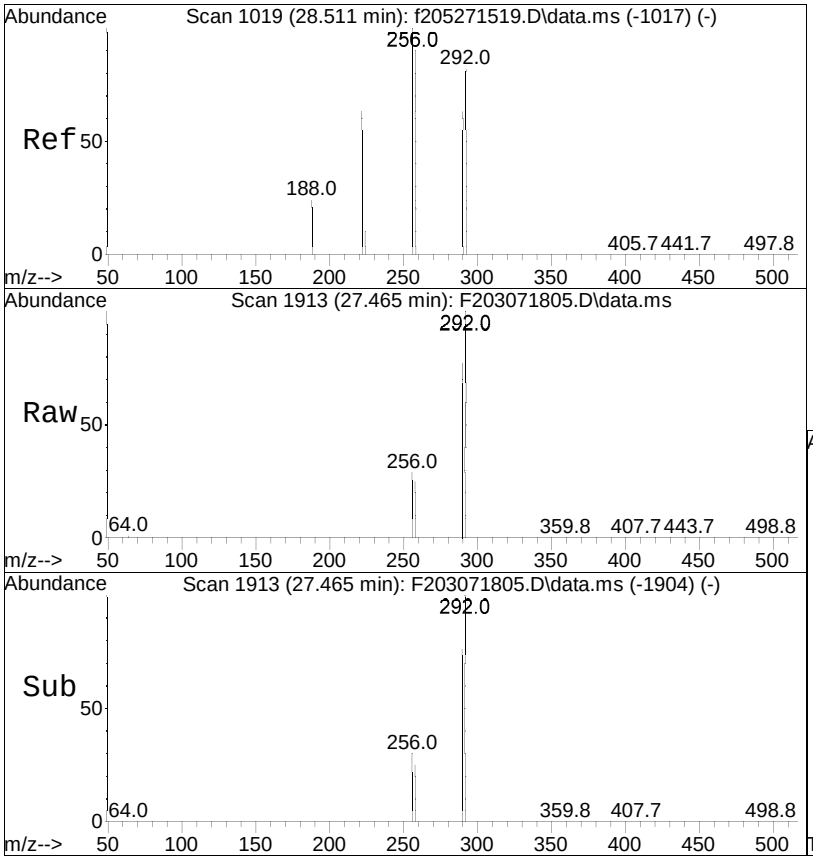


#49
Cl4-BZ#69
Concen: 85.57 ng/mL
RT: 27.382 min Scan# 1908
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 89140

Ion	Ratio	Lower	Upper
292	100		
290	79.3	62.0	93.0

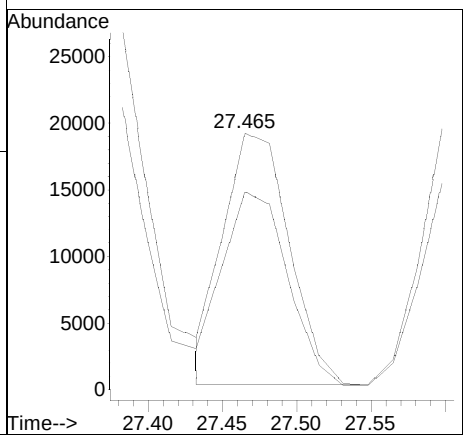


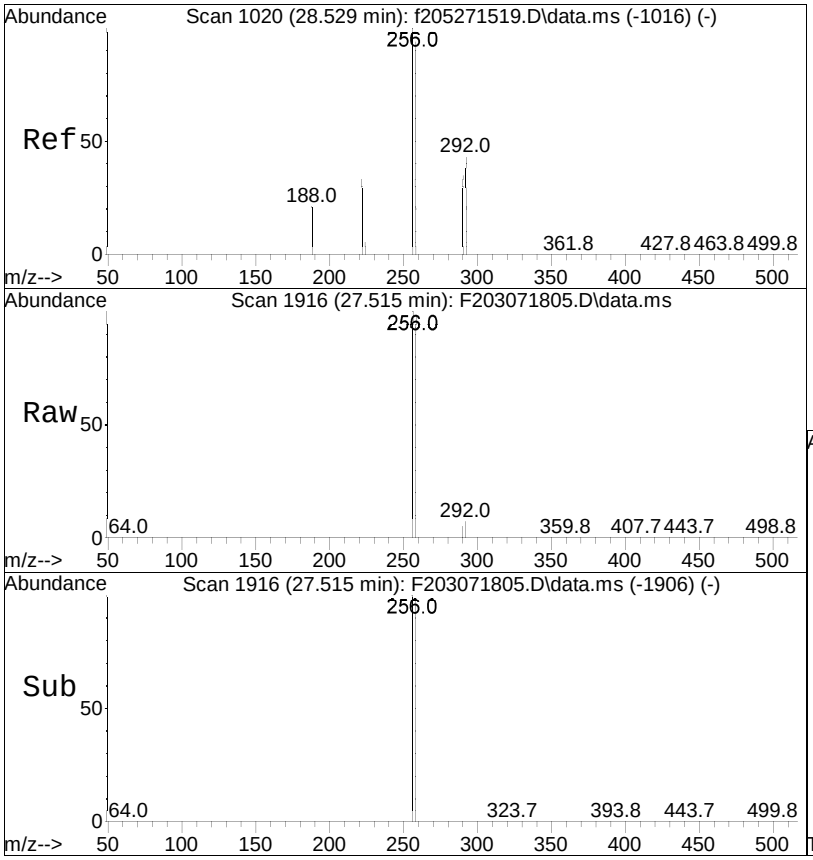


#50
Cl4-BZ#43
Concen: 84.18 ng/mL
RT: 27.465 min Scan# 1913
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 57917

Ion	Ratio	Lower	Upper
292	100		
290	76.4	60.5	90.7

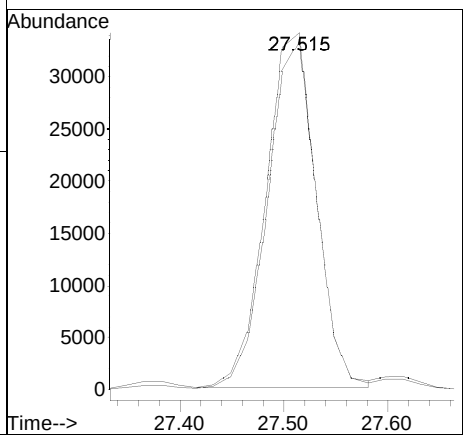


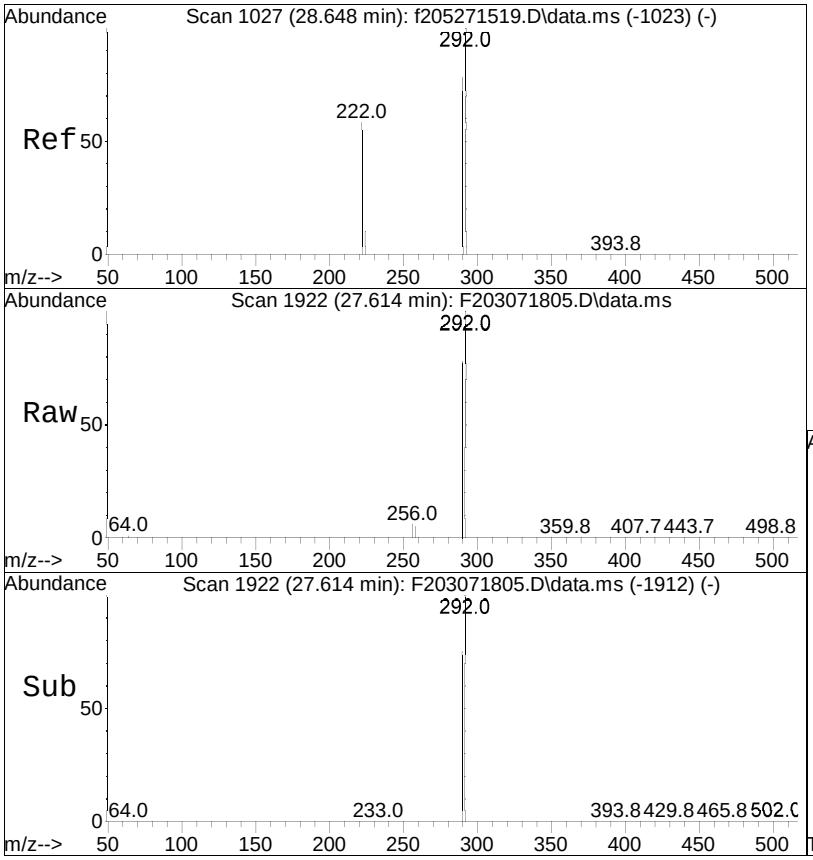


#51
Cl3-BZ#36
Concen: 88.66 ng/mL
RT: 27.515 min Scan# 1916
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 114587

Ion	Ratio	Lower	Upper
256	100		
258	95.0	77.4	116.0

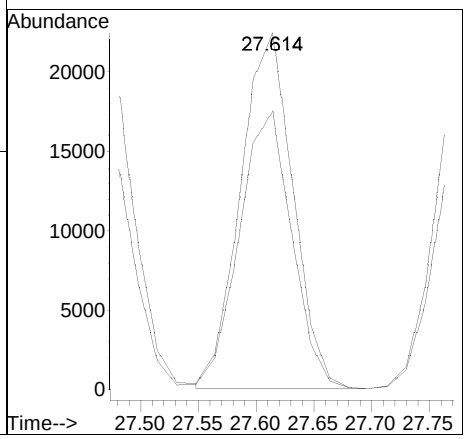


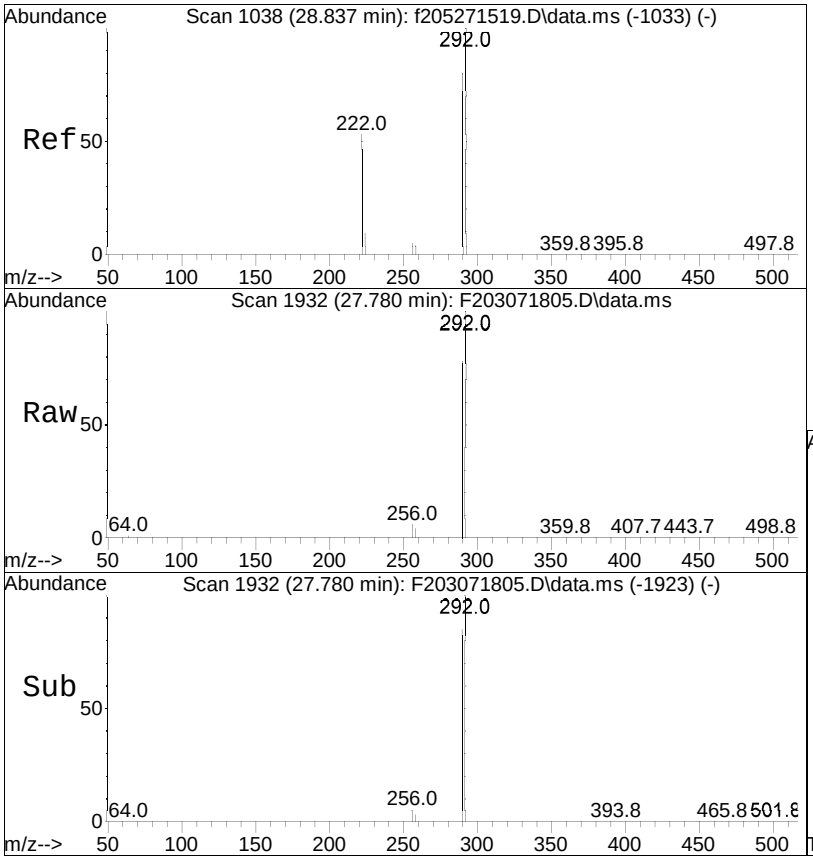


#52
Cl4-BZ#52
Concen: 83.56 ng/mL
RT: 27.614 min Scan# 1922
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 70784

Ion	Ratio	Lower	Upper
292	100		
290	78.1	60.8	91.2

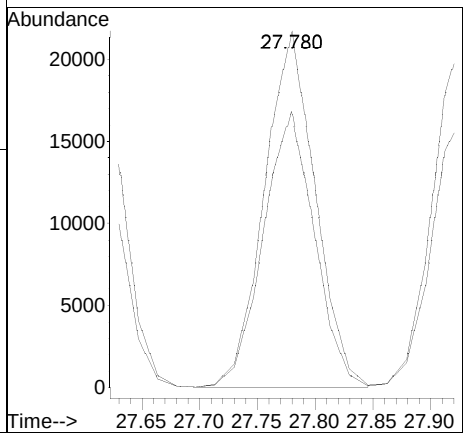


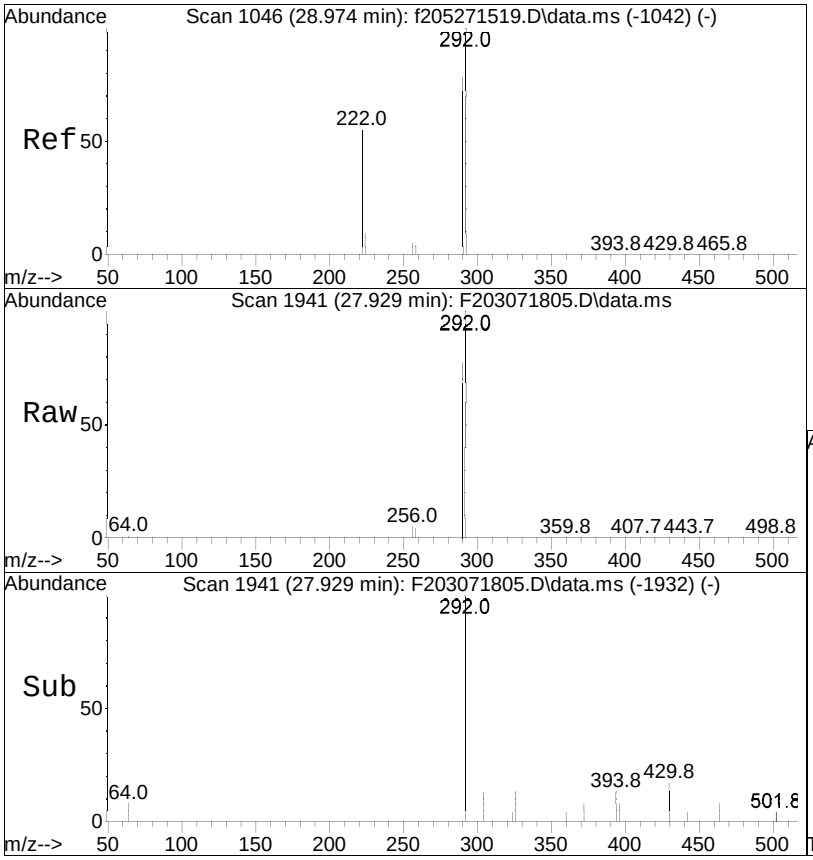


#53
Cl4-BZ#48
Concen: 87.43 ng/mL
RT: 27.780 min Scan# 1932
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 65806

Ion	Ratio	Lower	Upper
292	100		
290	77.5	61.0	91.6

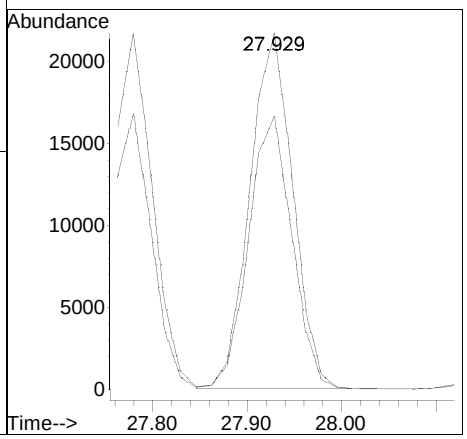


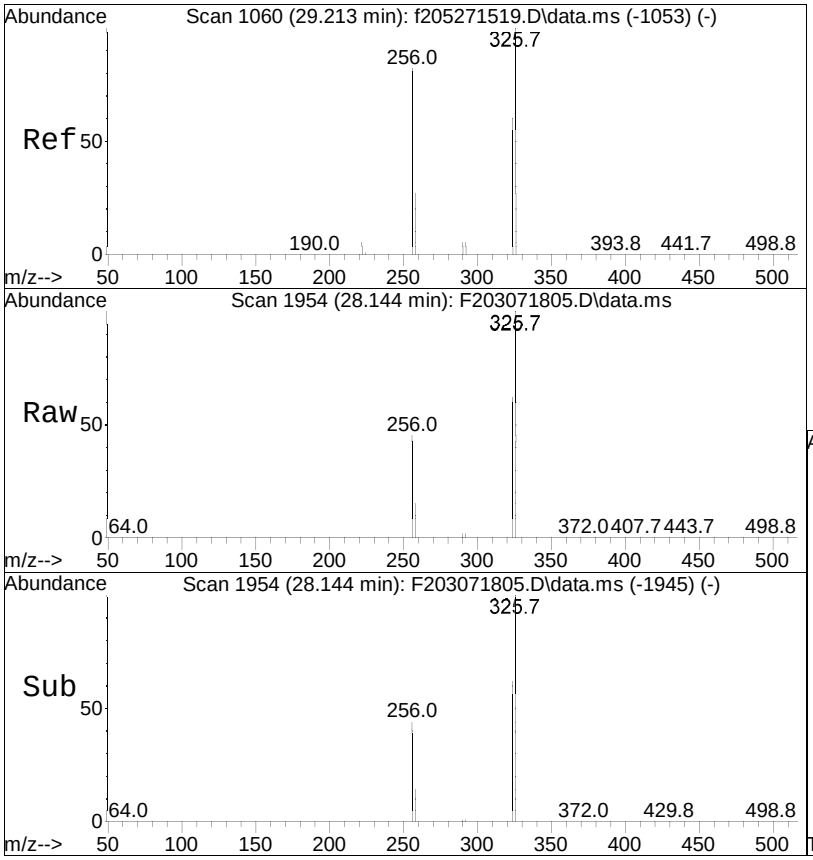


#54
Cl4-BZ#49
Concen: 84.35 ng/mL
RT: 27.929 min Scan# 1941
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 68293

Ion	Ratio	Lower	Upper
292	100		
290	76.6	62.1	93.1

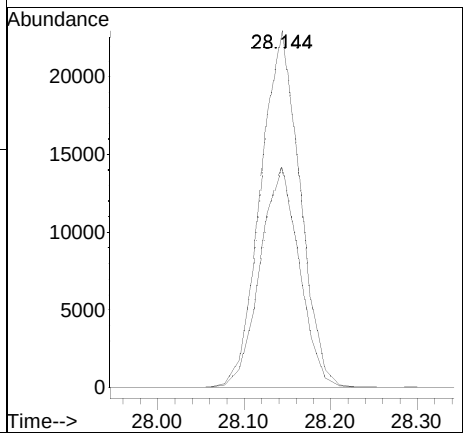


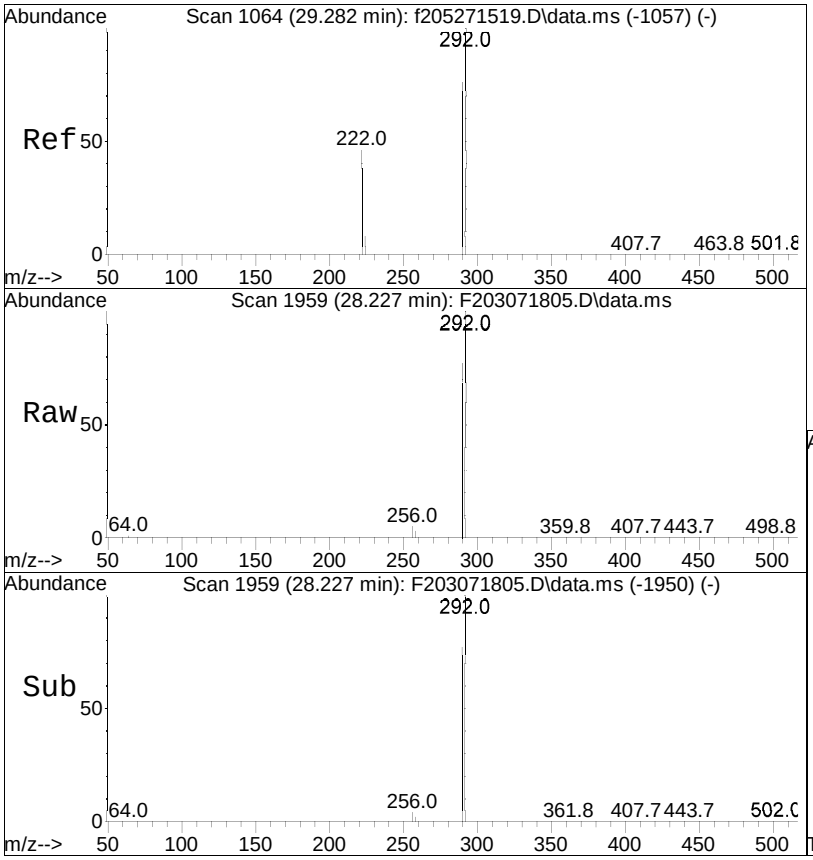


#55
Cl5-BZ#104-RTW
Concen: 85.97 ng/mL
RT: 28.144 min Scan# 1954
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 71873

Ion	Ratio	Lower	Upper
326	100		
324	61.9	48.4	72.6

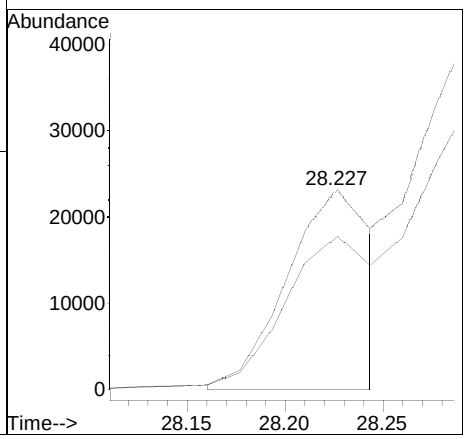


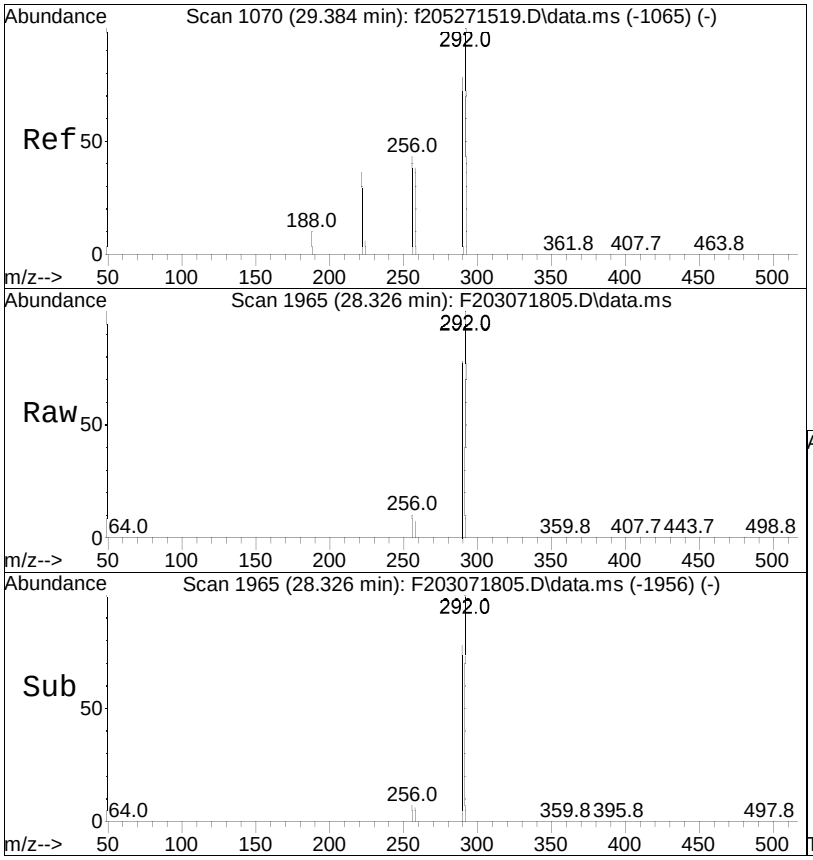


#56
Cl4-BZ#47
Concen: 80.88 ng/mL M4
RT: 28.227 min Scan# 1959
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 70621

Ion	Ratio	Lower	Upper
292	100		
290	0.0	63.0	94.4#

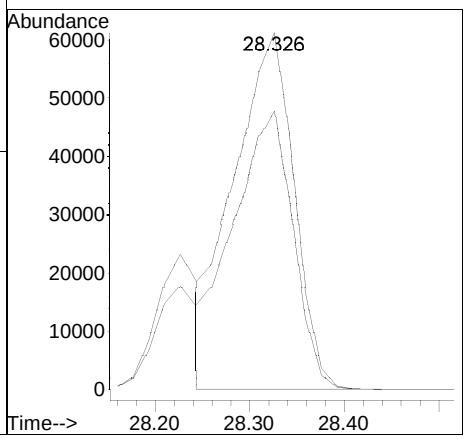


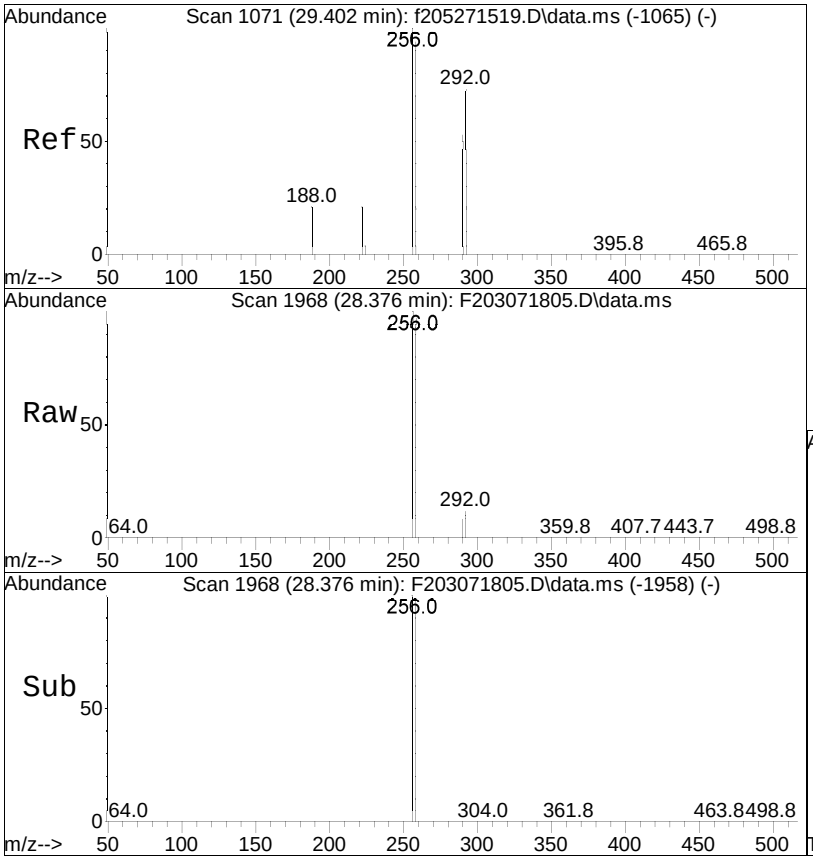


#57
Cl4-BZ#65/#75/#62
Concen: 264.91 ng/mL
RT: 28.326 min Scan# 1965
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 271735

Ion	Ratio	Lower	Upper
292	100		
290	77.9	63.0	94.6

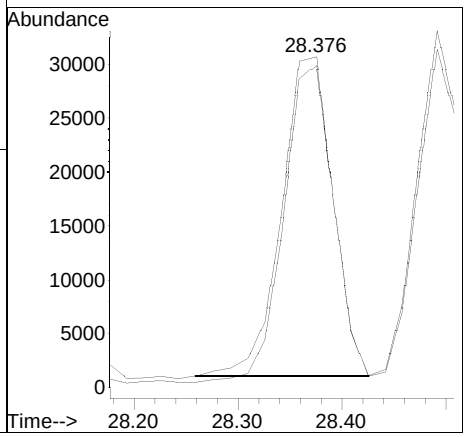


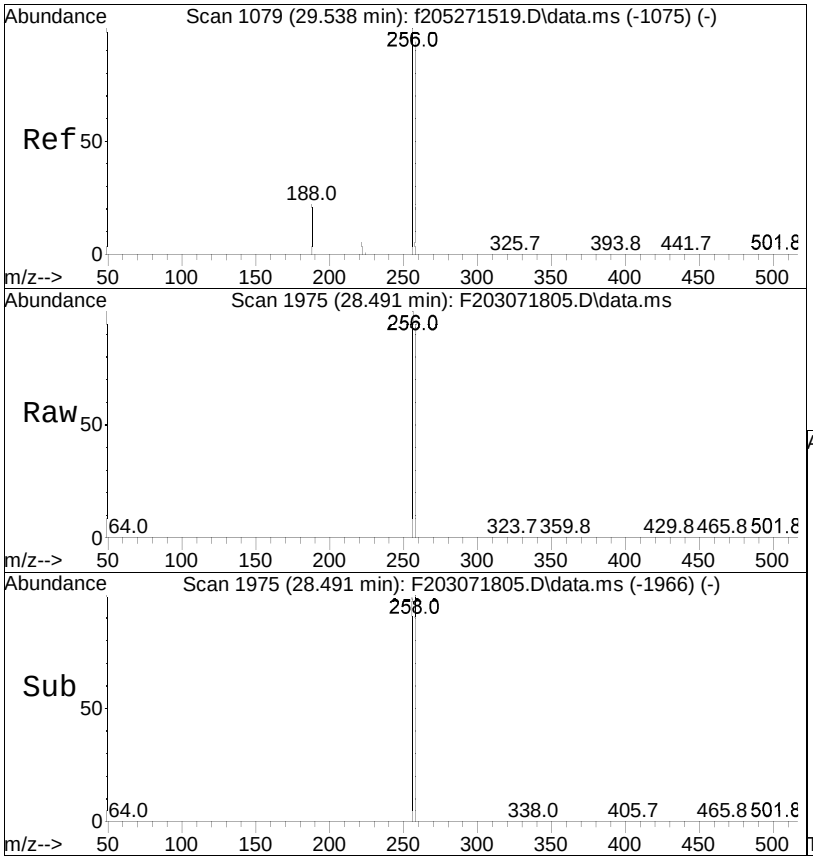


#58
Cl3-BZ#39
Concen: 85.16 ng/mL
RT: 28.376 min Scan# 1968
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 101445

Ion	Ratio	Lower	Upper
256	100		
258	96.9	76.2	114.2

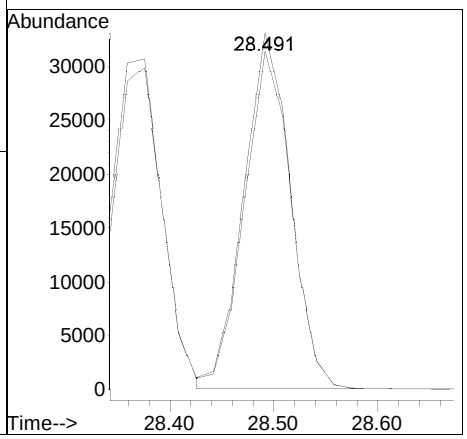


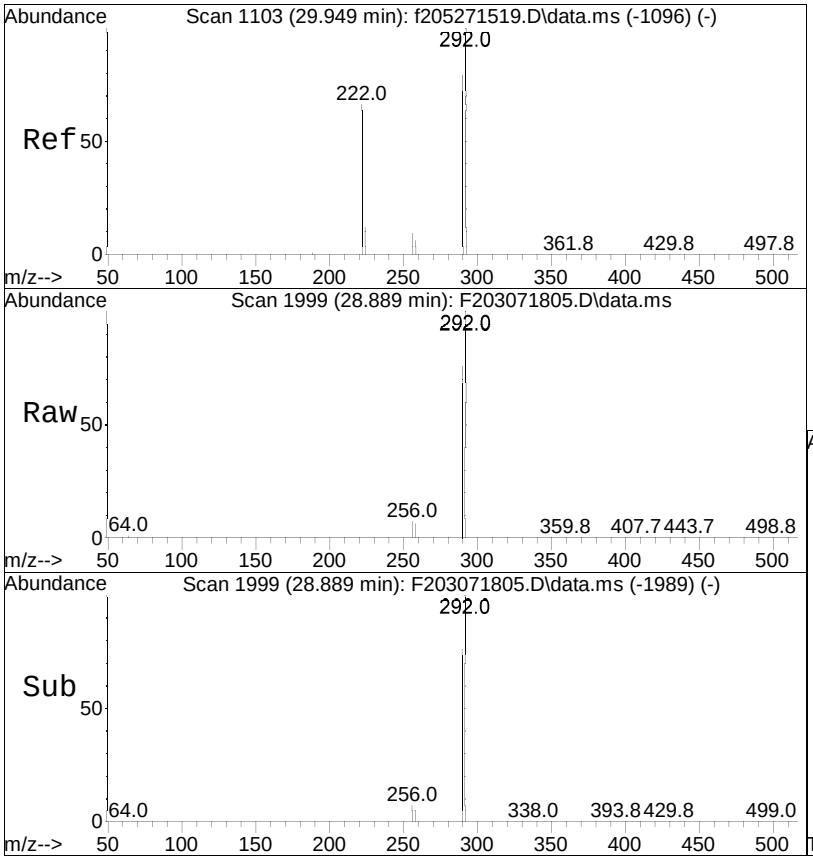


#59
Cl3-BZ#38
Concen: 89.38 ng/mL
RT: 28.491 min Scan# 1975
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 102682

Ion	Ratio	Lower	Upper
256	100		
258	95.1	74.9	112.3

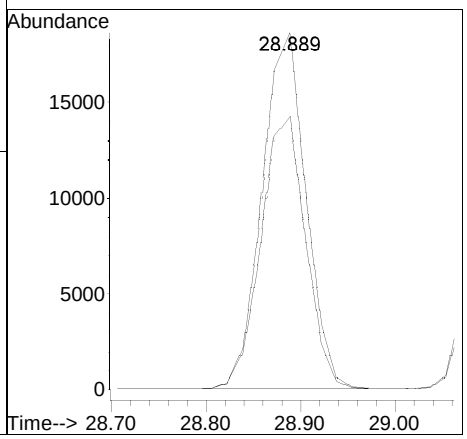


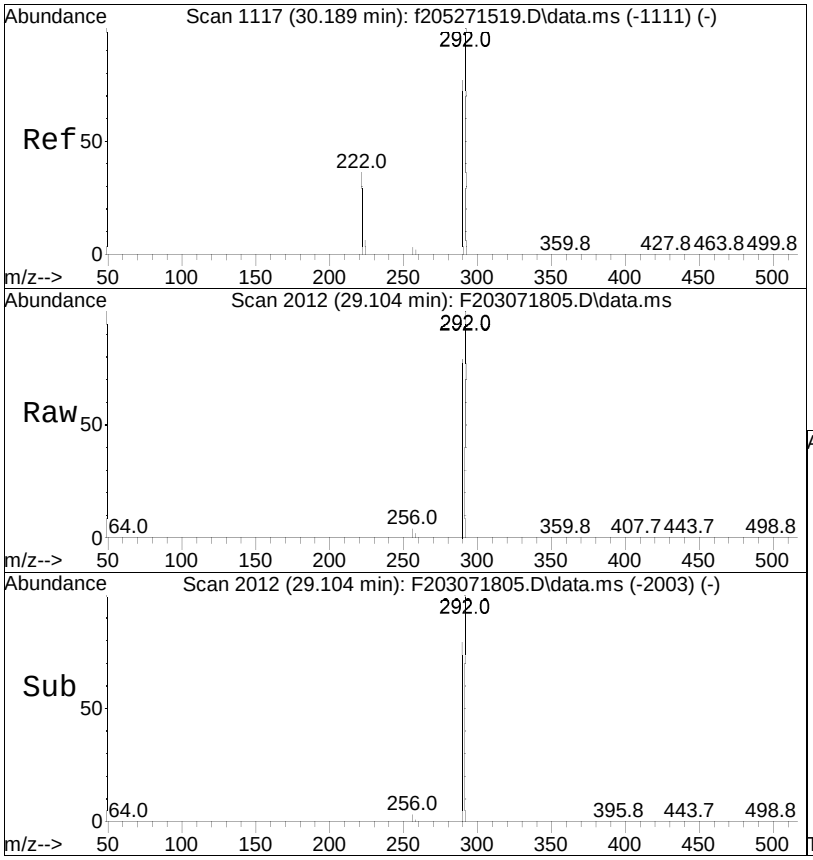


#60
Cl4-BZ#44
Concen: 84.89 ng/mL
RT: 28.889 min Scan# 1999
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 59832

Ion	Ratio	Lower	Upper
292	100		
290	76.4	63.1	94.7

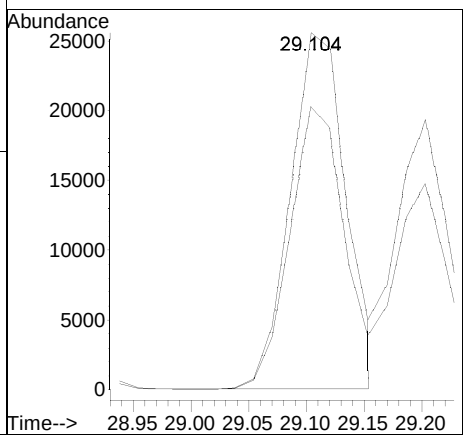


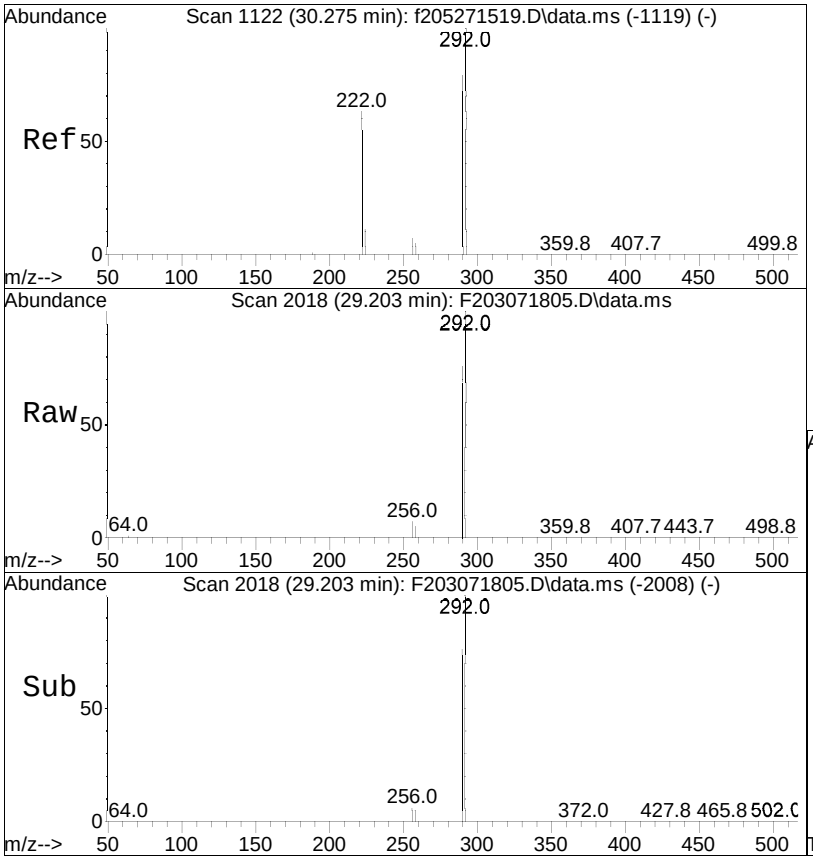


#61
Cl4-BZ#59
Concen: 82.93 ng/mL
RT: 29.104 min Scan# 2012
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 85715

Ion	Ratio	Lower	Upper
292	100		
290	78.4	64.0	96.0

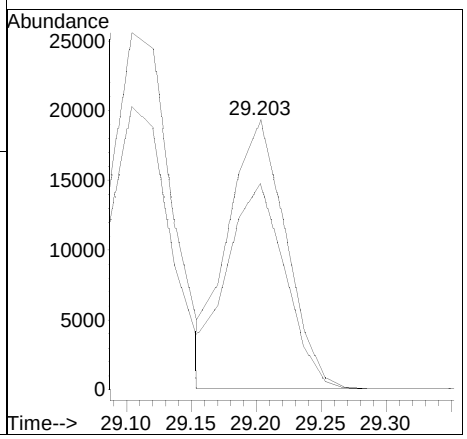


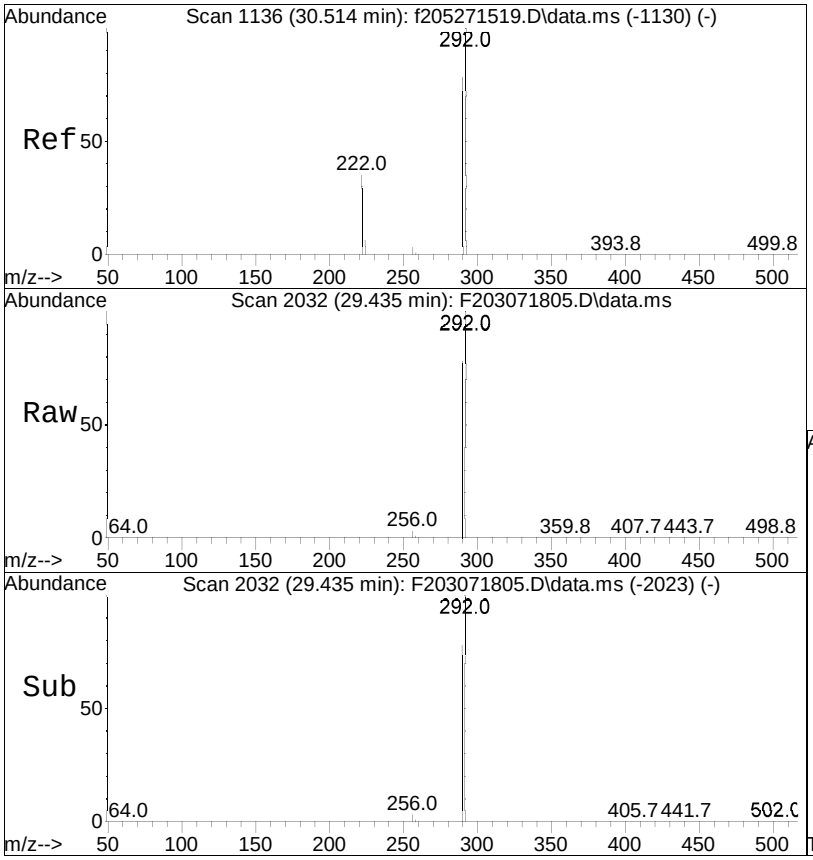


#62
Cl4-BZ#42
Concen: 88.52 ng/mL
RT: 29.203 min Scan# 2018
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 59272

Ion	Ratio	Lower	Upper
292	100		
290	76.4	64.3	96.5

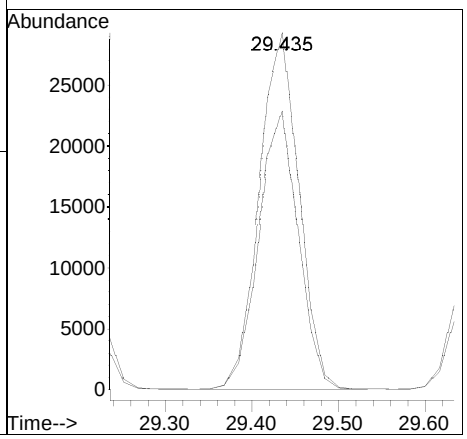


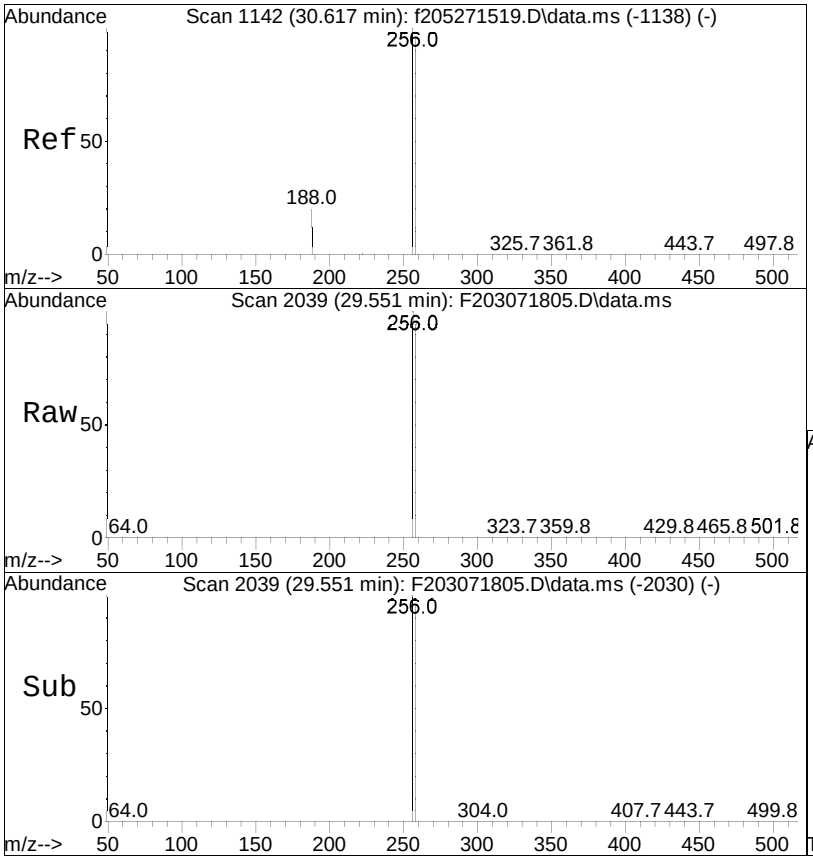


#63
Cl4-BZ#71
Concen: 85.33 ng/mL
RT: 29.435 min Scan# 2032
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 92621

Ion	Ratio	Lower	Upper
292	100		
290	77.9	62.8	94.2

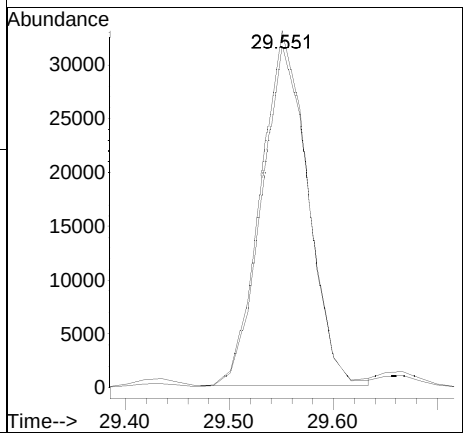


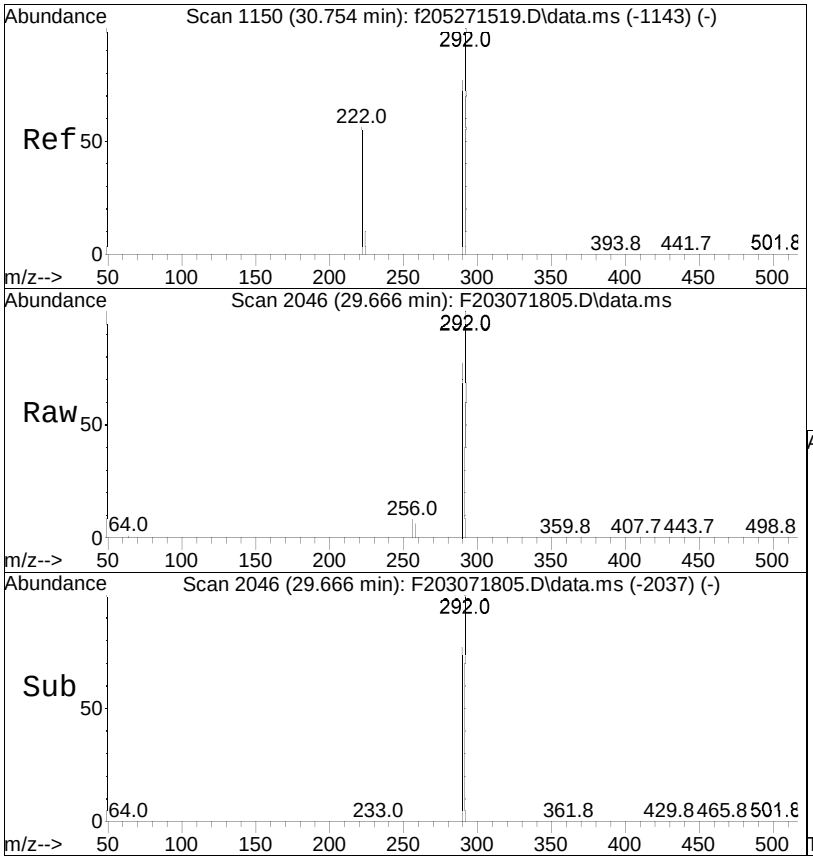


#64
Cl3-BZ#35
Concen: 86.27 ng/mL
RT: 29.551 min Scan# 2039
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 103651

Ion	Ratio	Lower	Upper
256	100		
258	96.2	77.2	115.8

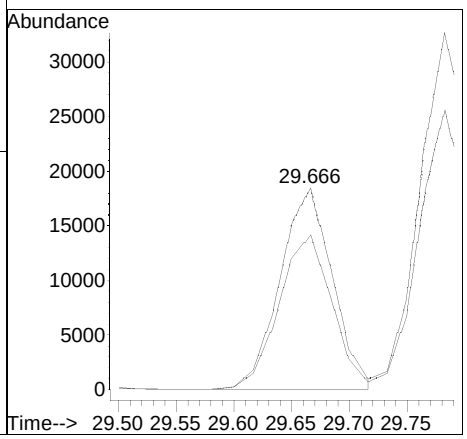


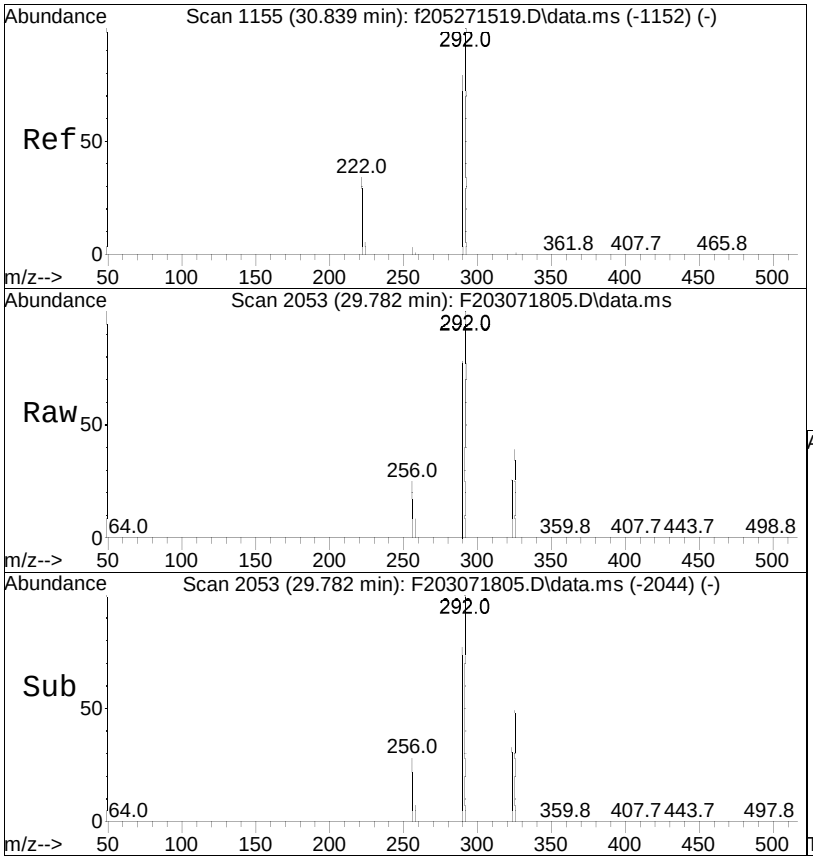


#65
Cl4-BZ#41
Concen: 87.73 ng/mL
RT: 29.666 min Scan# 2046
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 57827

Ion	Ratio	Lower	Upper
292	100		
290	77.7	63.0	94.4

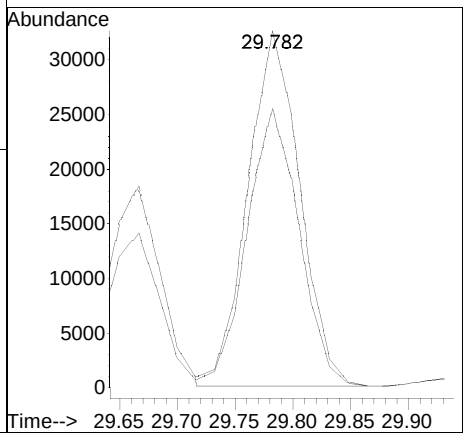


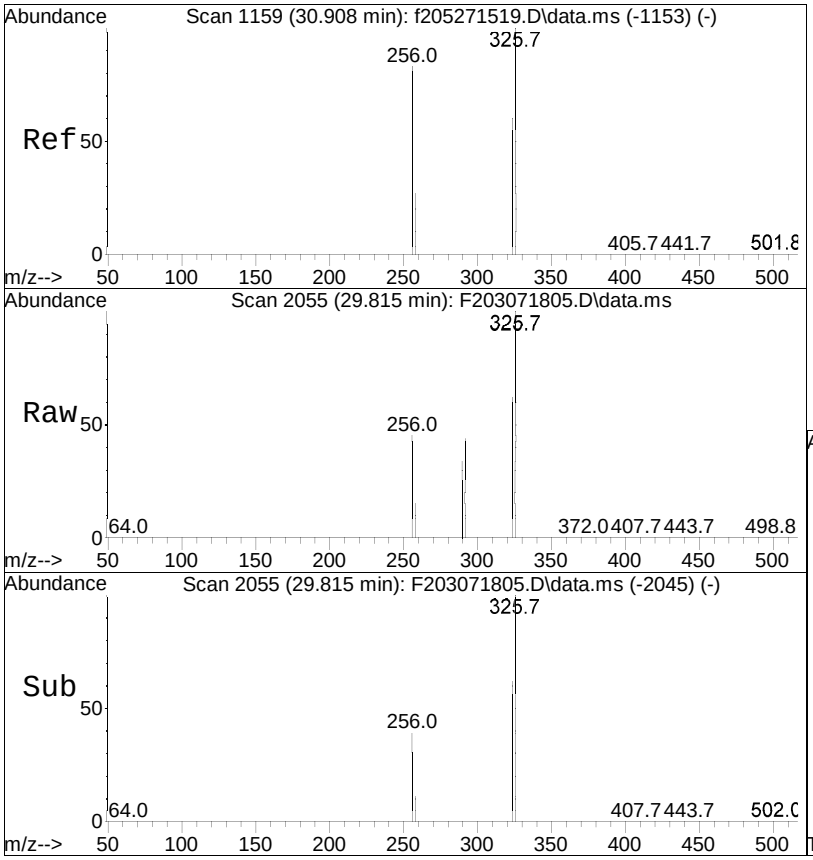


#66
Cl4-BZ#72
Concen: 89.14 ng/mL
RT: 29.782 min Scan# 2053
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 101259

Ion	Ratio	Lower	Upper
292	100		
290	78.6	62.6	93.8

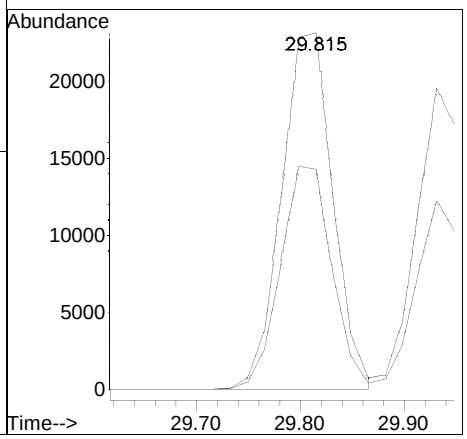


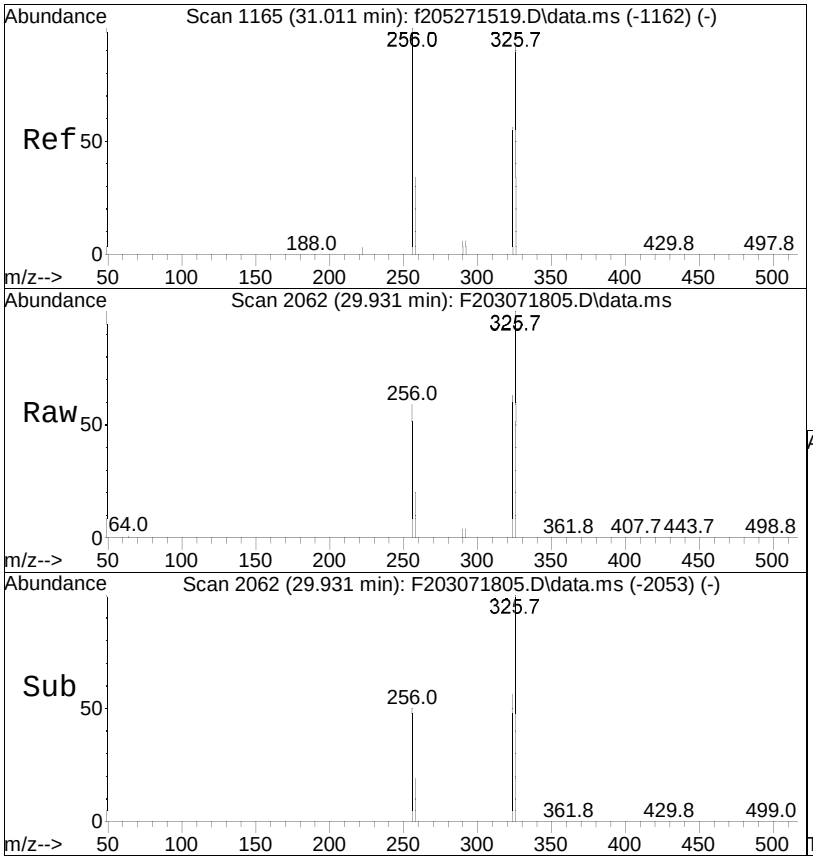


#67
Cl5-BZ#96
Concen: 87.56 ng/mL
RT: 29.815 min Scan# 2055
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 79151

Ion	Ratio	Lower	Upper
326	100		
324	62.7	47.2	70.8

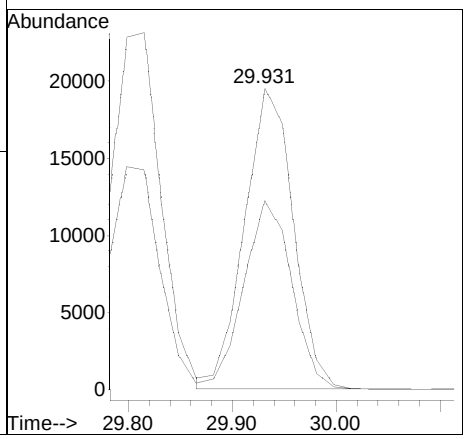


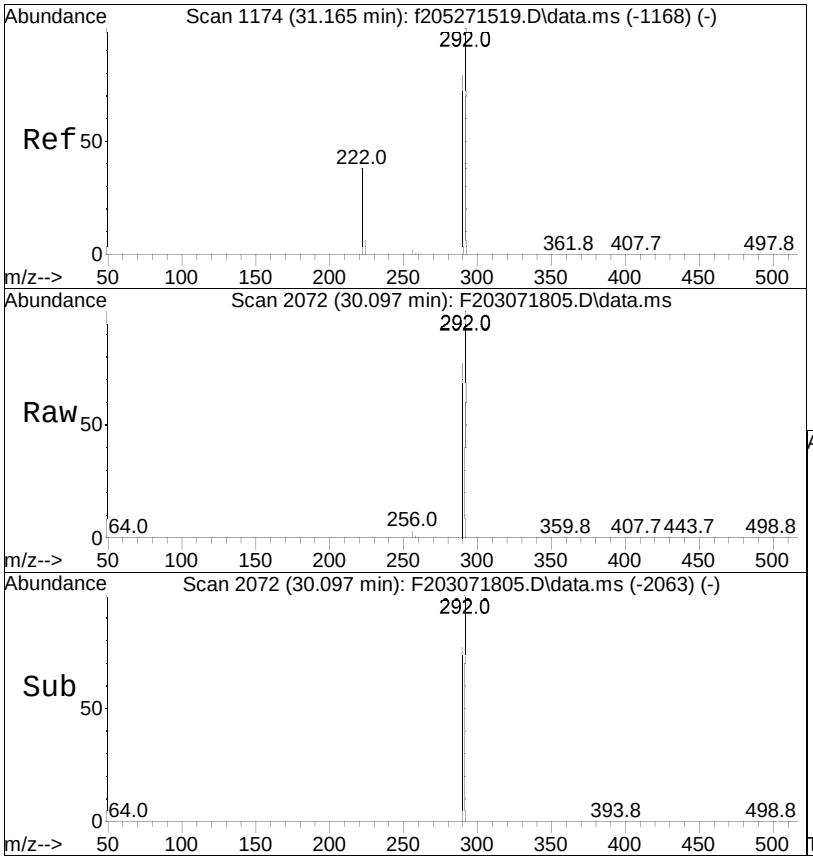


#68
Cl5-BZ#103
Concen: 90.45 ng/mL
RT: 29.931 min Scan# 2062
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 63208

Ion	Ratio	Lower	Upper
326	100		
324	61.9	51.6	77.4

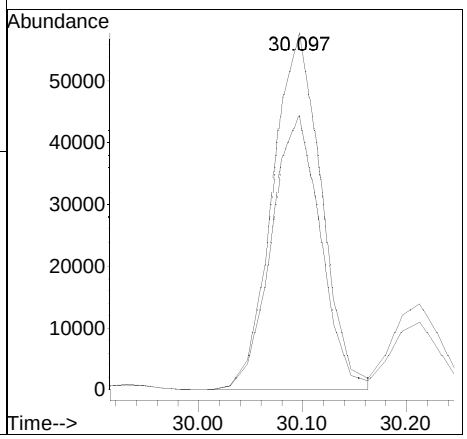


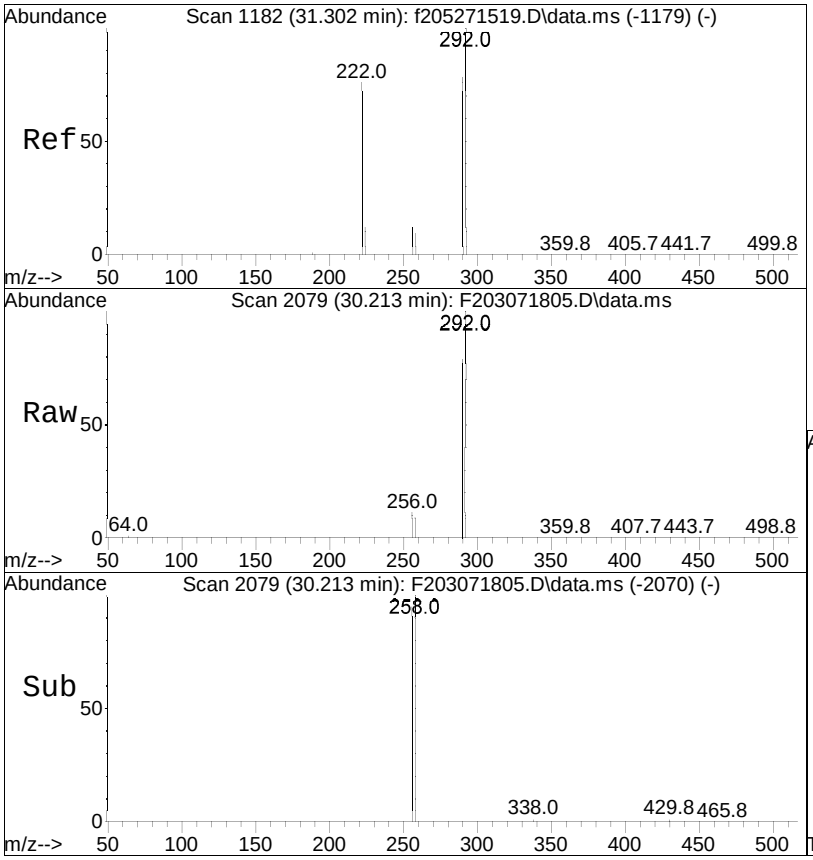


#69
Cl4-BZ#68/#64
Concen: 178.12 ng/mL
RT: 30.097 min Scan# 2072
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 187365

Ion	Ratio	Lower	Upper
292	100		
290	77.6	61.7	92.5

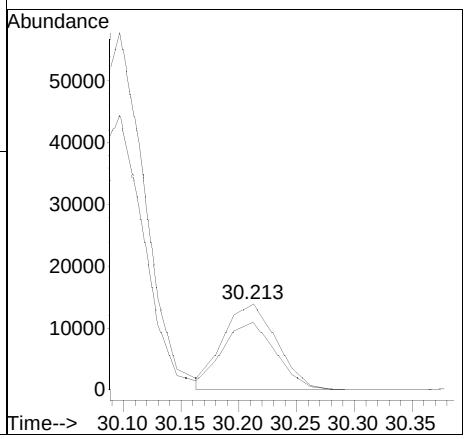


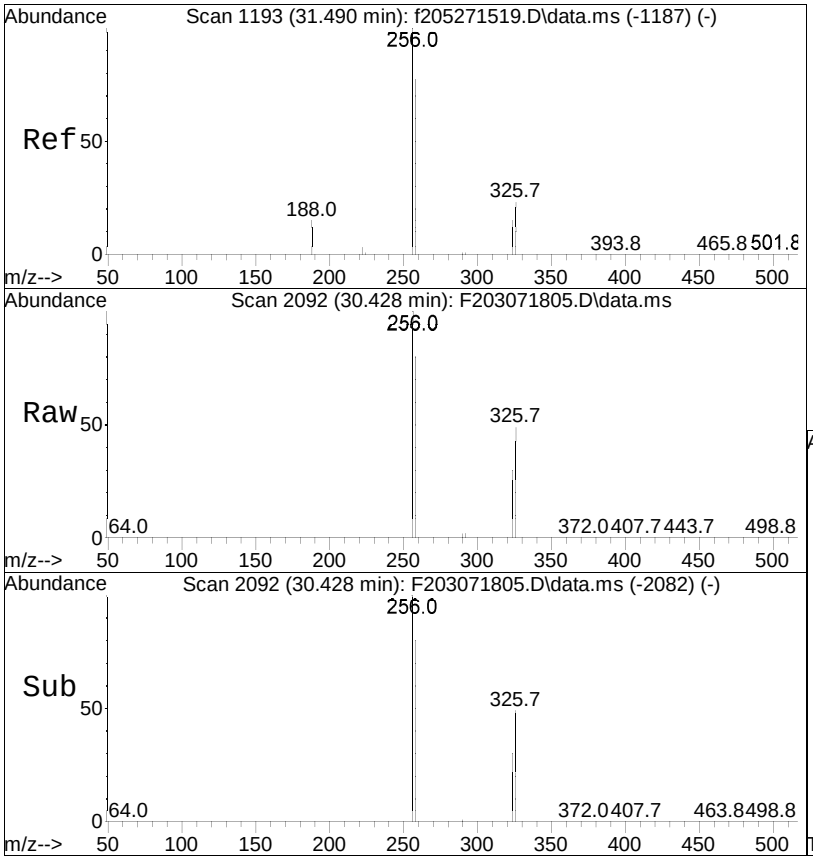


#70
Cl4-BZ#40
Concen: 86.66 ng/mL
RT: 30.213 min Scan# 2079
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 44392

Ion	Ratio	Lower	Upper
292	100		
290	77.8	63.8	95.6

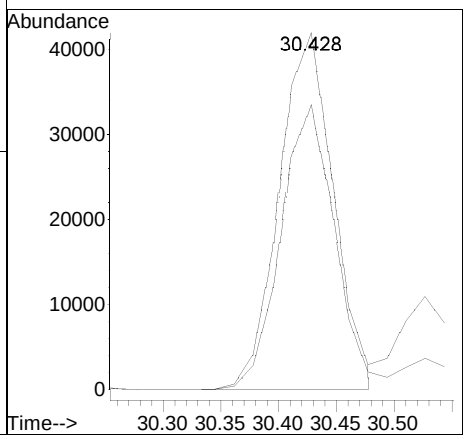


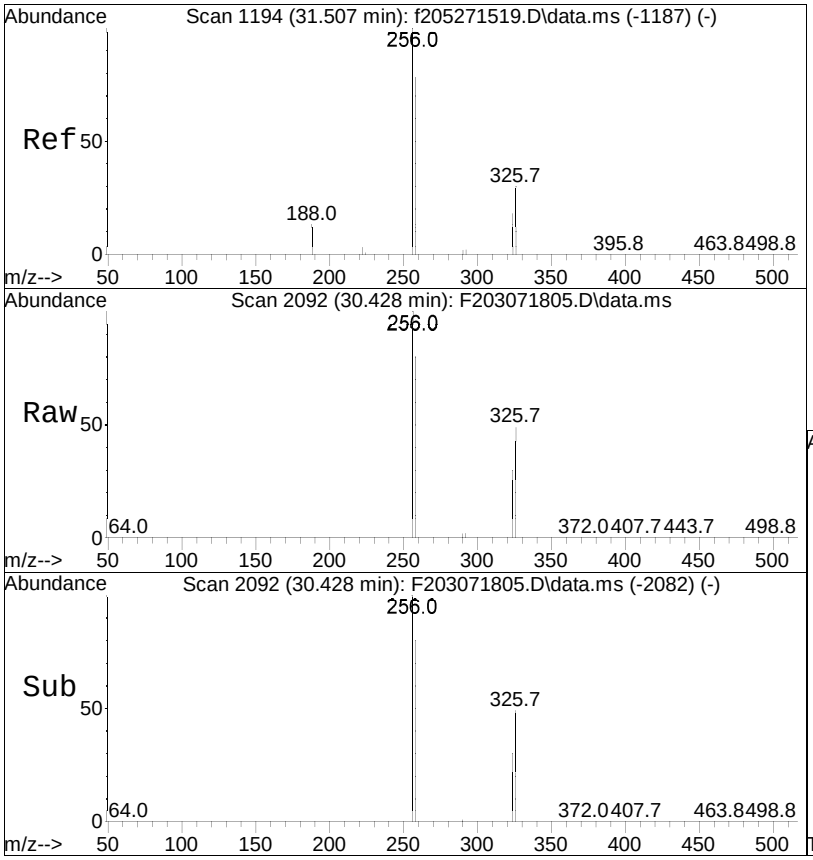


#71
Cl3-BZ#37-RTW
Concen: 85.79 ng/mL
RT: 30.428 min Scan# 2092
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:256 Resp: 137040

Ion	Ratio	Lower	Upper
256	100		
258	79.7	63.5	95.3

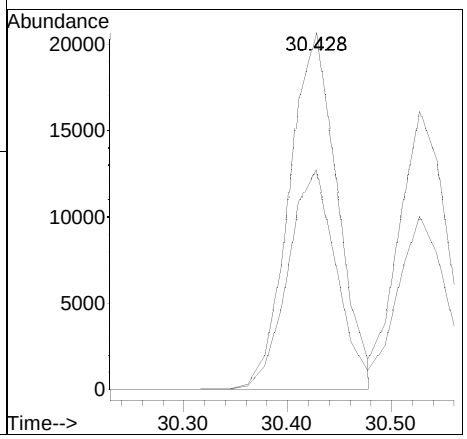


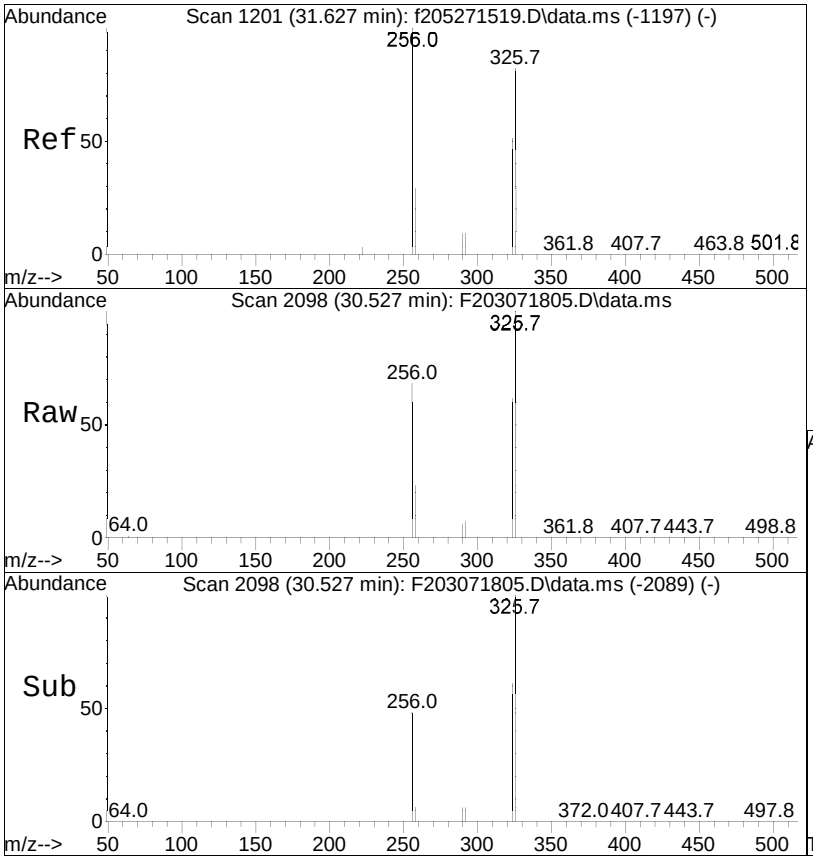


#72
Cl5-BZ#100
Concen: 88.38 ng/mL
RT: 30.428 min Scan# 2092
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 66552

Ion	Ratio	Lower	Upper
326	100		
324	61.8	48.6	73.0

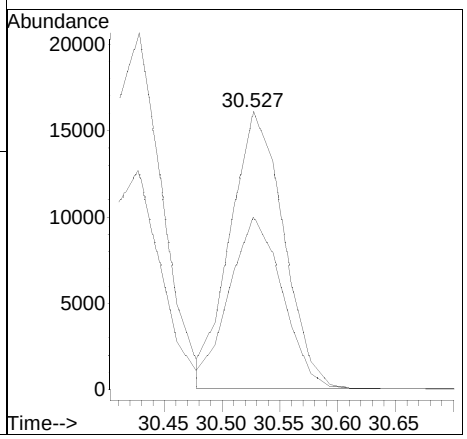


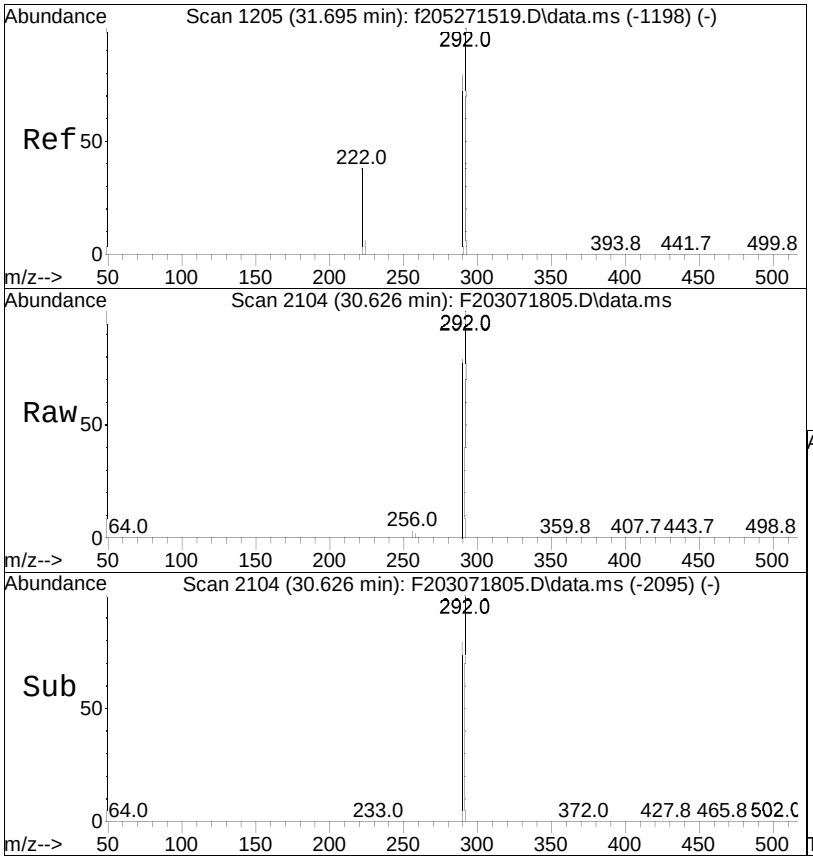


#73
Cl5-BZ#94
Concen: 91.73 ng/mL
RT: 30.527 min Scan# 2098
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 50997

Ion	Ratio	Lower	Upper
326	100		
324	61.9	49.7	74.5

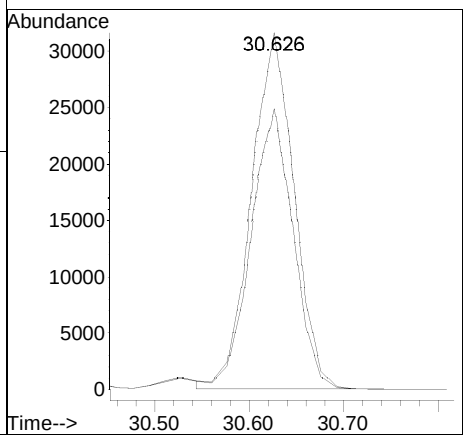


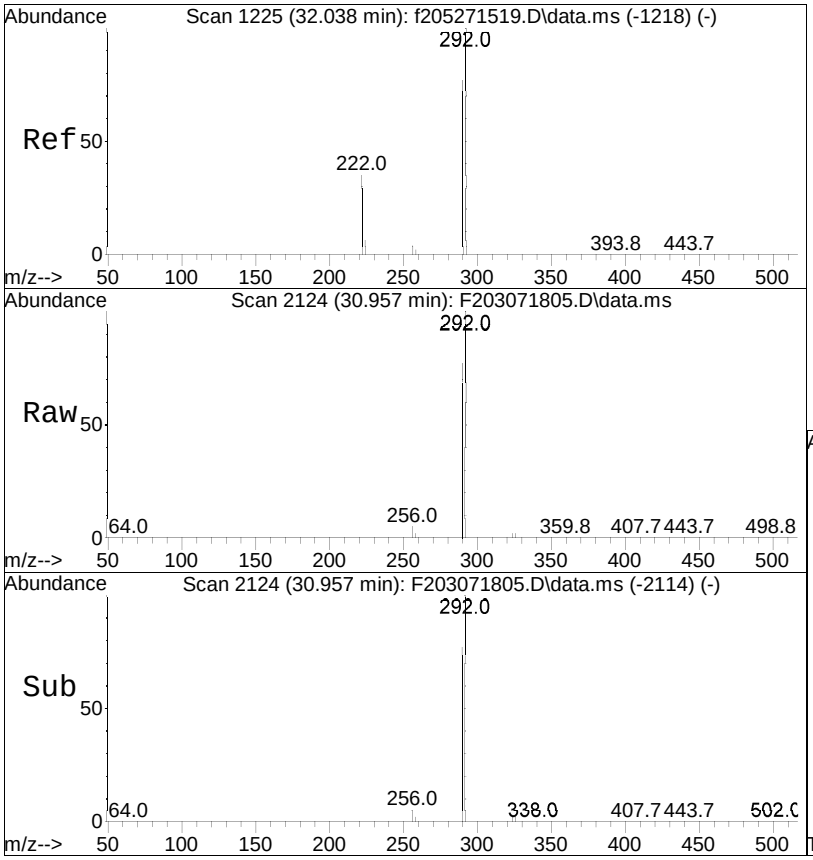


#74
Cl4-BZ#57
Concen: 86.93 ng/mL
RT: 30.626 min Scan# 2104
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 98263

Ion	Ratio	Lower	Upper
292	100		
290	78.0	63.9	95.9

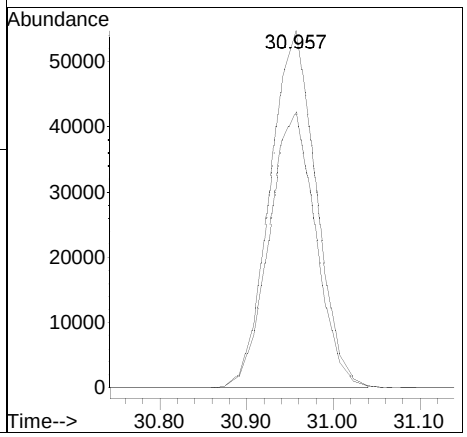


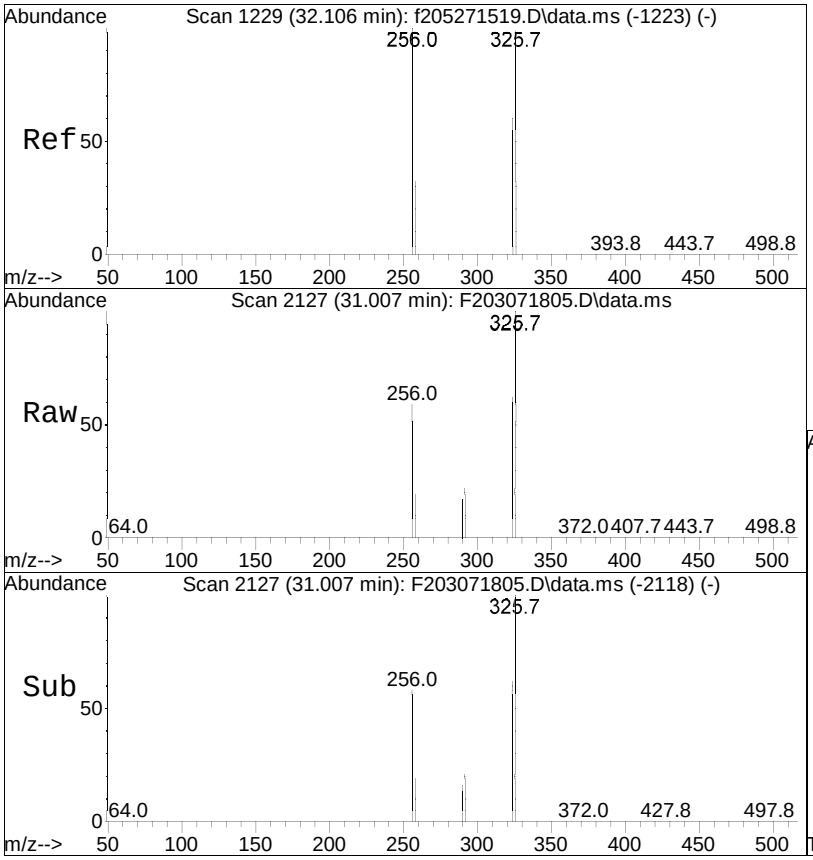


#75
Cl4-BZ#67/#58
Concen: 177.66 ng/mL
RT: 30.957 min Scan# 2124
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 202119

Ion	Ratio	Lower	Upper
292	100		
290	78.0	62.3	93.5

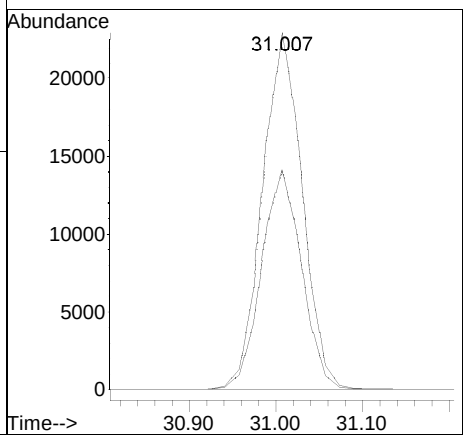


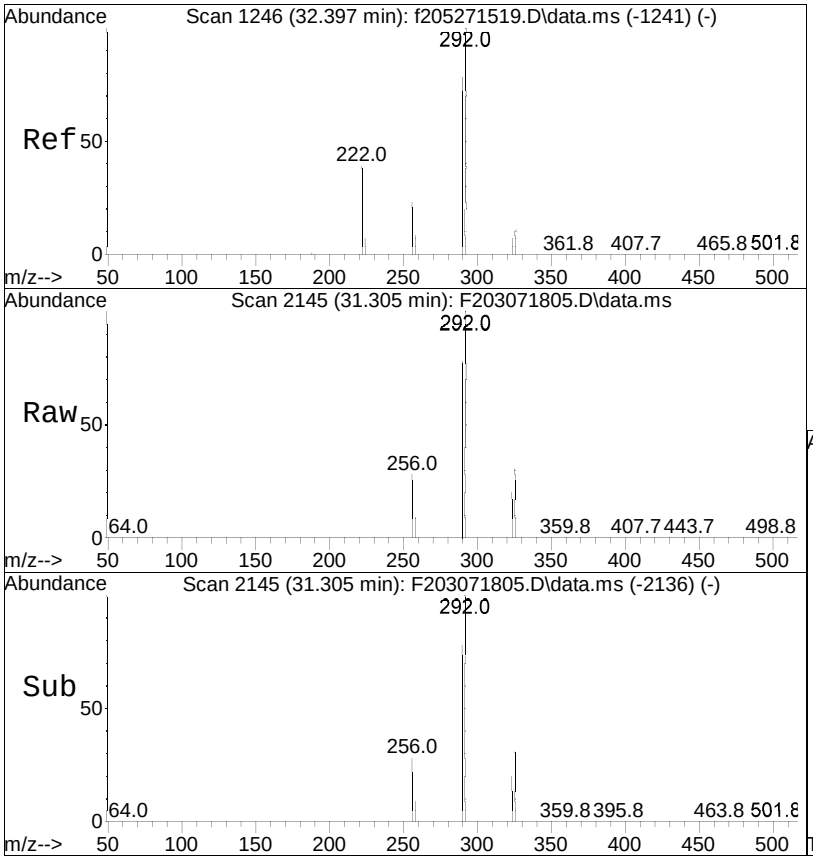


#76
Cl5-BZ#102
Concen: 90.28 ng/mL
RT: 31.007 min Scan# 2127
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 72263

Ion	Ratio	Lower	Upper
326	100		
324	62.2	49.8	74.8

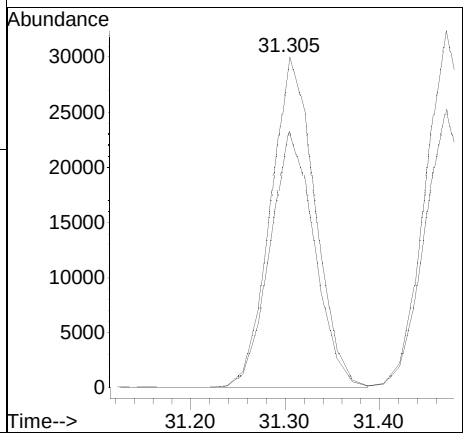


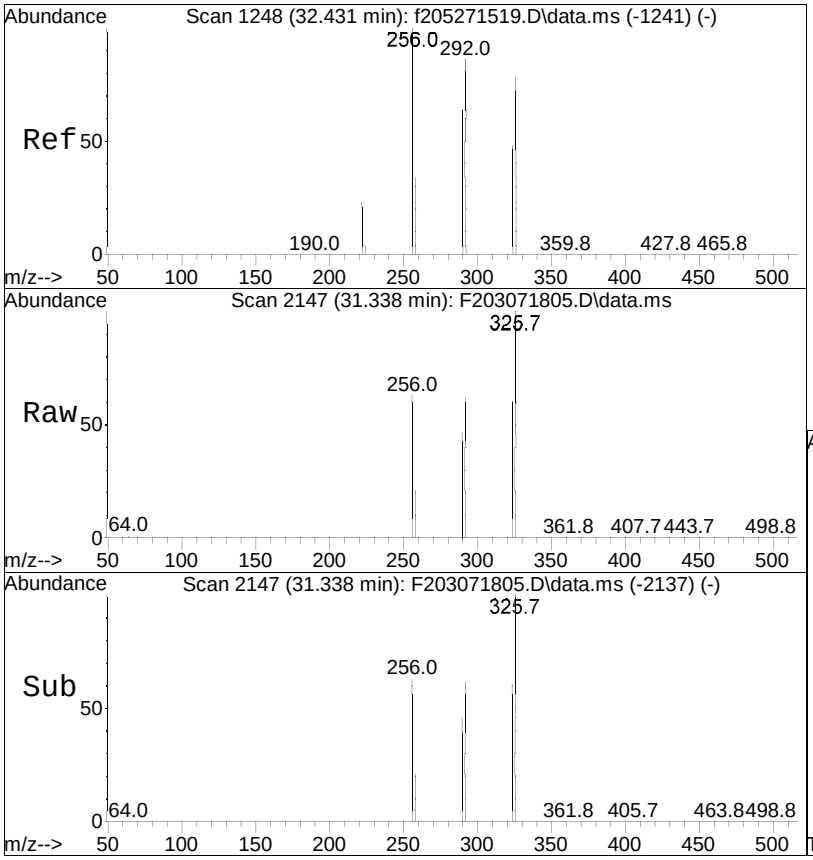


#77
Cl4-BZ#61
Concen: 87.09 ng/mL
RT: 31.305 min Scan# 2145
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 97588

Ion	Ratio	Lower	Upper
292	100		
290	77.6	61.5	92.3

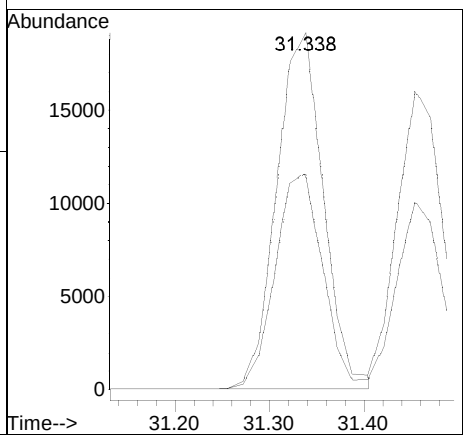


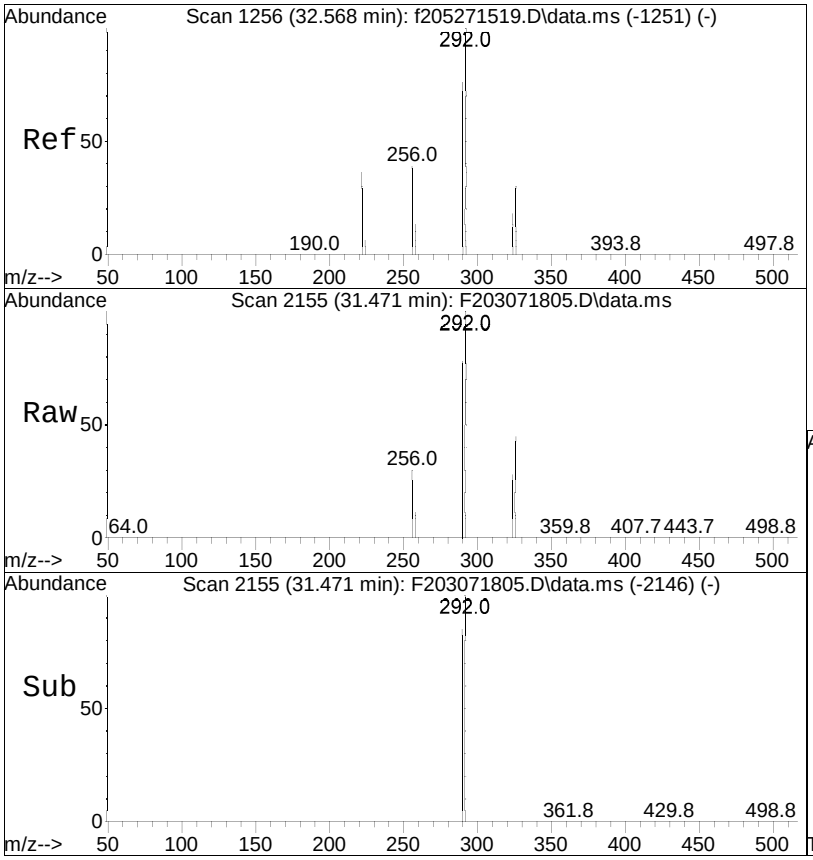


#78
Cl5-BZ#98
Concen: 89.45 ng/mL
RT: 31.338 min Scan# 2147
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 65595

Ion	Ratio	Lower	Upper
326	100		
324	61.3	50.2	75.2

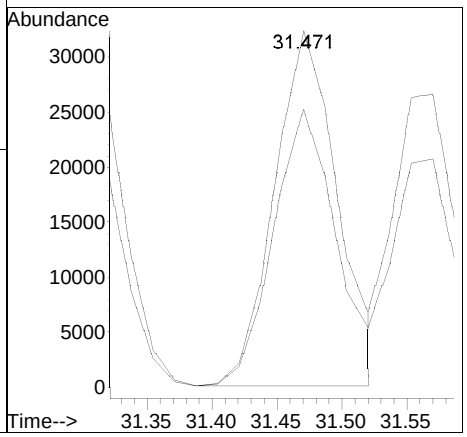


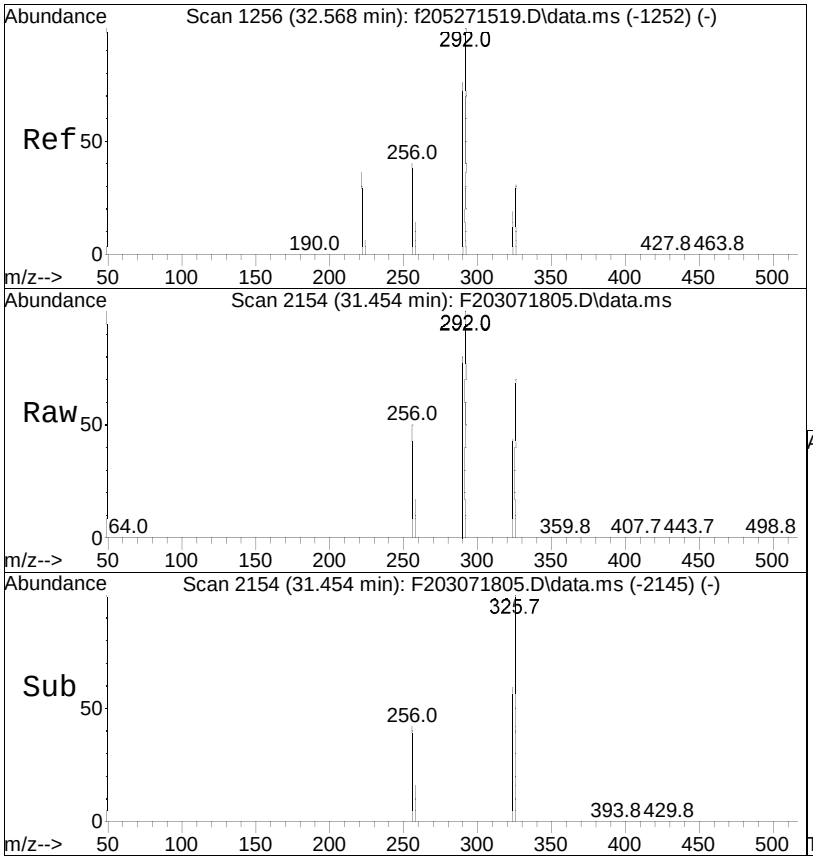


#79
Cl4-BZ#76
Concen: 91.96 ng/mL
RT: 31.471 min Scan# 2155
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 108890

Ion	Ratio	Lower	Upper
292	100		
290	78.2	62.2	93.2

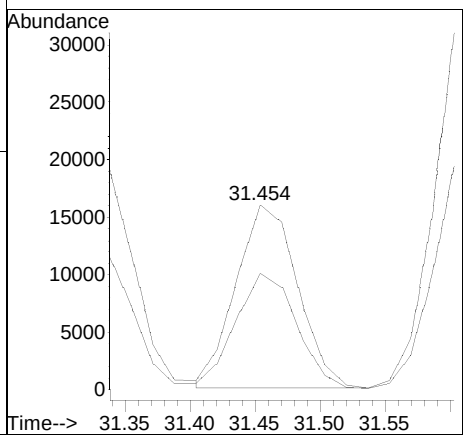


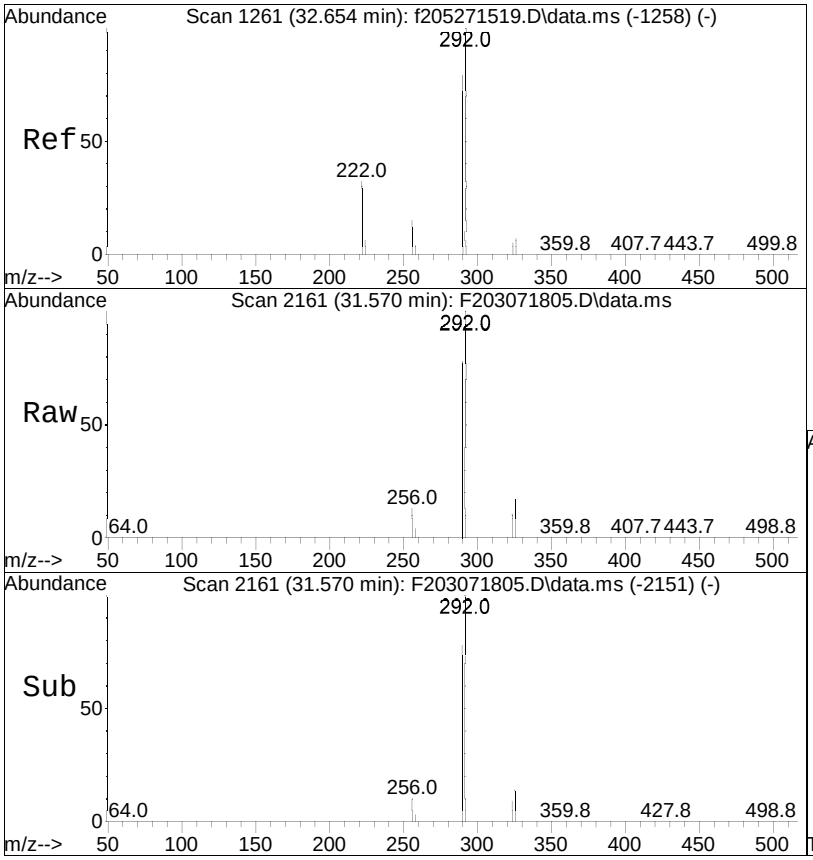


#80
Cl5-BZ#93
Concen: 88.67 ng/mL
RT: 31.454 min Scan# 2154
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 52453

Ion	Ratio	Lower	Upper
326	100		
324	62.7	49.8	74.6

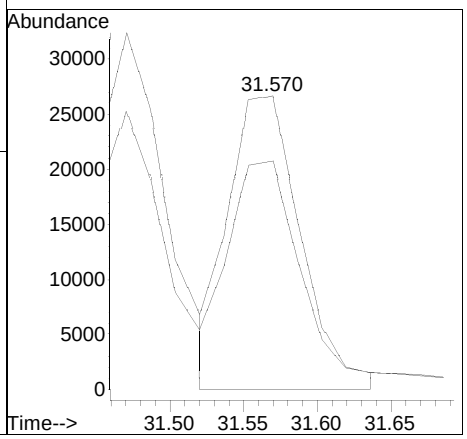


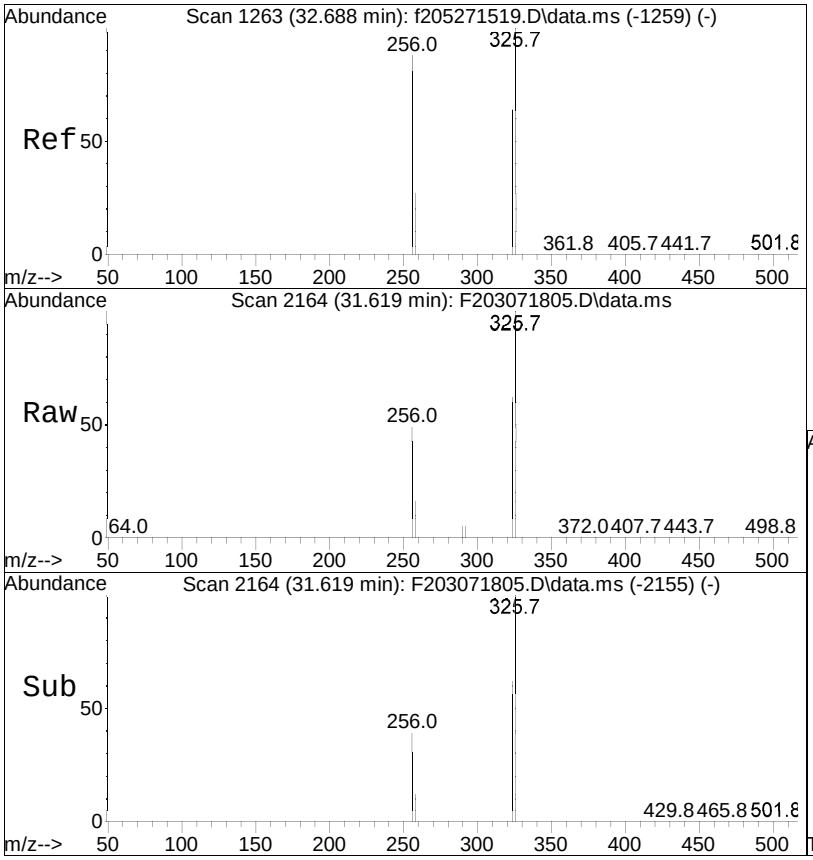


#81
Cl4-BZ#63
Concen: 85.21 ng/mL M4
RT: 31.570 min Scan# 2161
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 90521

Ion	Ratio	Lower	Upper
292	100		
290	78.0	61.7	92.5

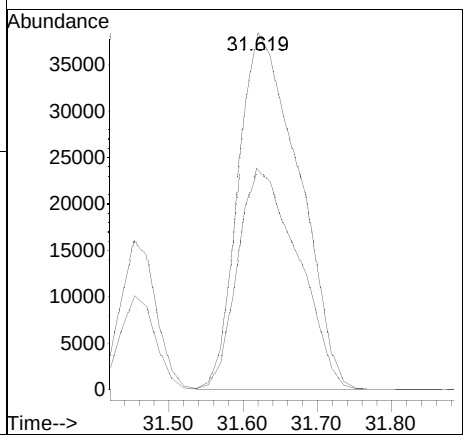


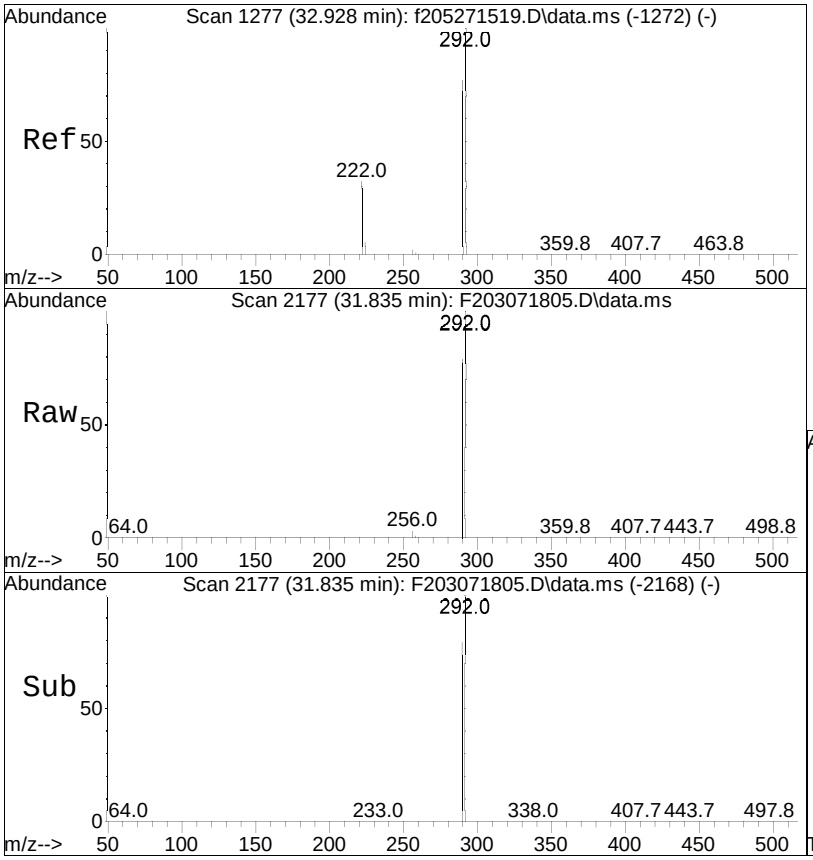


#82
Cl5-BZ#121/#95/#88
Concen: 275.47 ng/mL
RT: 31.619 min Scan# 2164
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 216265

Ion	Ratio	Lower	Upper
326	100		
324	61.6	49.4	74.2

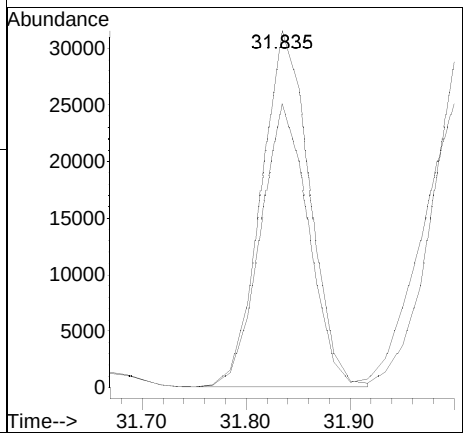


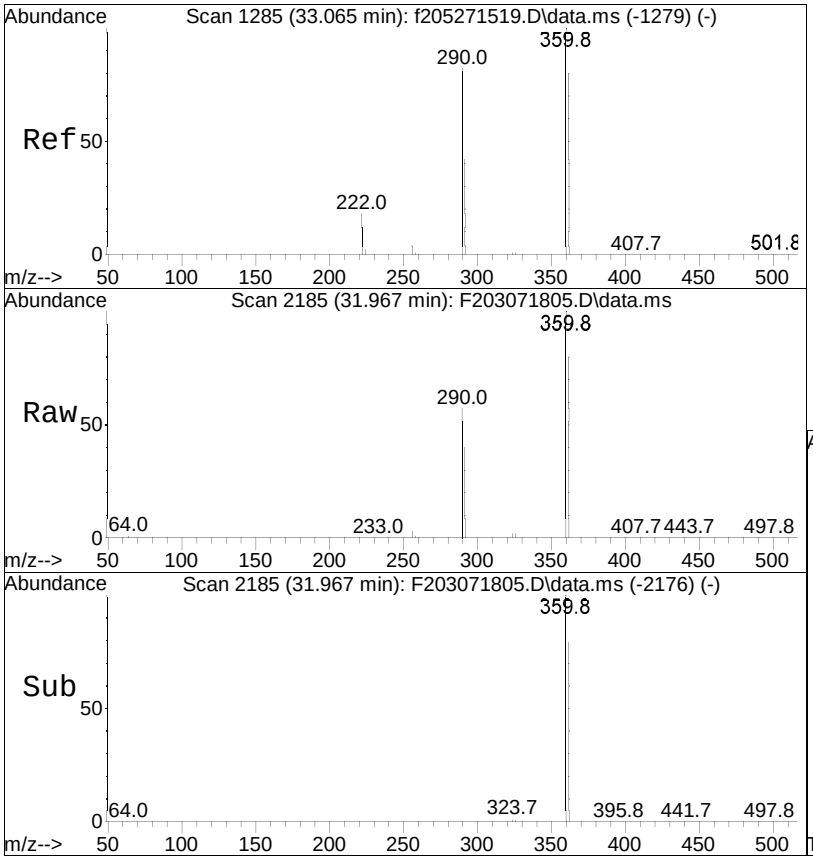


#83
Cl4-BZ#74
Concen: 86.83 ng/mL
RT: 31.835 min Scan# 2177
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 102025

Ion	Ratio	Lower	Upper
292	100		
290	79.5	63.6	95.4

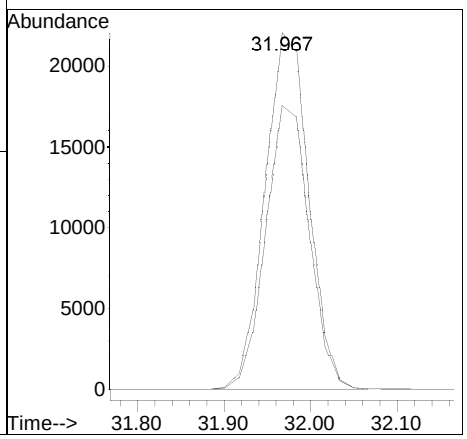


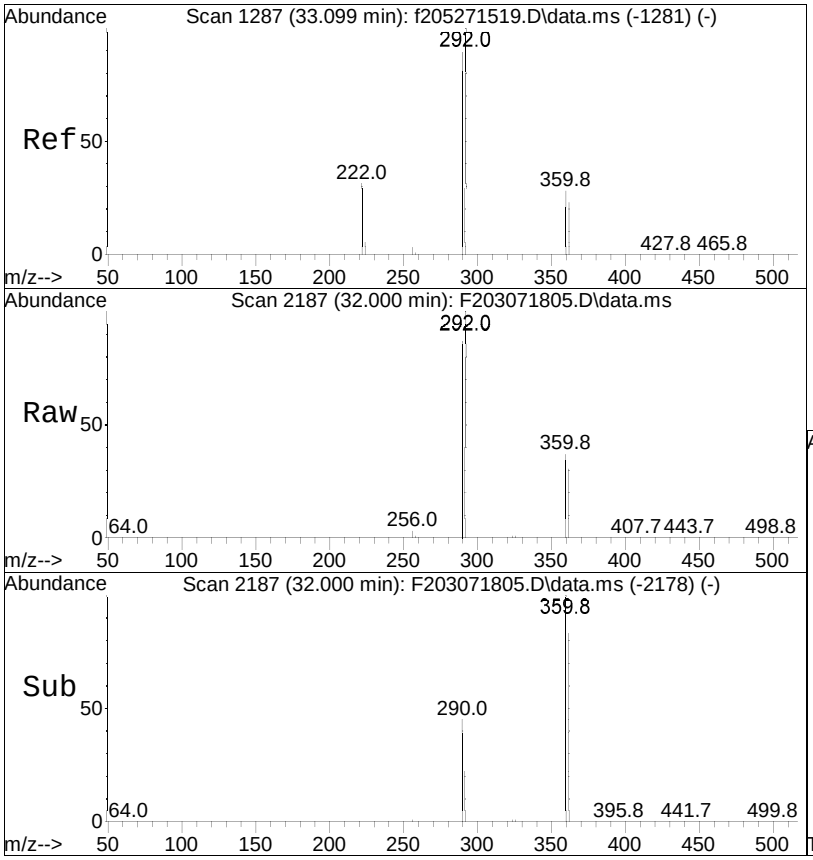


#84
Cl6-BZ#155-RTW
Concen: 88.47 ng/mL
RT: 31.967 min Scan# 2185
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 76991

Ion	Ratio	Lower	Upper
360	100		
362	79.4	63.7	95.5

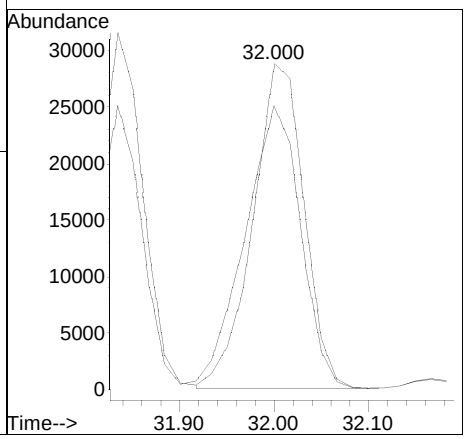


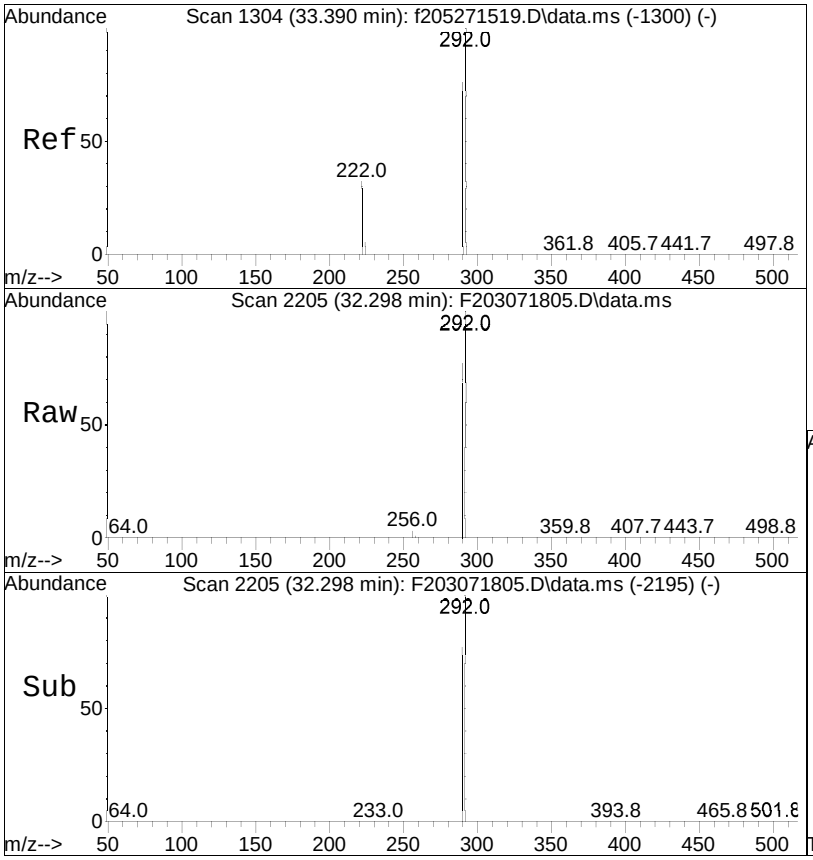


#85
Cl4-BZ#70
Concen: 88.75 ng/mL
RT: 32.000 min Scan# 2187
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 107404

Ion	Ratio	Lower	Upper
292	100		
290	87.0	66.7	100.1

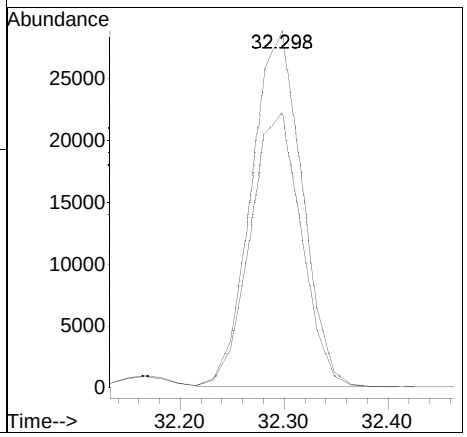


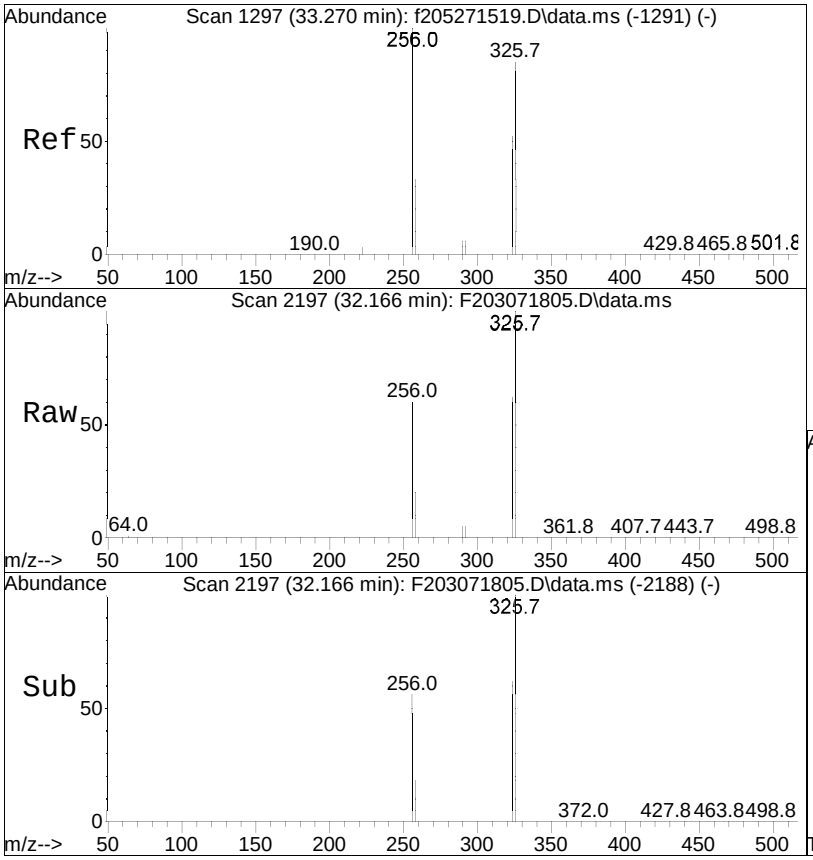


#86
Cl4-BZ#66
Concen: 88.31 ng/mL
RT: 32.298 min Scan# 2205
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 96756

Ion	Ratio	Lower	Upper
292	100		
290	77.1	62.3	93.5

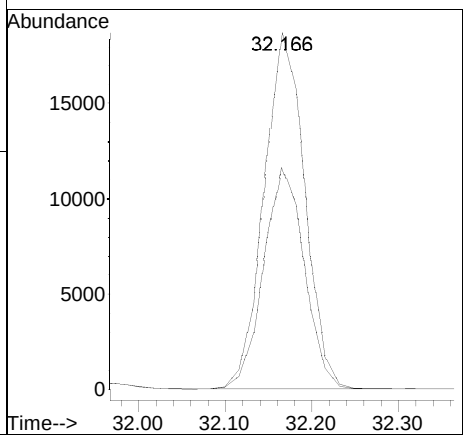


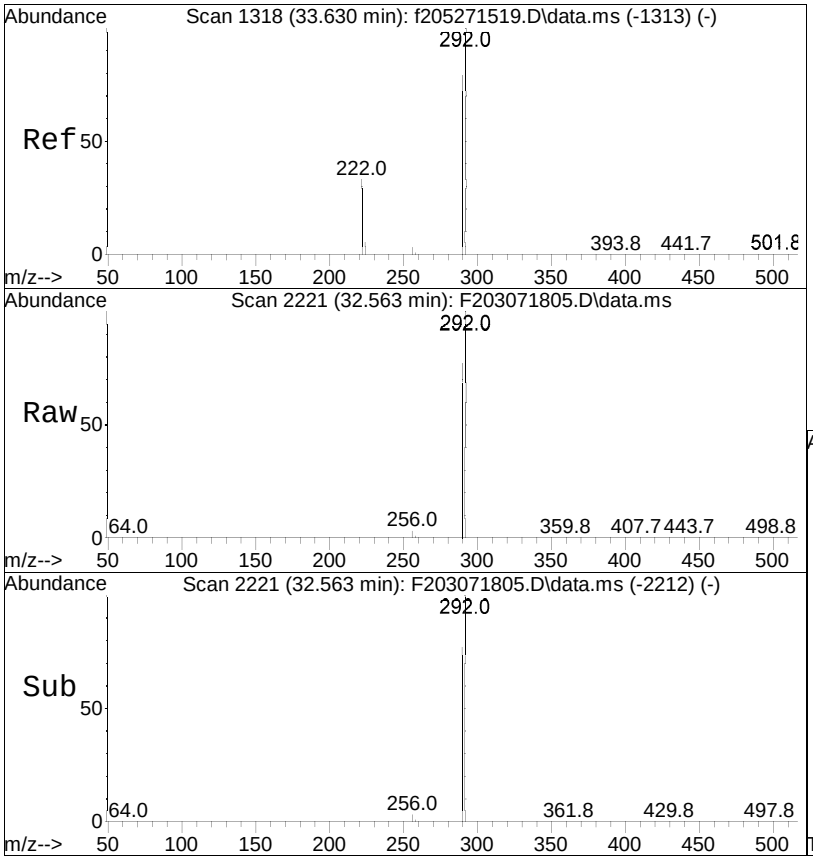


#87
Cl5-BZ#91
Concen: 87.52 ng/mL
RT: 32.166 min Scan# 2197
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 60565

Ion	Ratio	Lower	Upper
326	100		
324	62.3	50.0	75.0

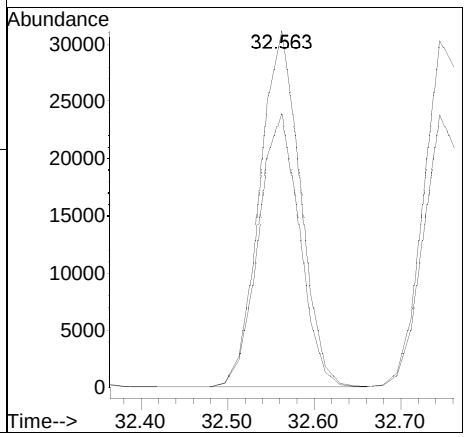


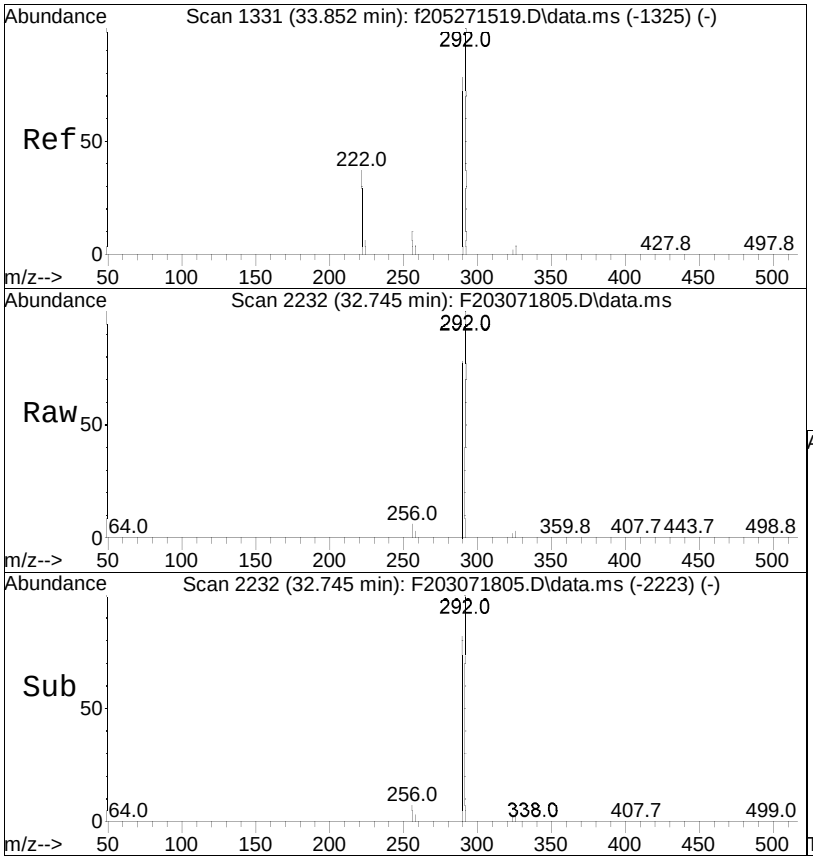


#88
Cl4-BZ#80
Concen: 87.98 ng/mL
RT: 32.563 min Scan# 2221
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 100932

Ion	Ratio	Lower	Upper
292	100		
290	77.7	63.5	95.3

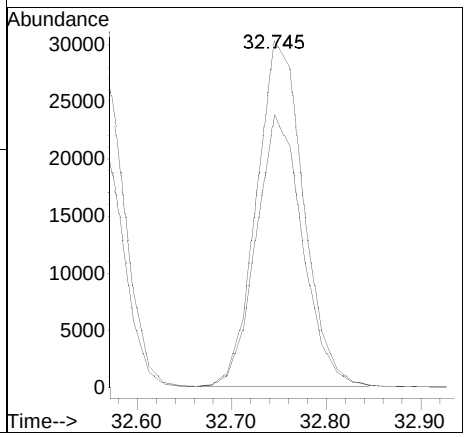


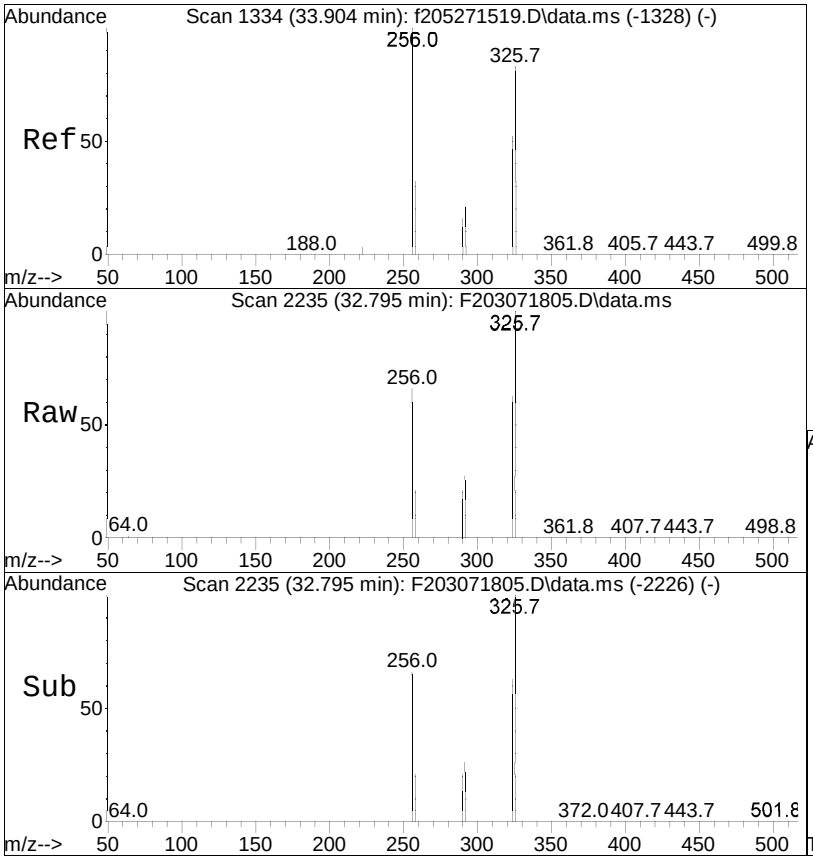


#89
Cl4-BZ#55
Concen: 88.85 ng/mL
RT: 32.745 min Scan# 2232
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 104073

Ion	Ratio	Lower	Upper
292	100		
290	77.6	61.8	92.6

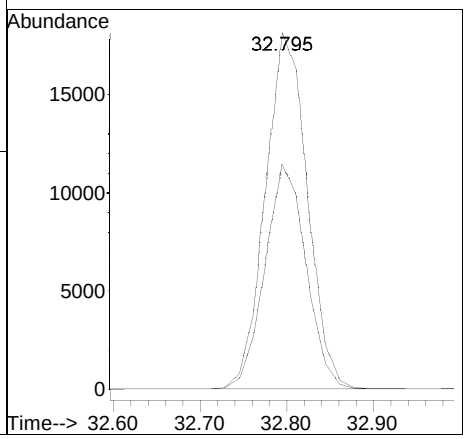


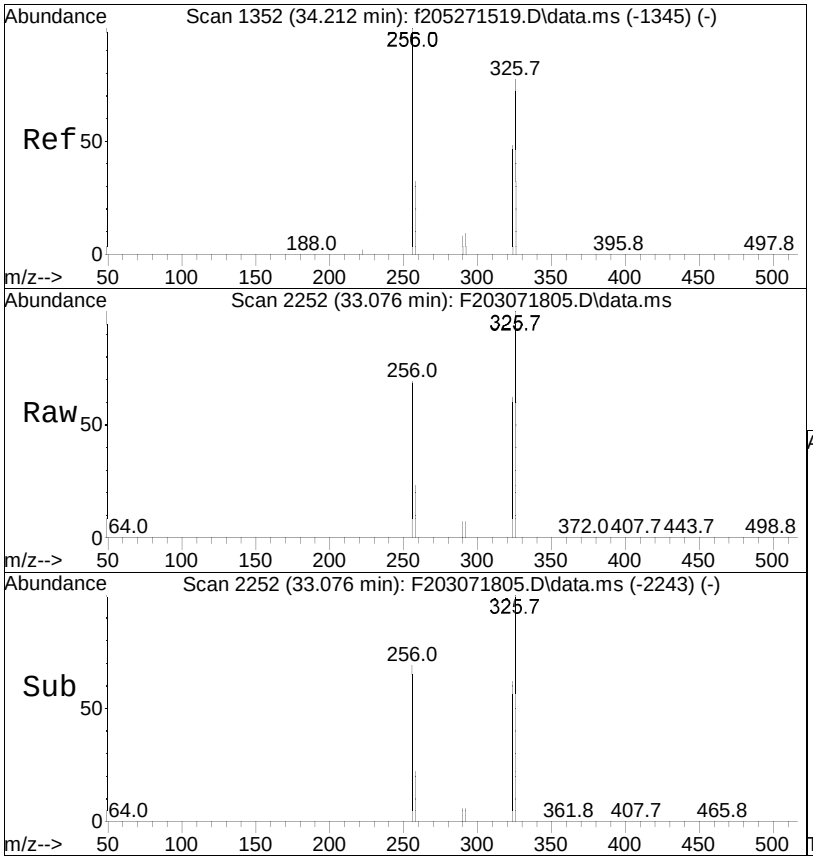


#90
Cl5-BZ#92
Concen: 89.62 ng/mL
RT: 32.795 min Scan# 2235
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 60497

Ion	Ratio	Lower	Upper
326	100		
324	63.3	49.1	73.7

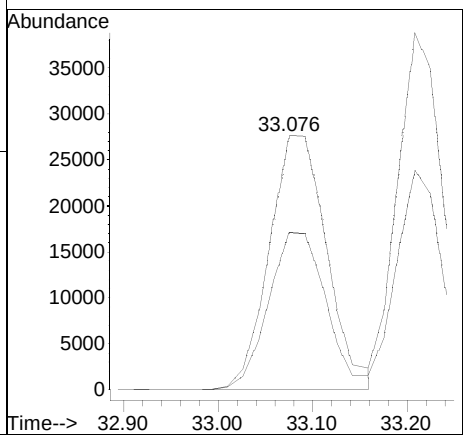


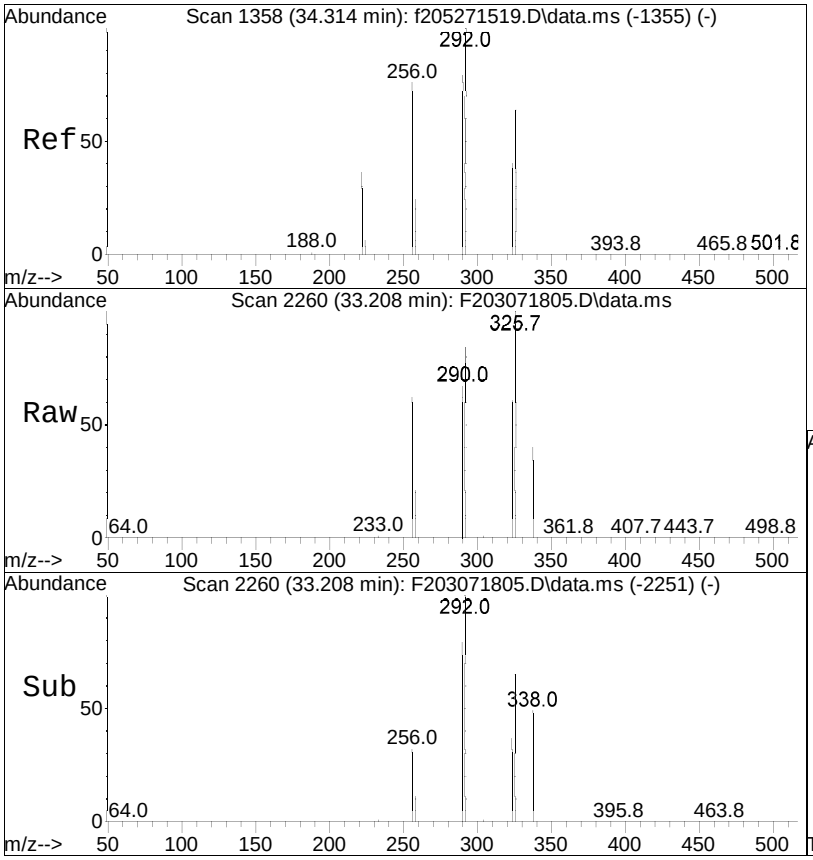


#91
Cl5-BZ#89/#84
Concen: 179.96 ng/mL
RT: 33.076 min Scan# 2252
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 116420

Ion	Ratio	Lower	Upper
326	100		
324	61.9	47.8	71.8

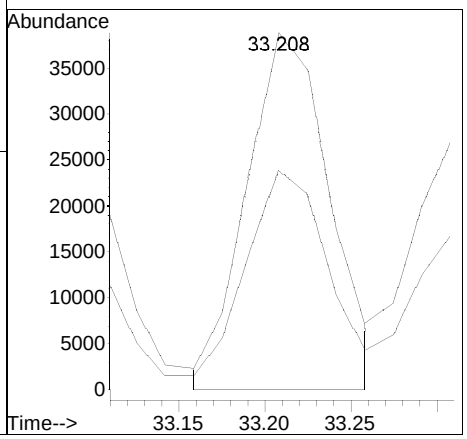


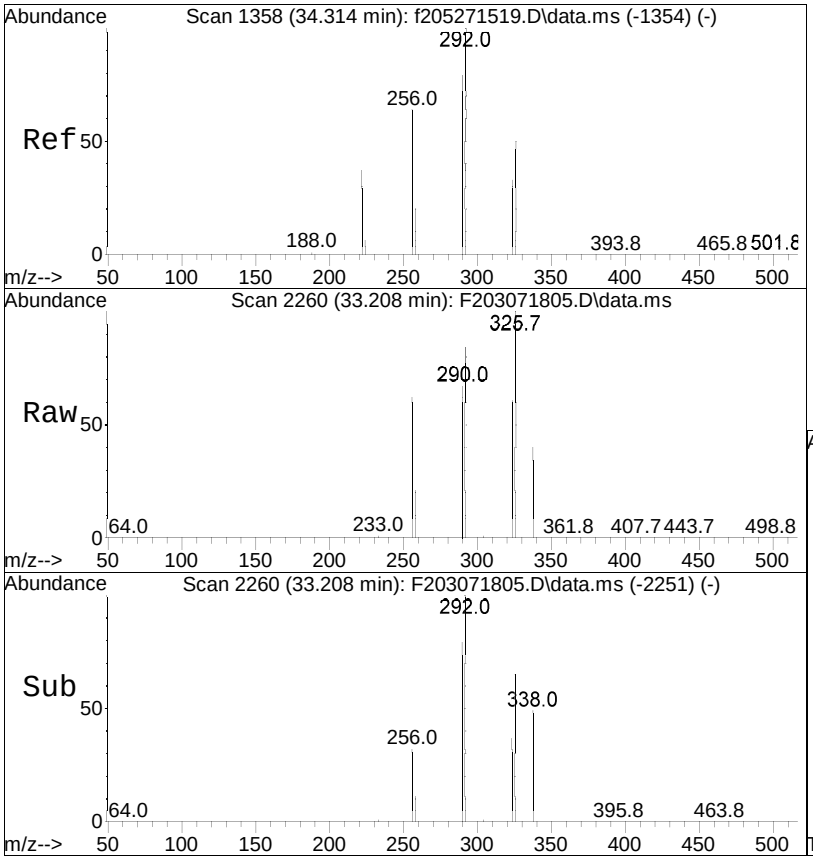


#92
Cl5-BZ#101/#90
Concen: 174.45 ng/mL M4
RT: 33.208 min Scan# 2260
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 130014

Ion	Ratio	Lower	Upper
326	100		
324	54.8	48.9	73.3

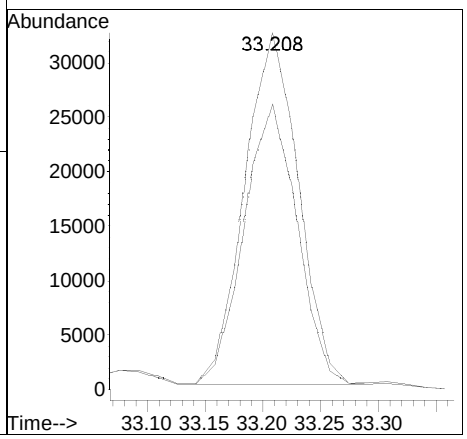


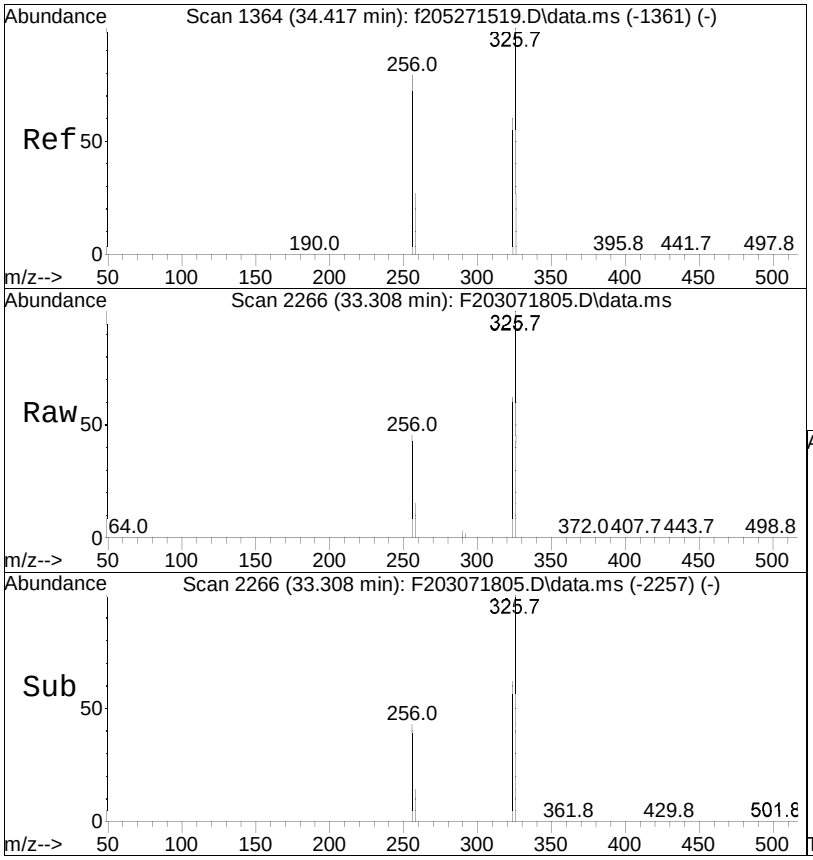


#94
Cl4-BZ#56
Concen: 89.87 ng/mL
RT: 33.208 min Scan# 2260
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 104142

Ion	Ratio	Lower	Upper
292	100		
290	78.7	63.5	95.3

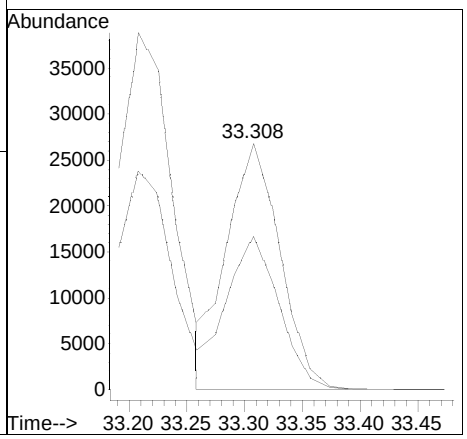


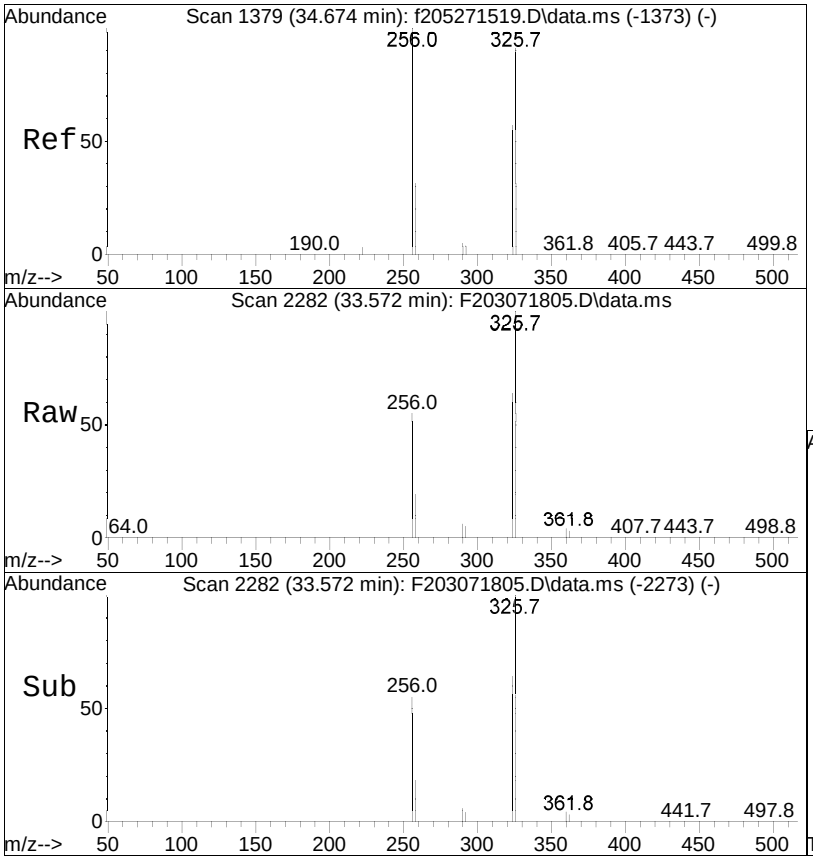


#95
Cl5-BZ#113
Concen: 97.28 ng/mL
RT: 33.308 min Scan# 2266
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 85229

Ion	Ratio	Lower	Upper
326	100		
324	61.4	50.5	75.7

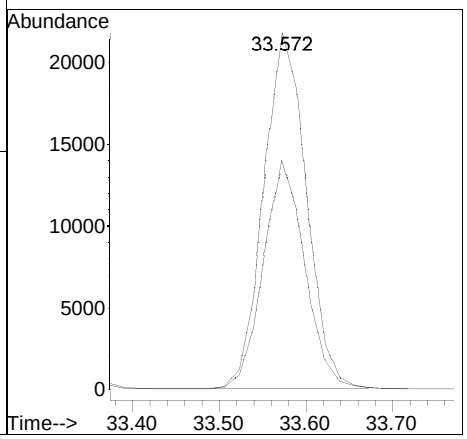


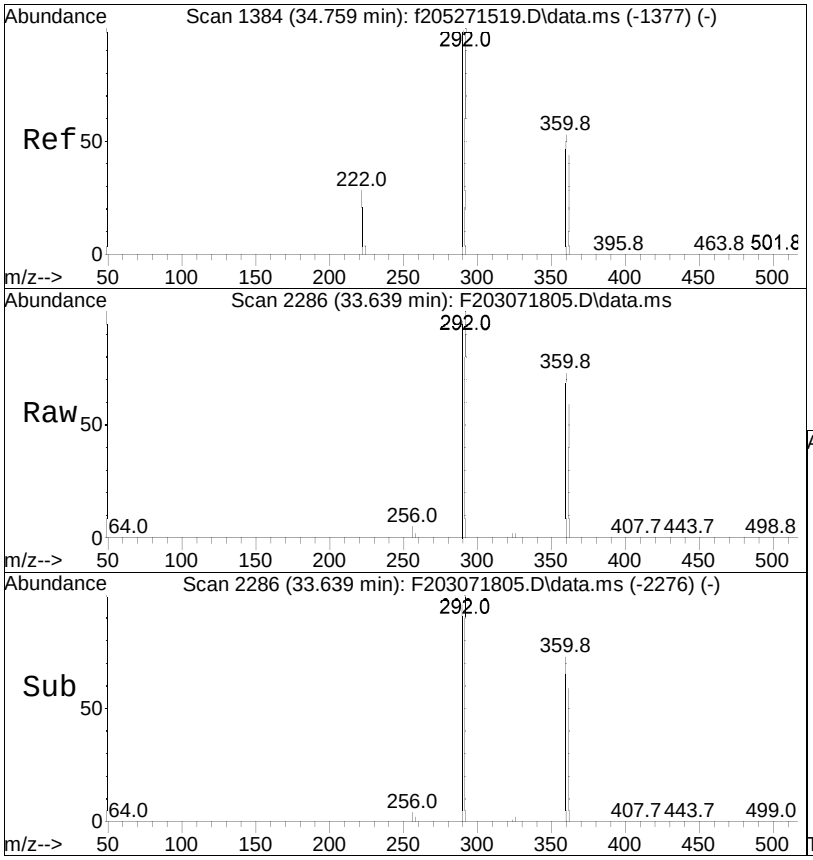


#96
Cl5-BZ#99
Concen: 88.10 ng/mL
RT: 33.572 min Scan# 2282
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 74143

Ion	Ratio	Lower	Upper
326	100		
324	62.4	50.5	75.7

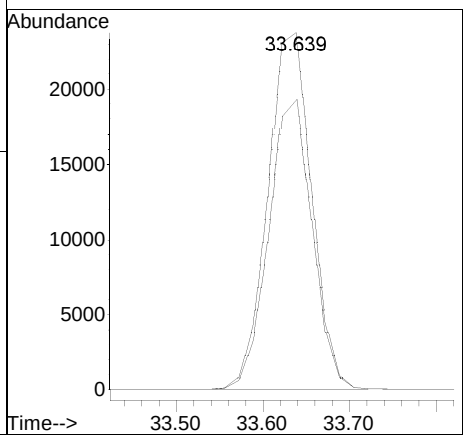


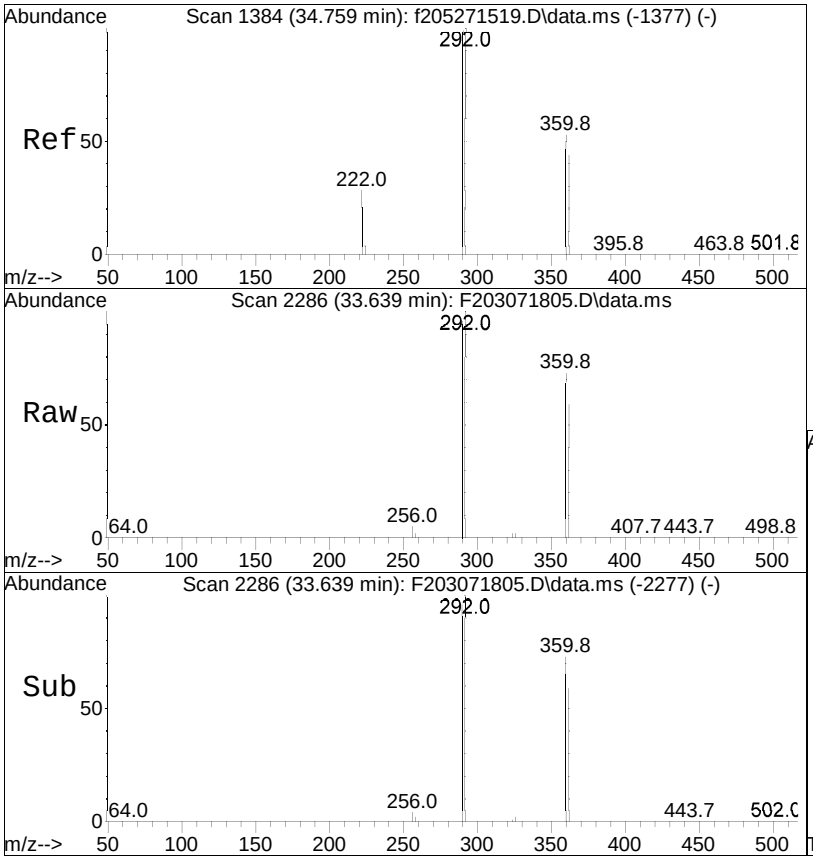


#97
Cl6-BZ#150
Concen: 89.28 ng/mL
RT: 33.639 min Scan# 2286
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 83310

Ion	Ratio	Lower	Upper
360	100		
362	80.6	65.2	97.8

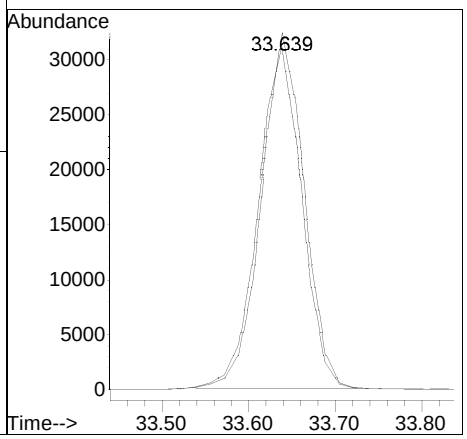


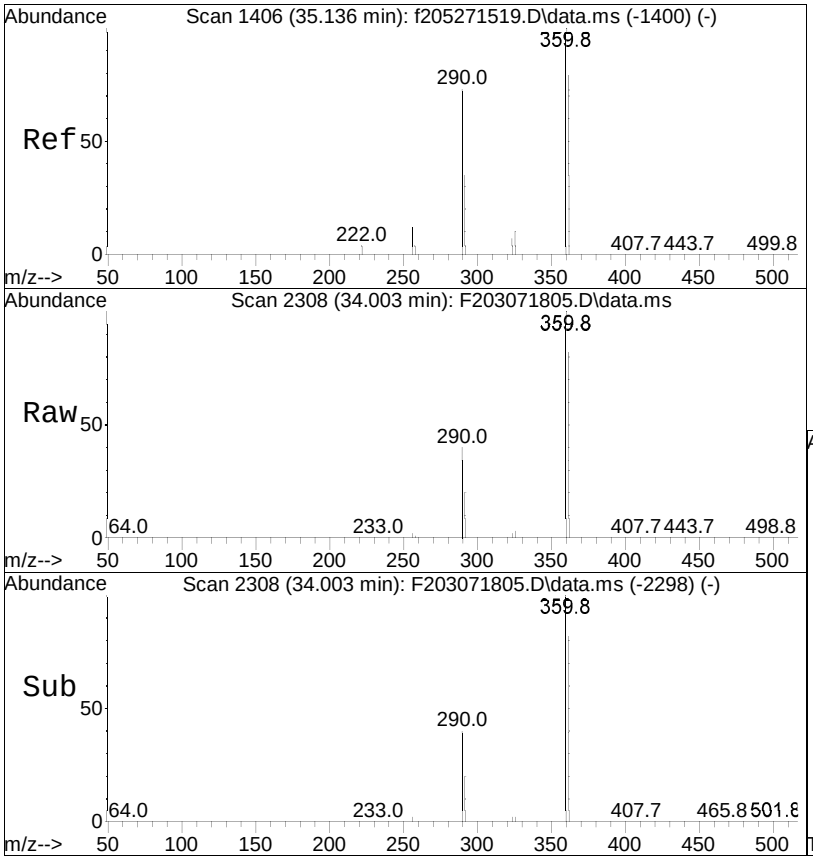


#98
Cl4-BZ#60
Concen: 89.15 ng/mL
RT: 33.639 min Scan# 2286
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 110393

Ion	Ratio	Lower	Upper
292	100		
290	97.8	79.1	118.7

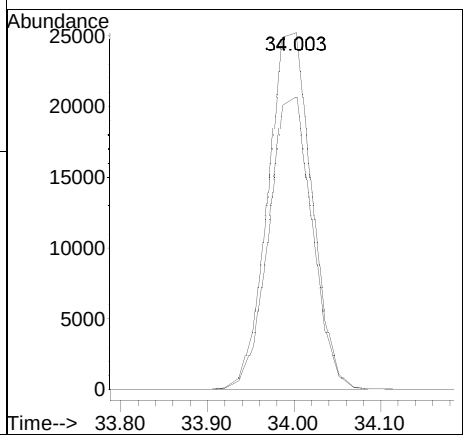


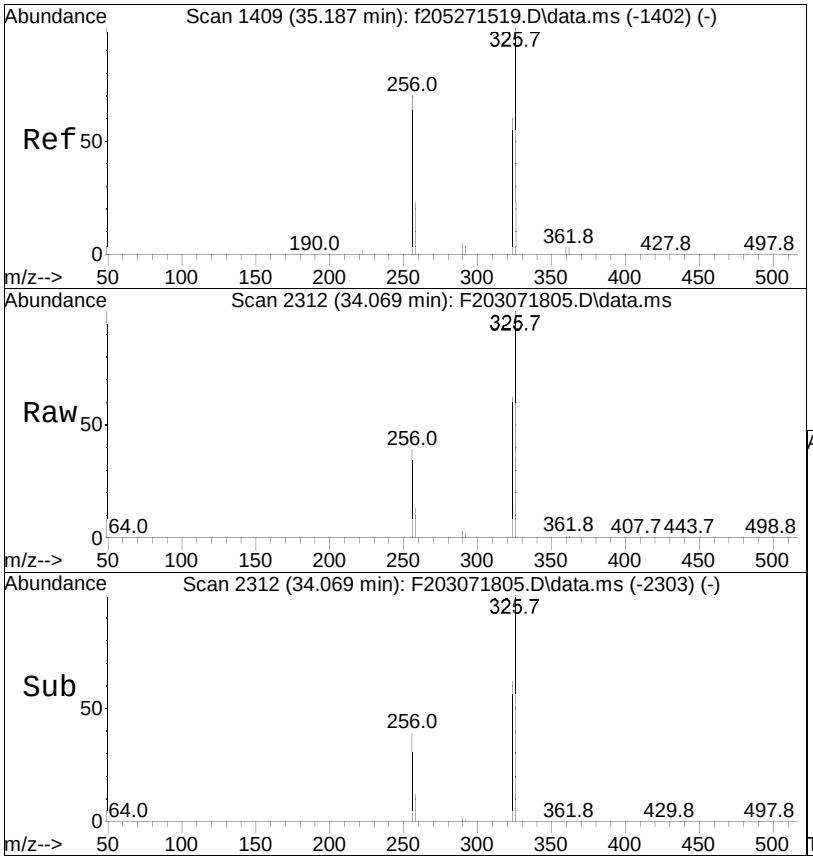


#99
Cl6-BZ#152
Concen: 88.31 ng/mL
RT: 34.003 min Scan# 2308
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 88348

Ion	Ratio	Lower	Upper
360	100		
362	81.3	64.2	96.4

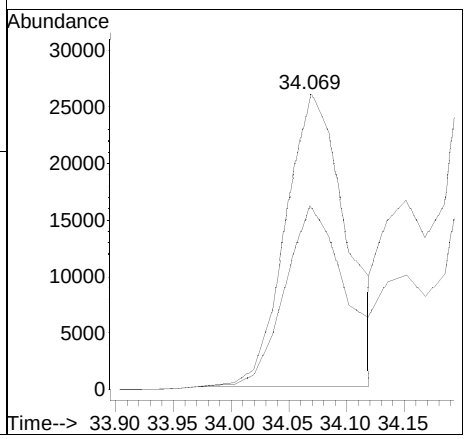


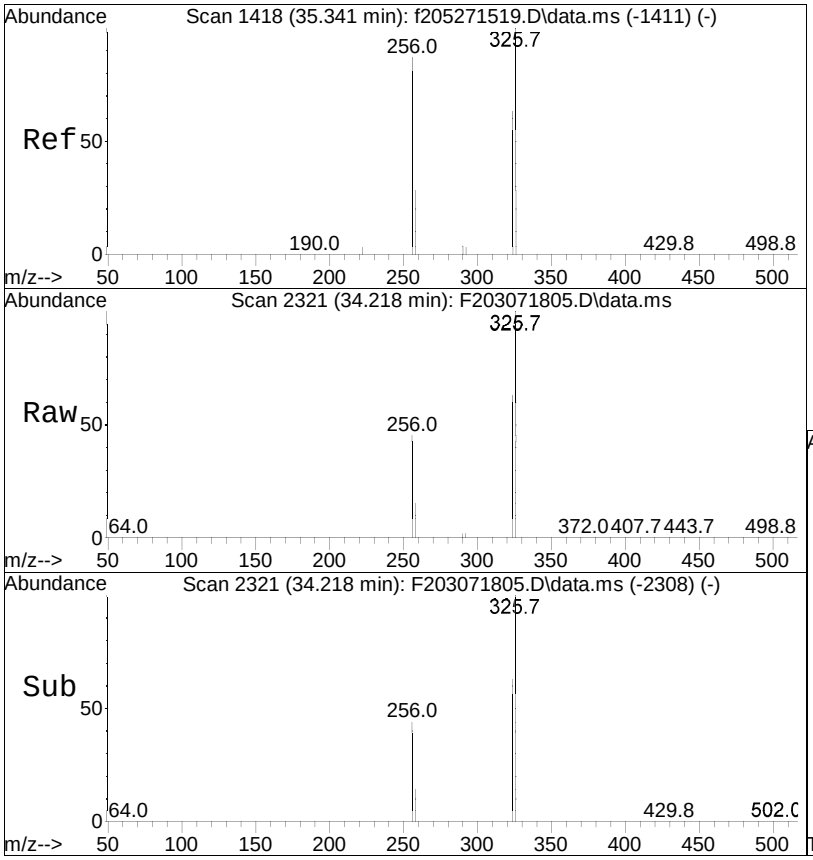


#100
Cl5-BZ#119
Concen: 94.08 ng/mL
RT: 34.069 min Scan# 2312
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 95901

Ion	Ratio	Lower	Upper
326	100		
324	62.2	47.9	71.9

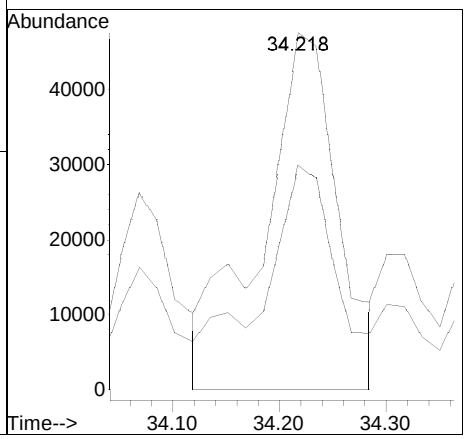


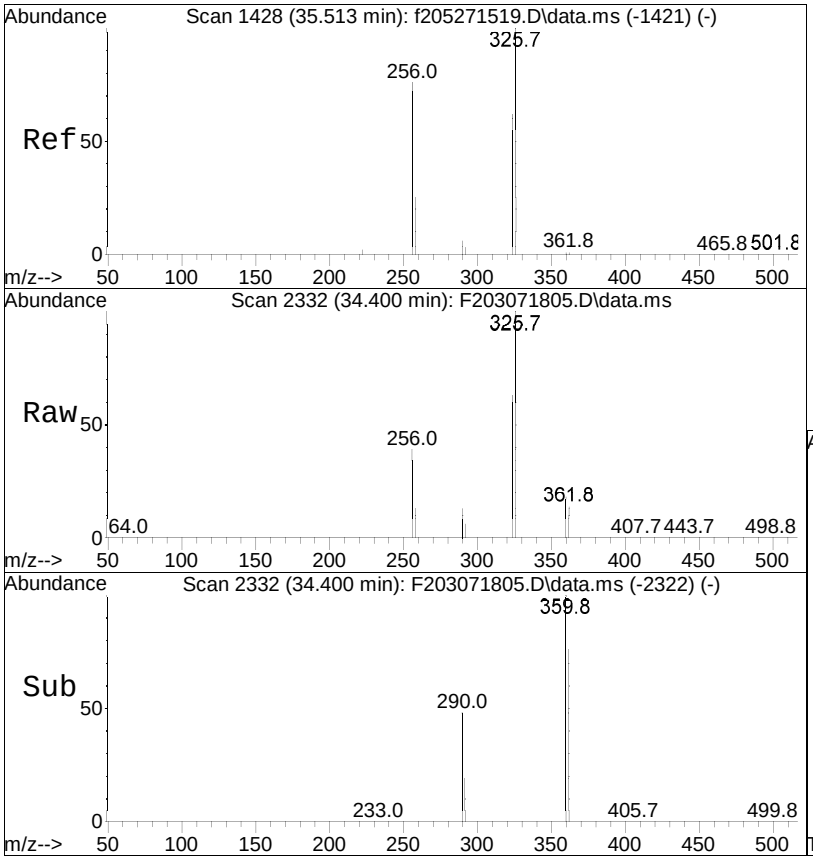


#101
Cl5-BZ#83/#125/#112
Concen: 279.05 ng/mL M4
RT: 34.218 min Scan# 2321
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 236721

Ion	Ratio	Lower	Upper
326	100		
324	35.1	49.5	74.3#

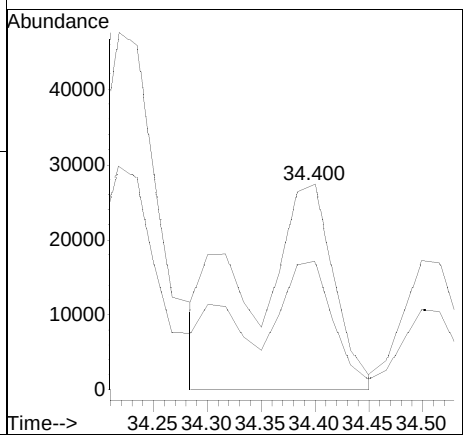


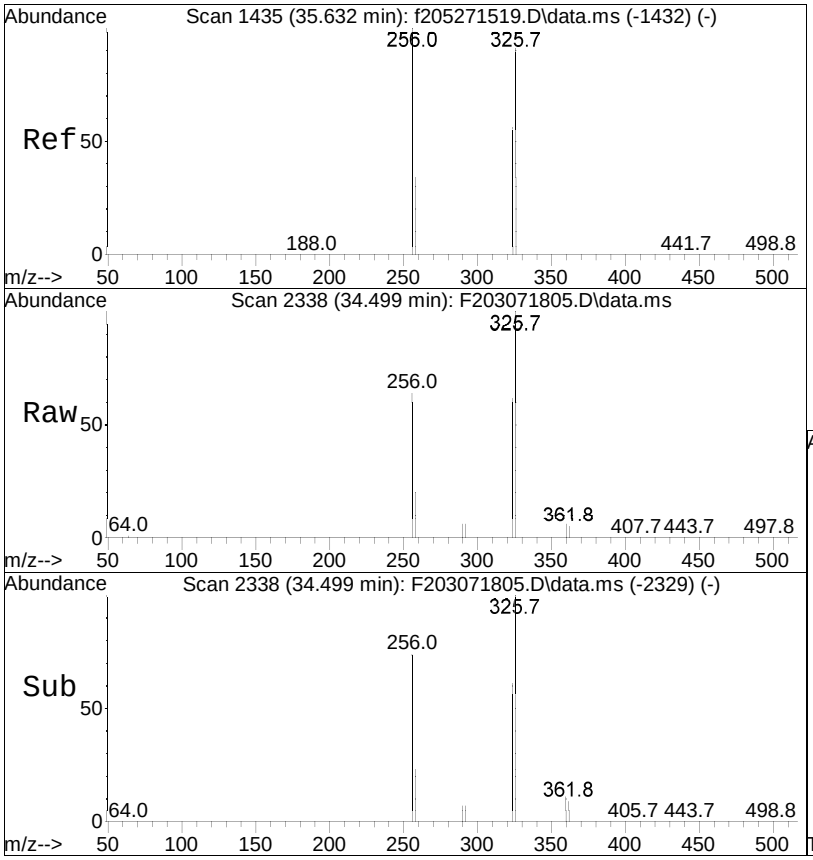


#102
Cl5-BZ#86/#109
Concen: 174.94 ng/mL M4
RT: 34.400 min Scan# 2332
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 147544

Ion	Ratio	Lower	Upper
326	100		
324	33.3	49.7	74.5#

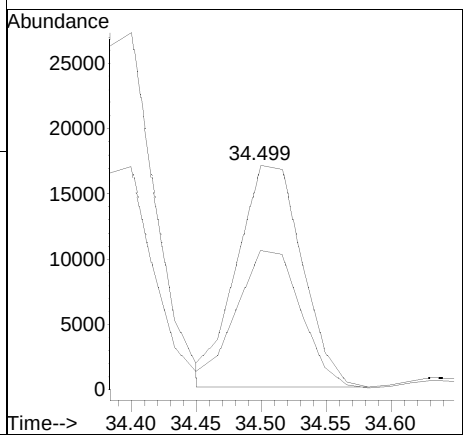


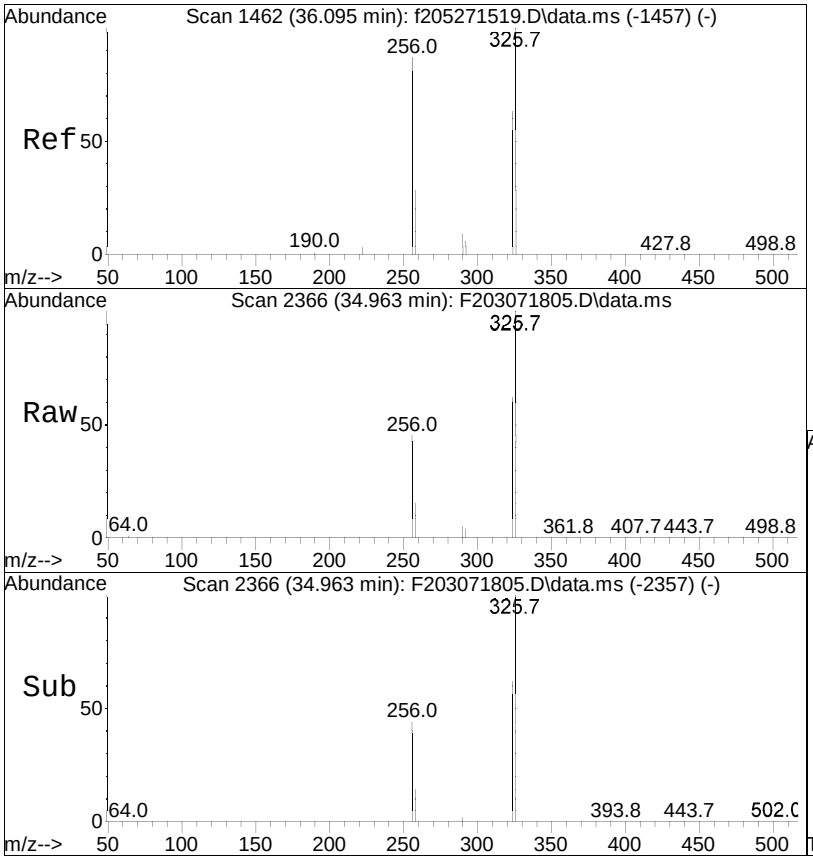


#103
Cl5-BZ#97
Concen: 94.14 ng/mL
RT: 34.499 min Scan# 2338
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 59191

Ion	Ratio	Lower	Upper
326	100		
324	61.8	51.2	76.8

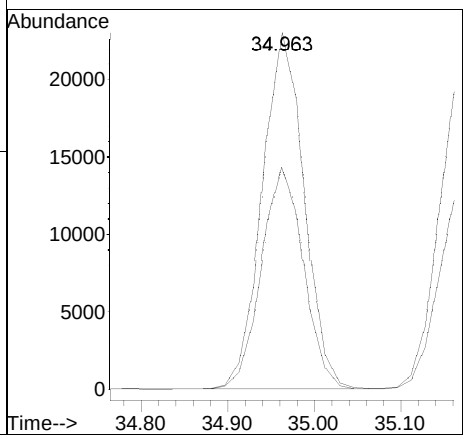


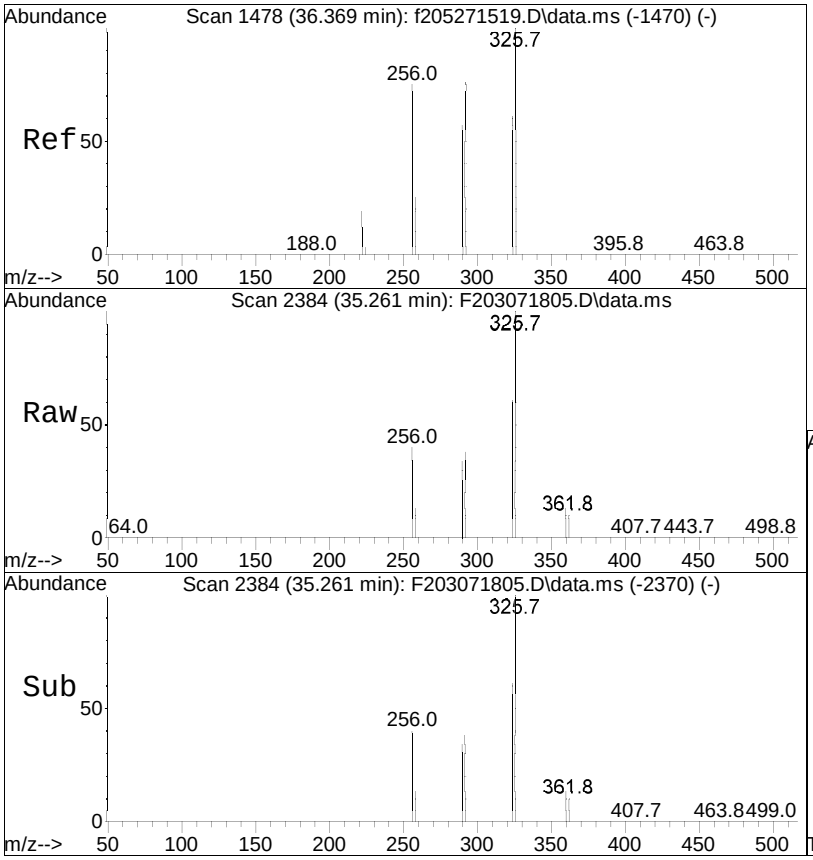


#104
Cl5-BZ#116
Concen: 88.73 ng/mL
RT: 34.963 min Scan# 2366
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 76991

Ion	Ratio	Lower	Upper
326	100		
324	62.4	49.0	73.6

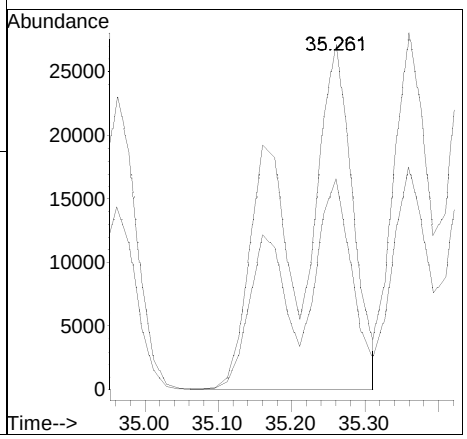


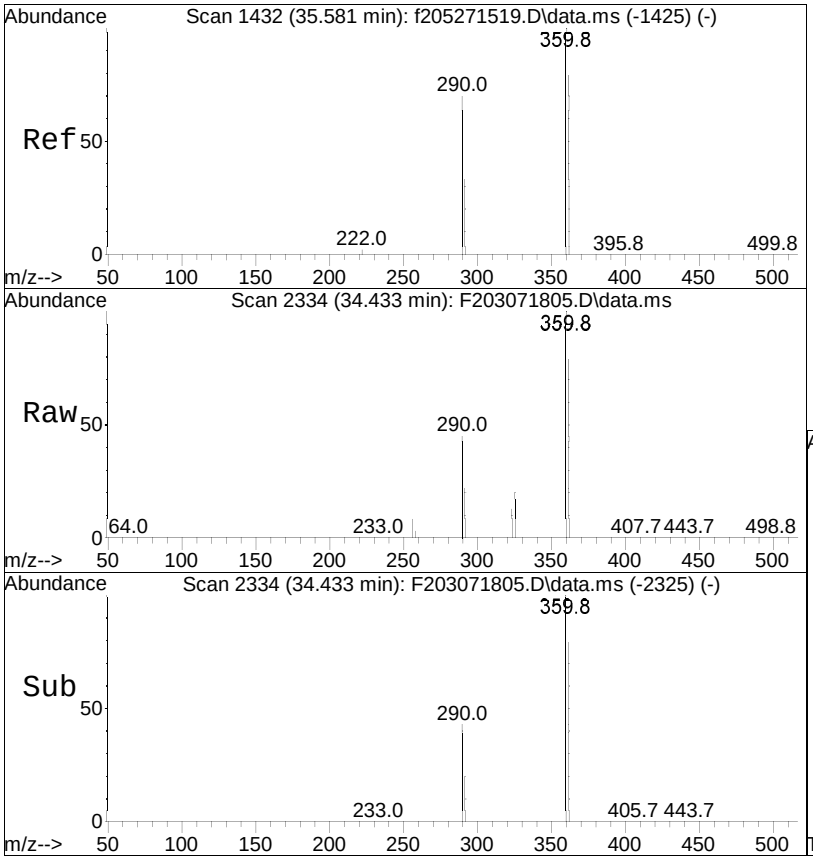


#105
Cl5-BZ#87/#111
Concen: 188.20 ng/mL M4
RT: 35.261 min Scan# 2384
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 159632

Ion	Ratio	Lower	Upper
326	100		
324	27.1	50.6	75.8#

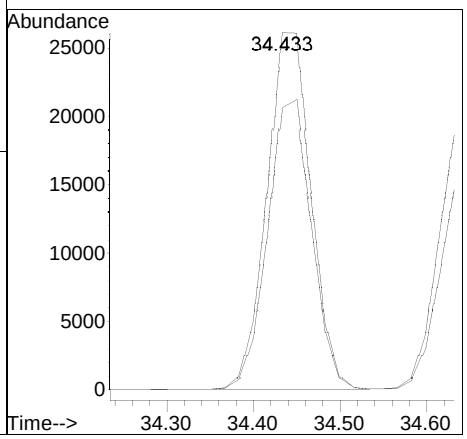


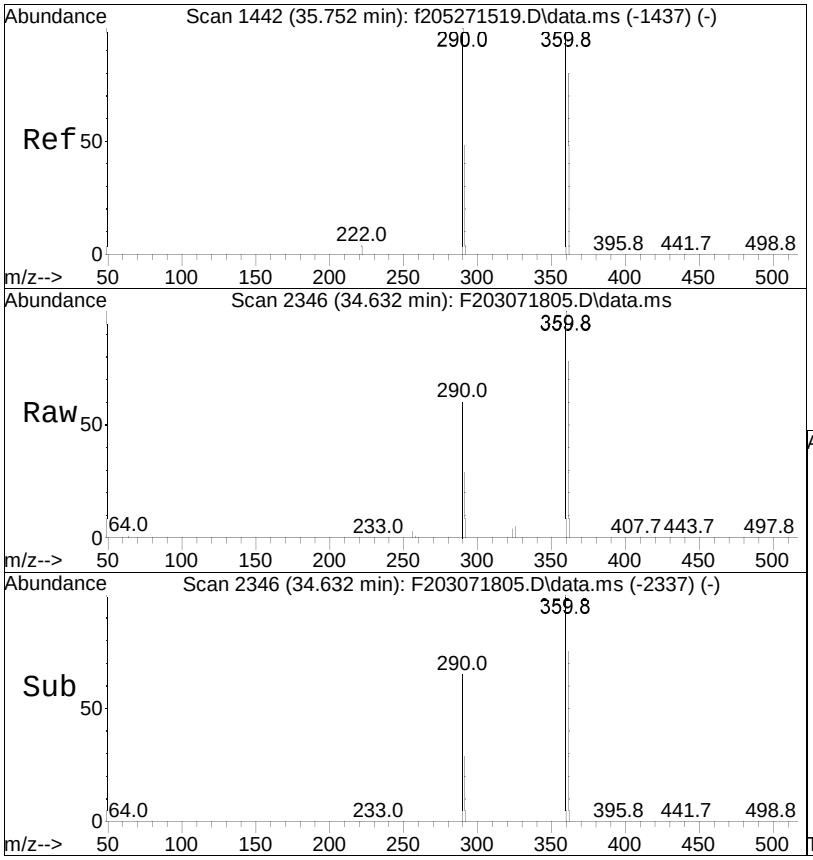


#108
Cl6-BZ#145
Concen: 89.56 ng/mL
RT: 34.433 min Scan# 2334
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 92497

Ion	Ratio	Lower	Upper
360	100		
362	80.7	64.9	97.3

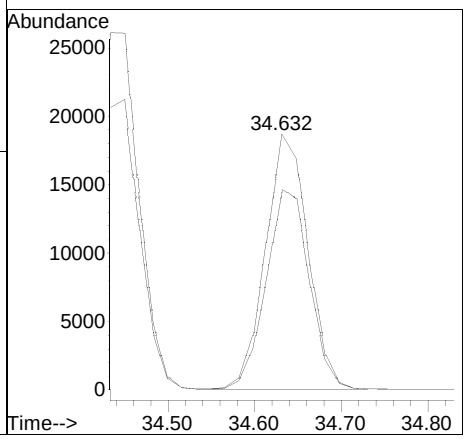


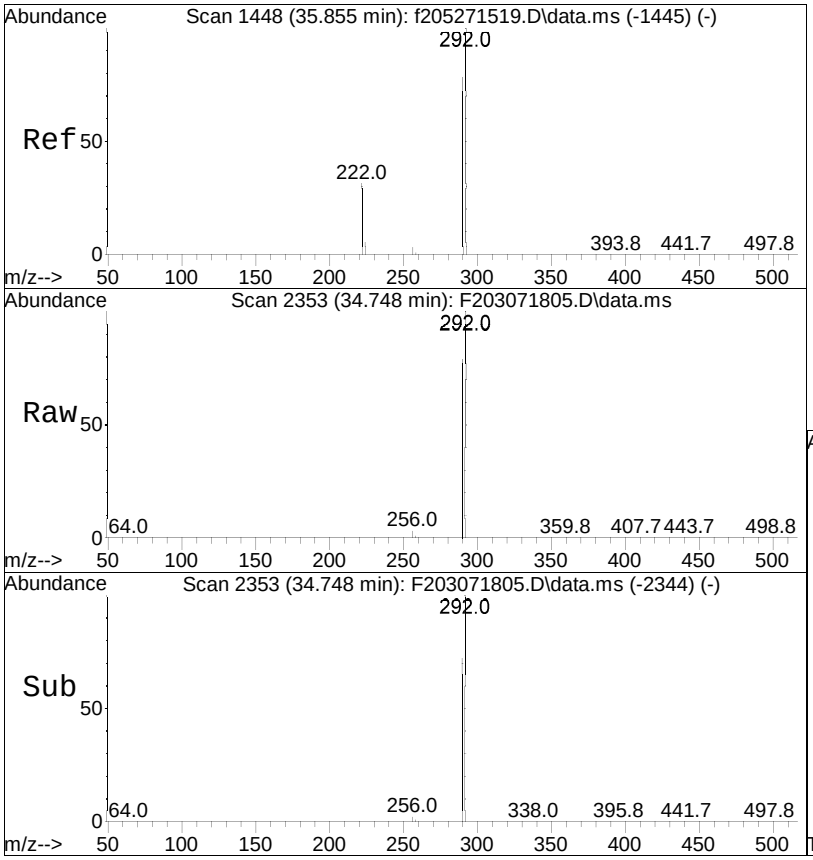


#109
Cl6-BZ#148
Concen: 89.61 ng/mL
RT: 34.632 min Scan# 2346
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 63226

Ion	Ratio	Lower	Upper
360	100		
362	79.3	63.3	94.9

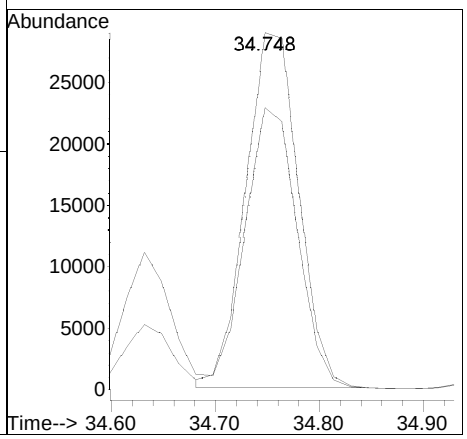


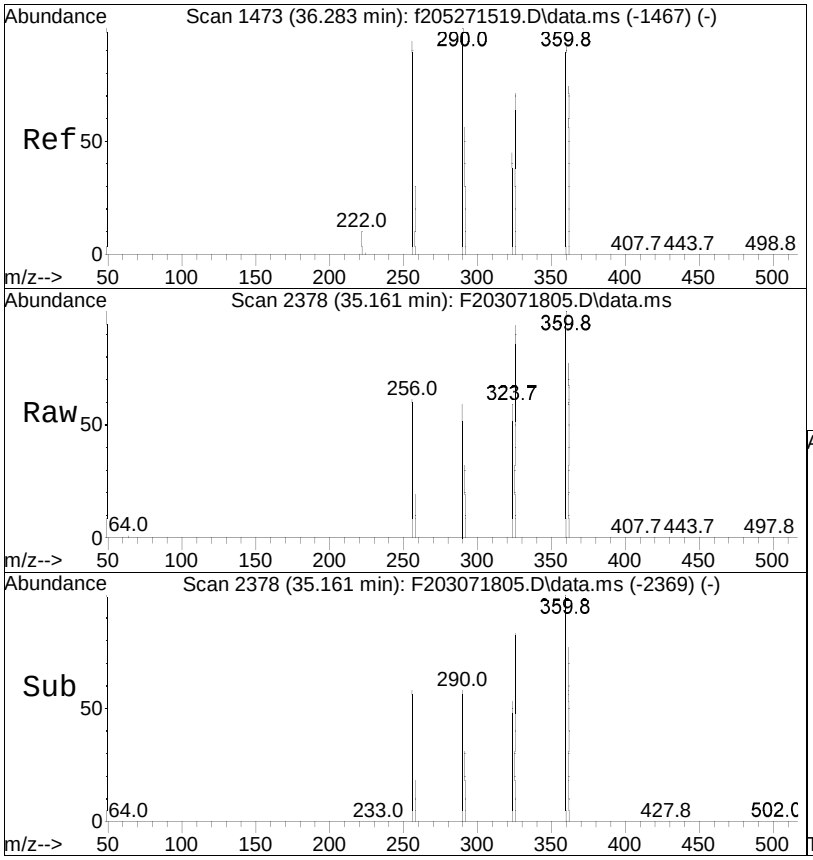


#110
Cl4-BZ#79
Concen: 89.41 ng/mL
RT: 34.748 min Scan# 2353
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 101989

Ion	Ratio	Lower	Upper
292	100		
290	77.0	62.6	93.8

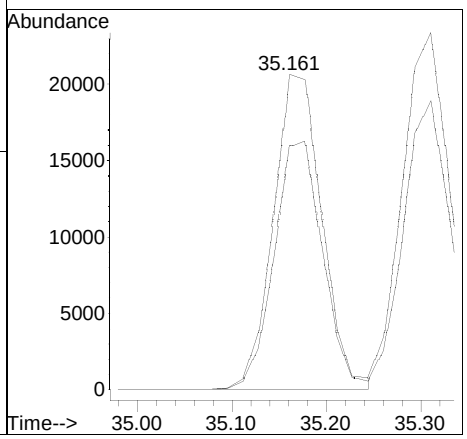


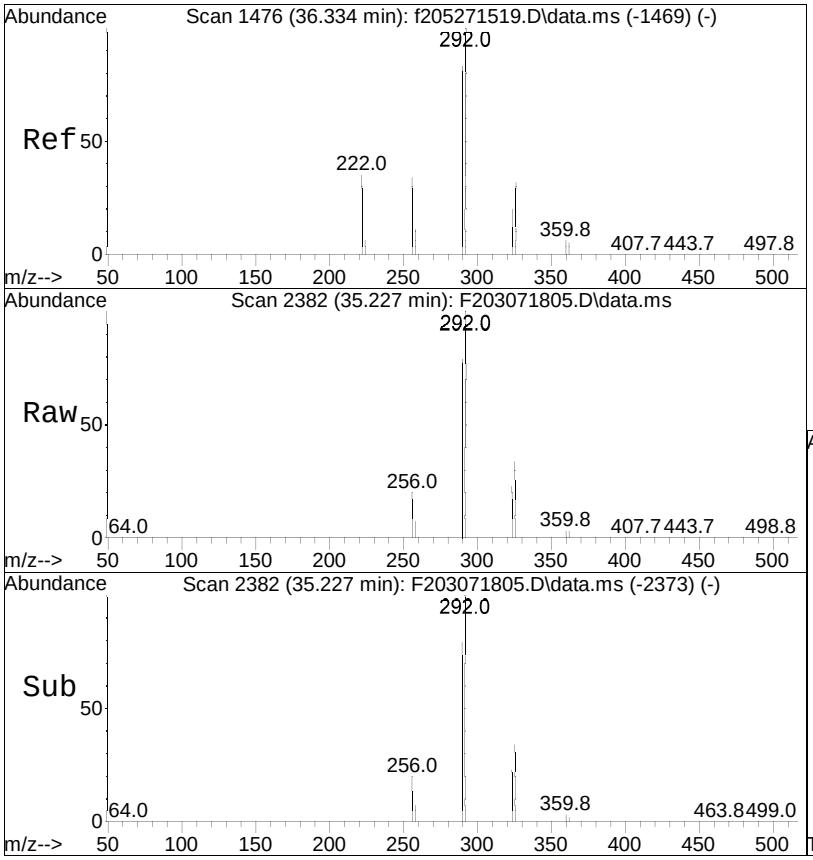


#111
Cl6-BZ#154-Cal
Concen: 89.97 ng/mL
RT: 35.161 min Scan# 2378
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 73367

Ion	Ratio	Lower	Upper
360	100		
362	79.1	64.2	96.4

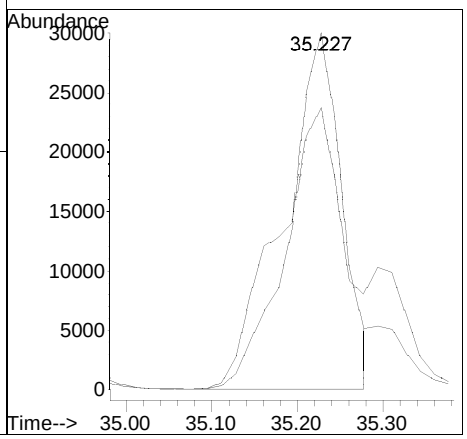


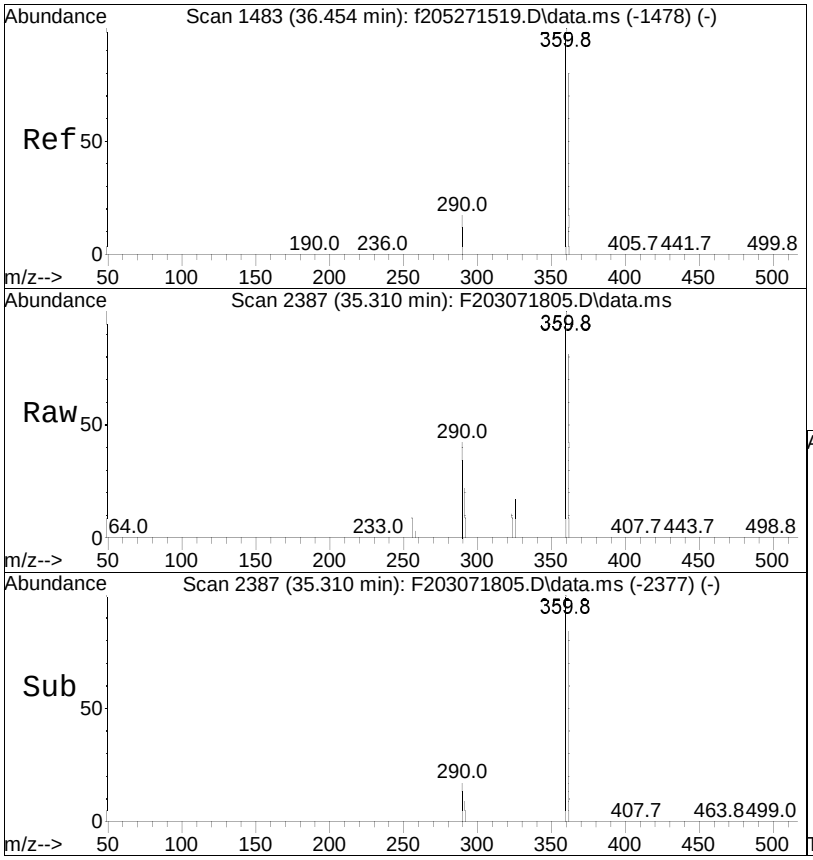


#114
Cl4-BZ#78
Concen: 89.42 ng/mL M4
RT: 35.227 min Scan# 2382
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 126259

Ion	Ratio	Lower	Upper
292	100		
290	80.2	65.0	97.6

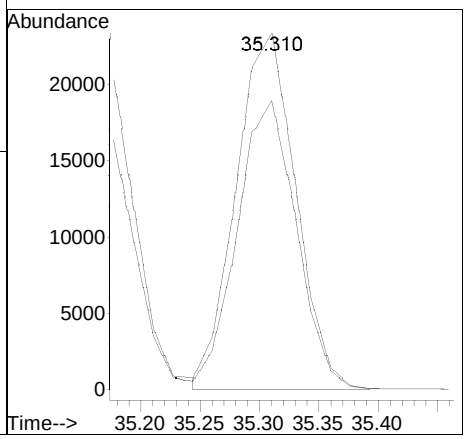


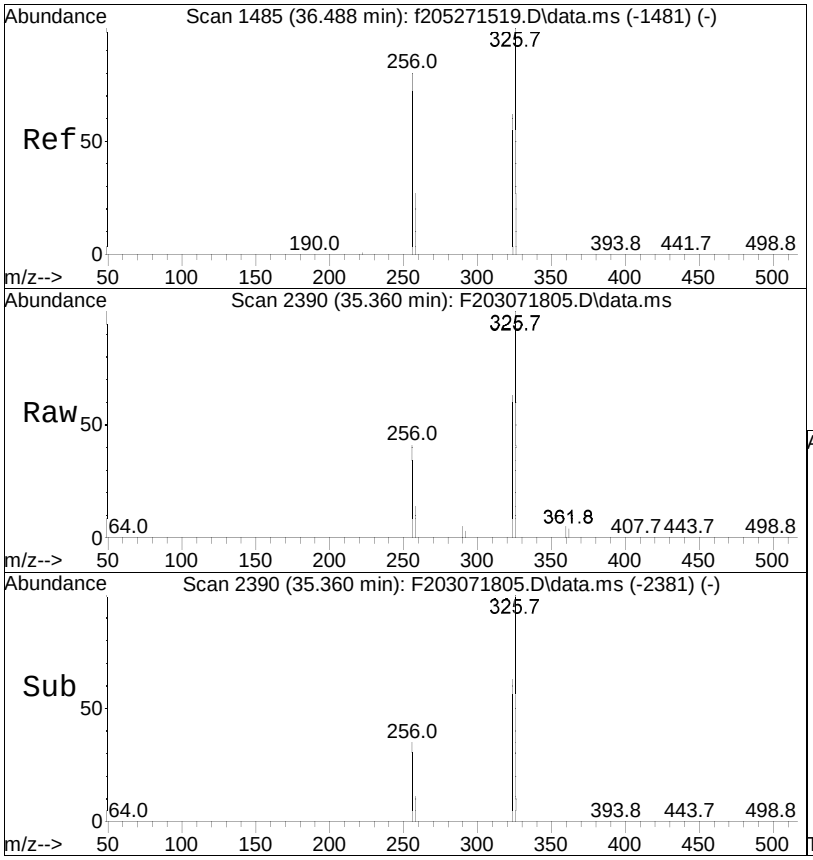


#115
Cl6-BZ#136
Concen: 90.63 ng/mL M4
RT: 35.310 min Scan# 2387
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 81929

Ion	Ratio	Lower	Upper
360	100		
362	79.2	64.9	97.3

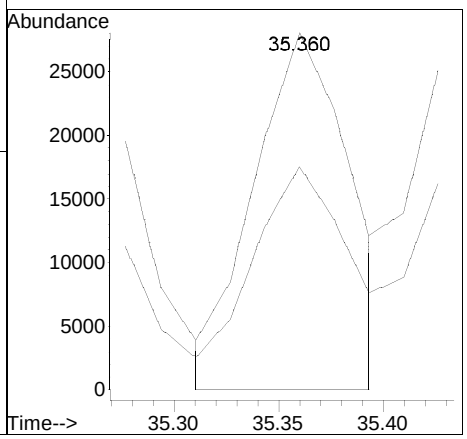


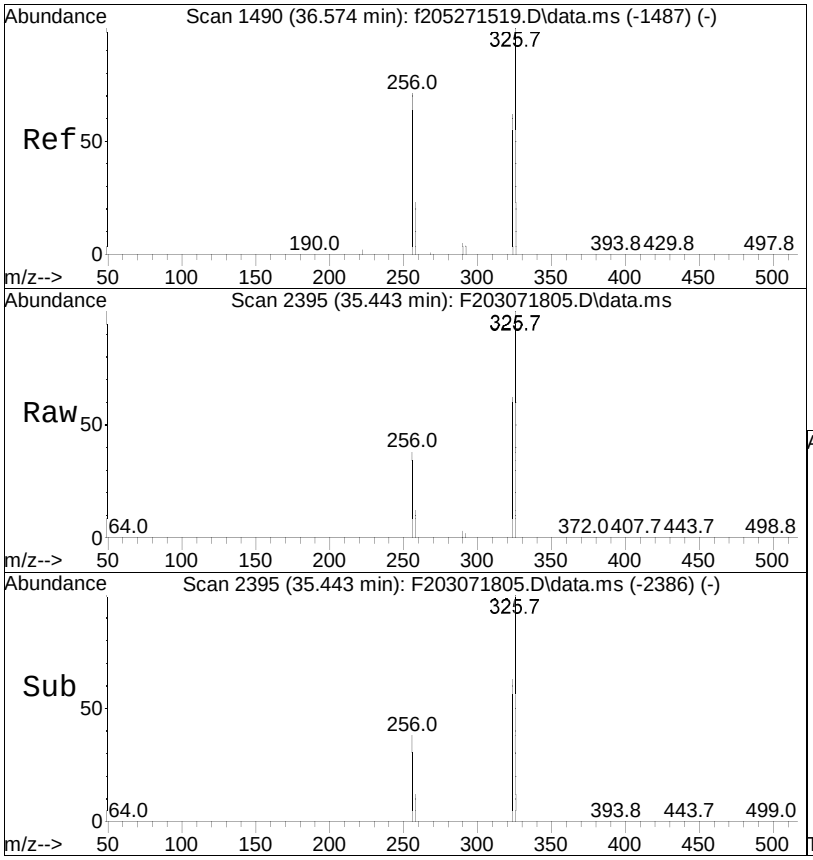


#116
Cl5-BZ#117
Concen: 83.60 ng/mL M4
RT: 35.360 min Scan# 2390
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 89744

Ion	Ratio	Lower	Upper
326	100		
324	48.7	49.1	73.7#

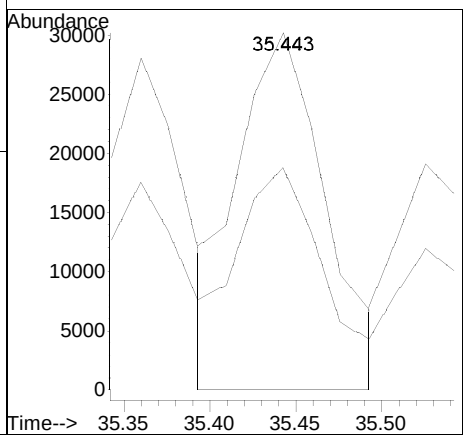


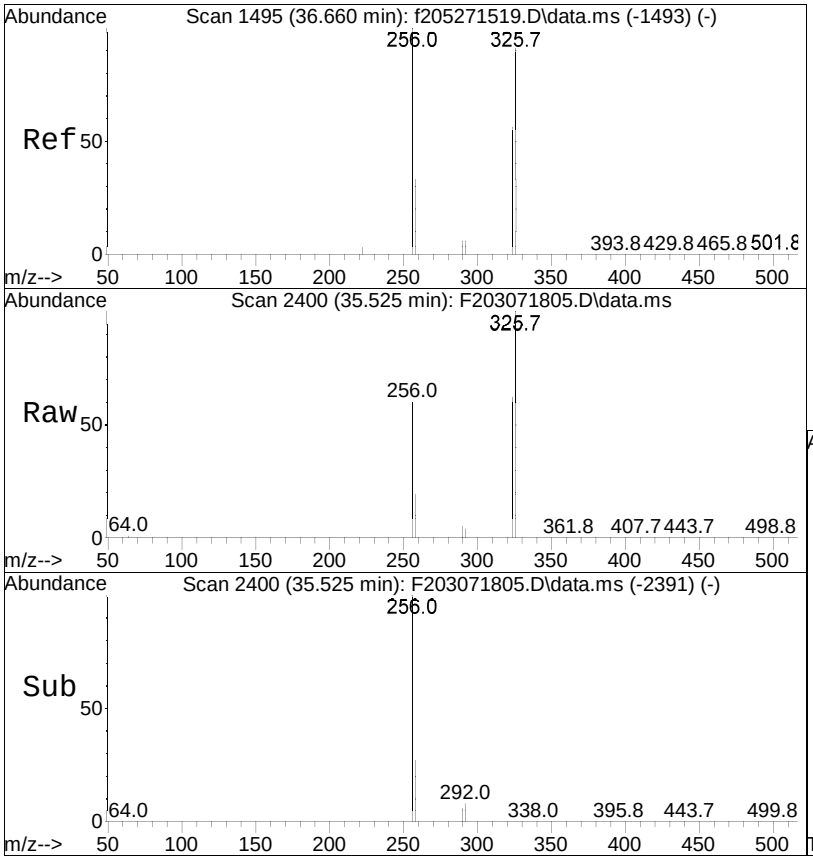


#117
Cl5-BZ#115
Concen: 100.81 ng/mL M4
RT: 35.443 min Scan# 2395
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 107243

Ion	Ratio	Lower	Upper
326	100		
324	38.6	48.7	73.1#

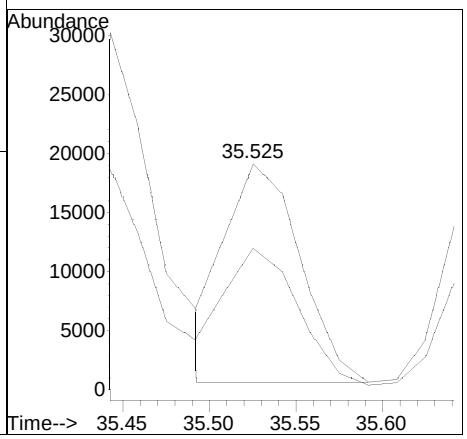


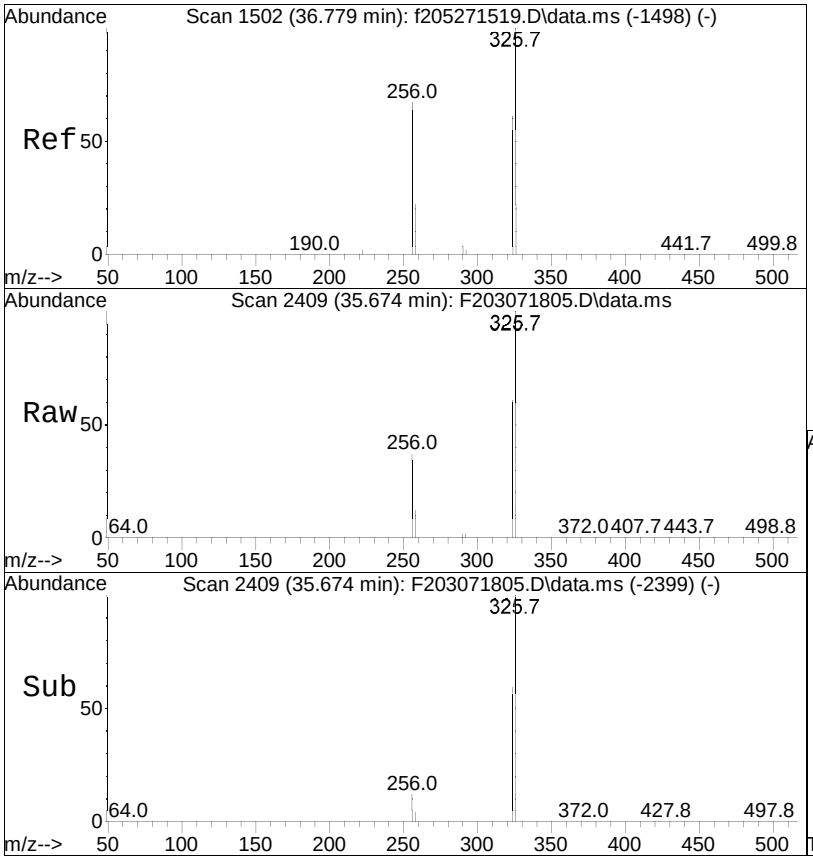


#118
Cl5-BZ#85
Concen: 83.87 ng/mL
RT: 35.525 min Scan# 2400
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 55727

Ion	Ratio	Lower	Upper
326	100		
324	61.4	49.6	74.4

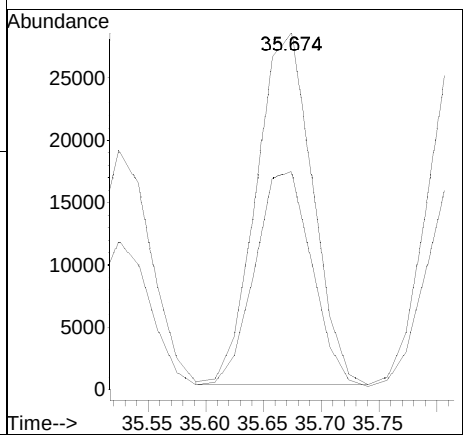


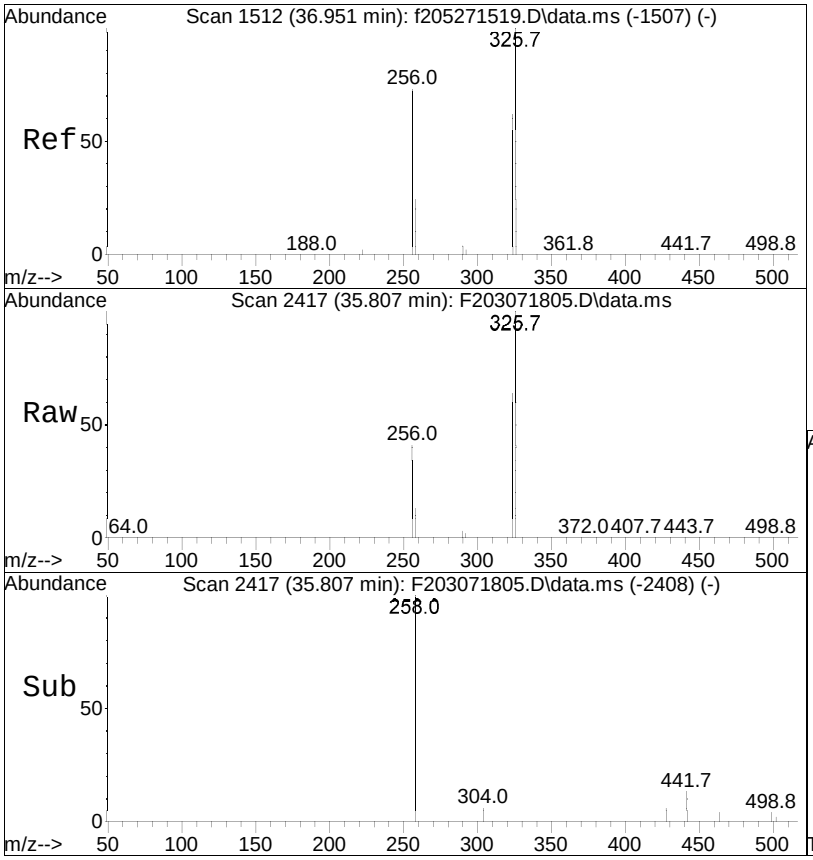


#119
Cl5-BZ#120
Concen: 91.67 ng/mL
RT: 35.674 min Scan# 2409
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 95327

Ion	Ratio	Lower	Upper
326	100		
324	62.1	49.7	74.5

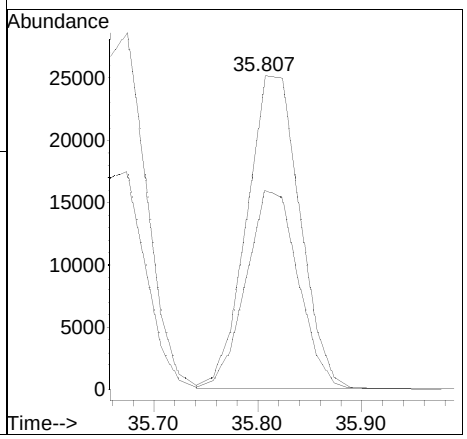


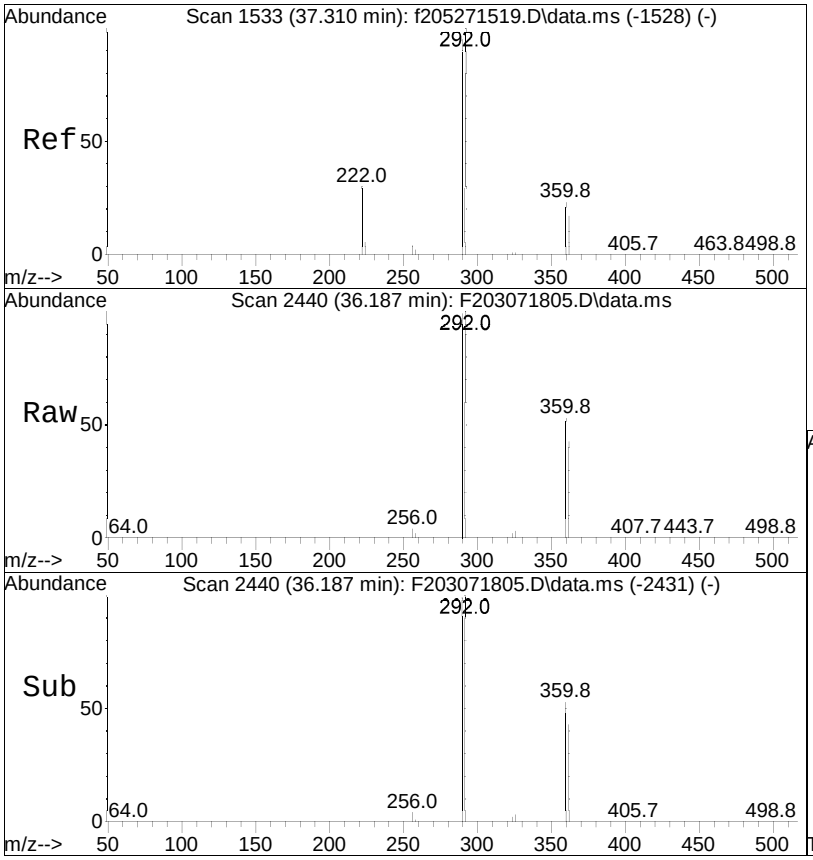


#120
Cl5-BZ#110
Concen: 88.19 ng/mL
RT: 35.807 min Scan# 2417
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 88520

Ion	Ratio	Lower	Upper
326	100		
324	62.4	49.4	74.2

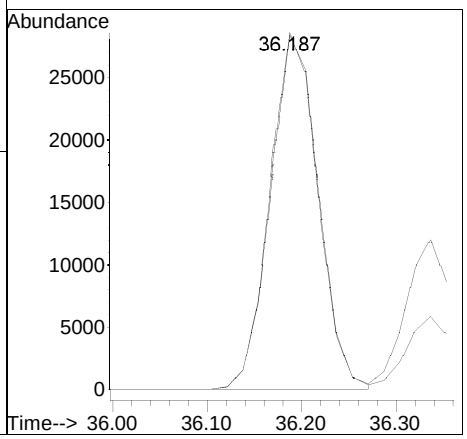


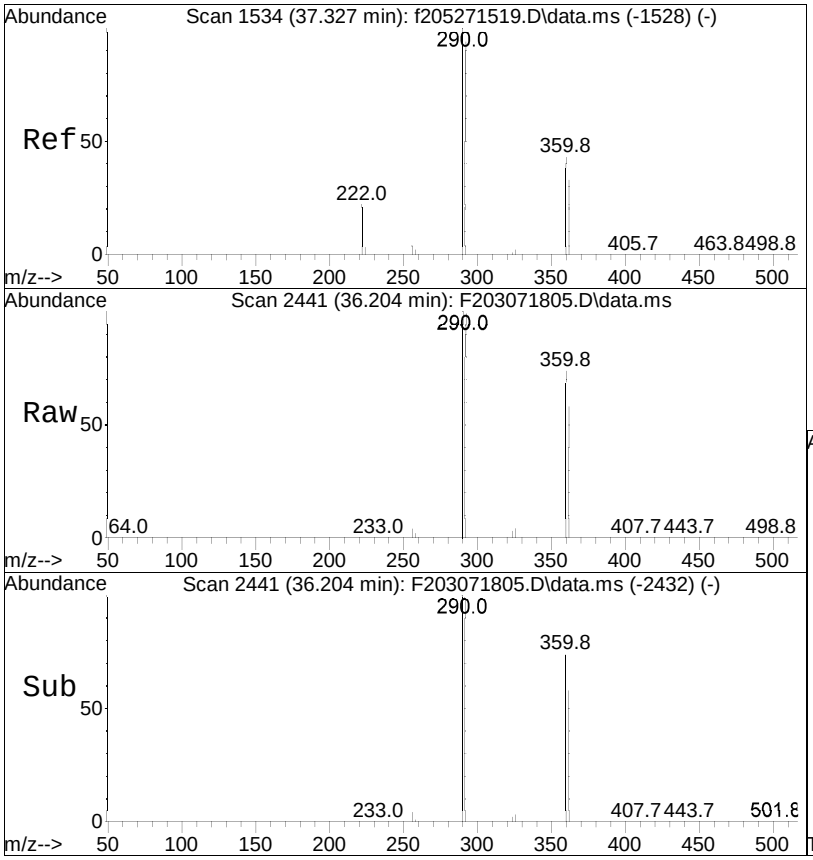


#121
Cl4-BZ#81
Concen: 87.04 ng/mL
RT: 36.187 min Scan# 2440
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 99671

Ion	Ratio	Lower	Upper
292	100		
290	99.3	78.3	117.5

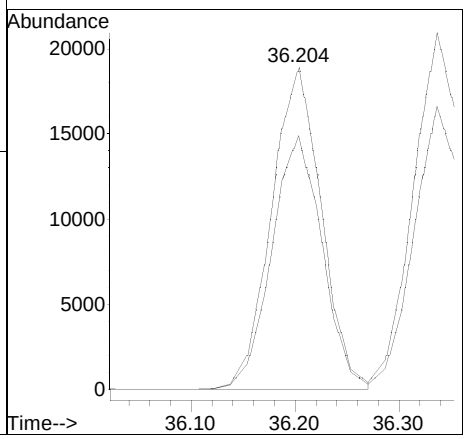


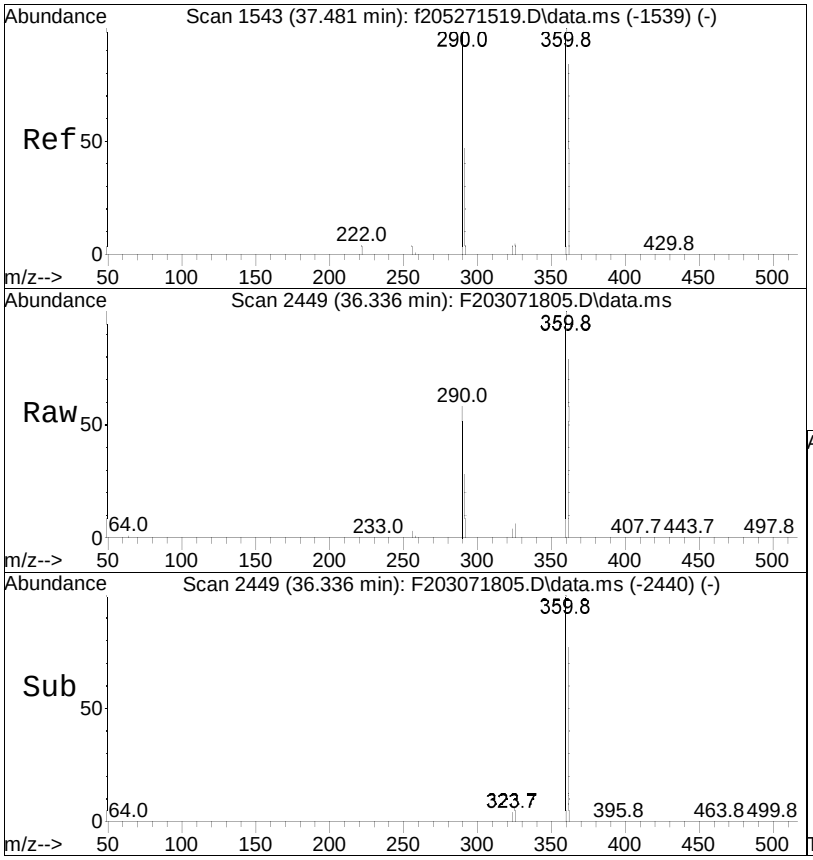


#123
Cl6-BZ#151
Concen: 87.14 ng/mL
RT: 36.204 min Scan# 2441
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 62746

Ion	Ratio	Lower	Upper
360	100		
362	79.6	62.7	94.1

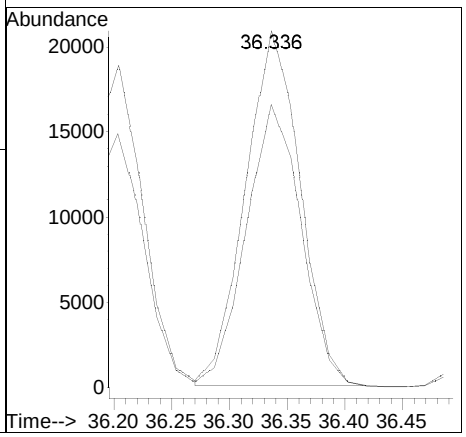


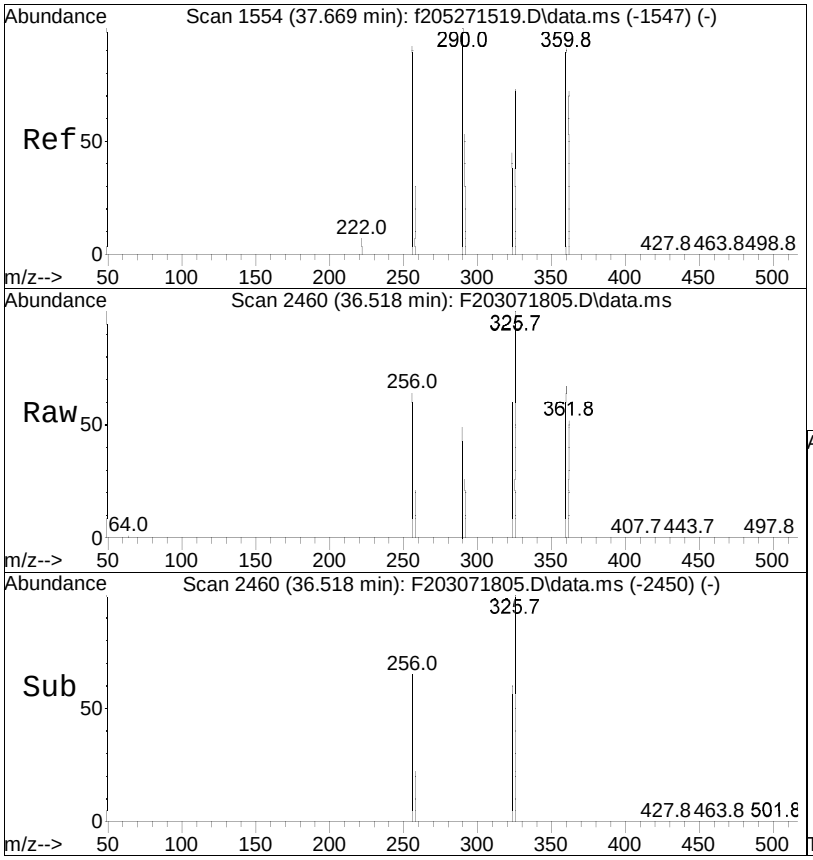


#124
Cl6-BZ#135
Concen: 90.37 ng/mL
RT: 36.336 min Scan# 2449
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 68640

Ion	Ratio	Lower	Upper
360	100		
362	79.7	64.3	96.5

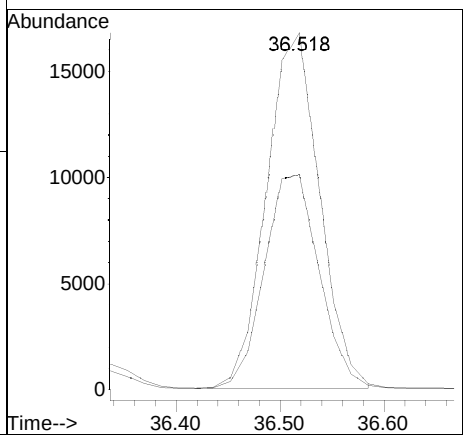


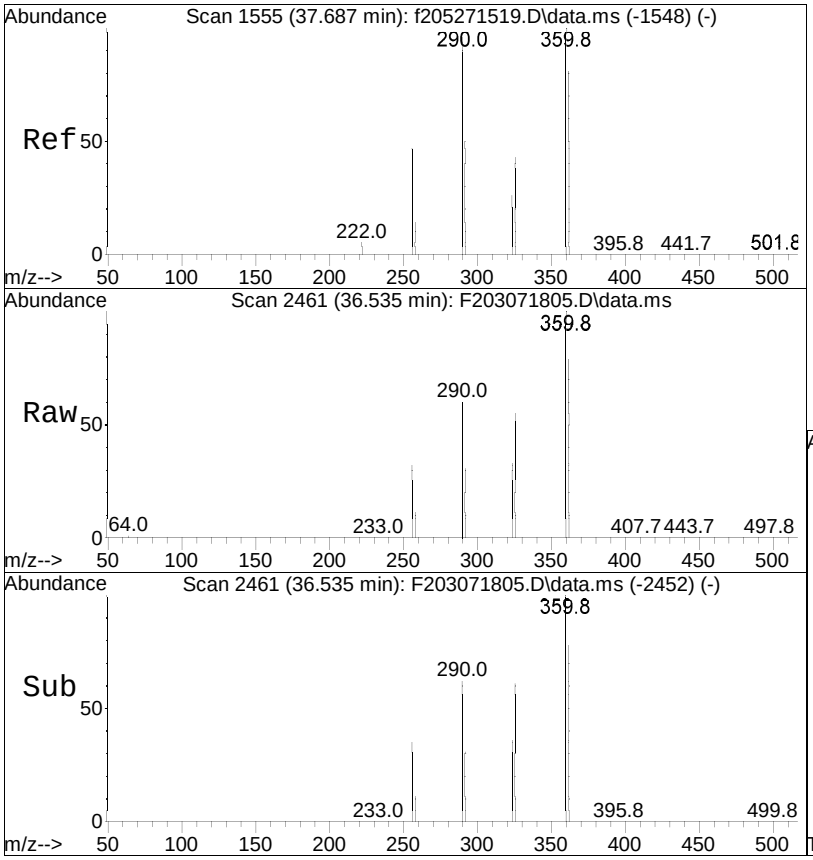


#125
Cl5-BZ#82
Concen: 90.74 ng/mL
RT: 36.518 min Scan# 2460
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 58954

Ion	Ratio	Lower	Upper
326	100		
324	62.6	48.7	73.1

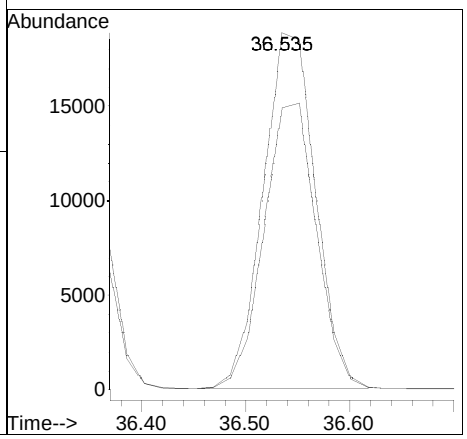


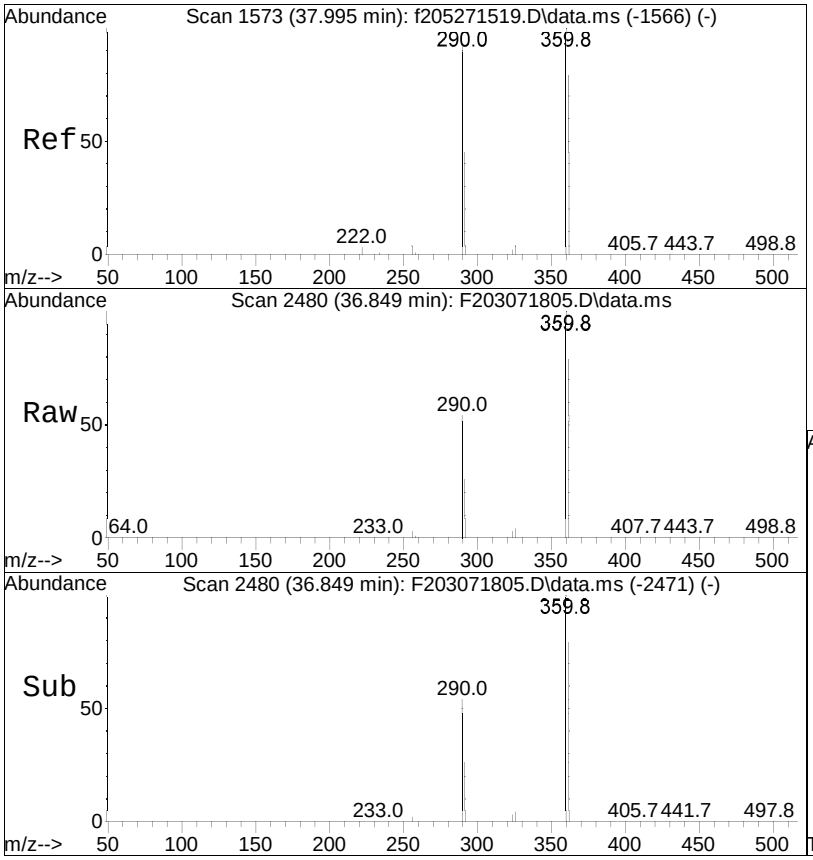


#126
Cl6-BZ#144
Concen: 88.99 ng/mL
RT: 36.535 min Scan# 2461
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 65897

Ion	Ratio	Lower	Upper
360	100		
362	80.3	64.8	97.2

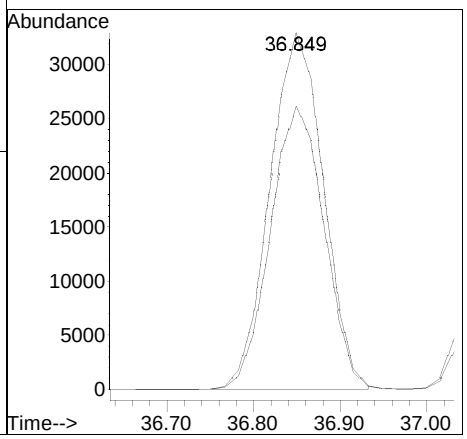


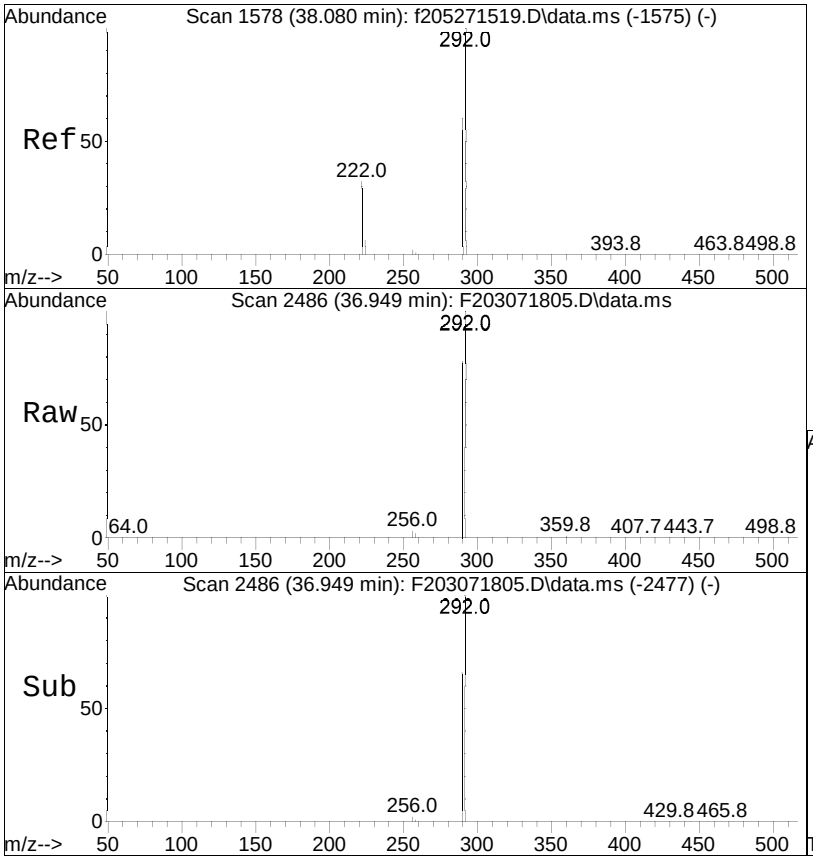


#127
Cl6-BZ#147/#149
Concen: 178.04 ng/mL
RT: 36.849 min Scan# 2480
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 140760

Ion	Ratio	Lower	Upper
360	100		
362	79.7	62.6	94.0

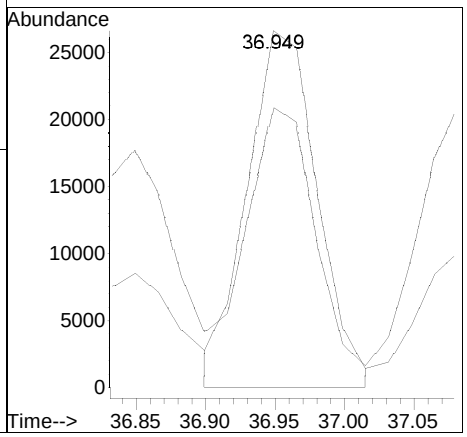


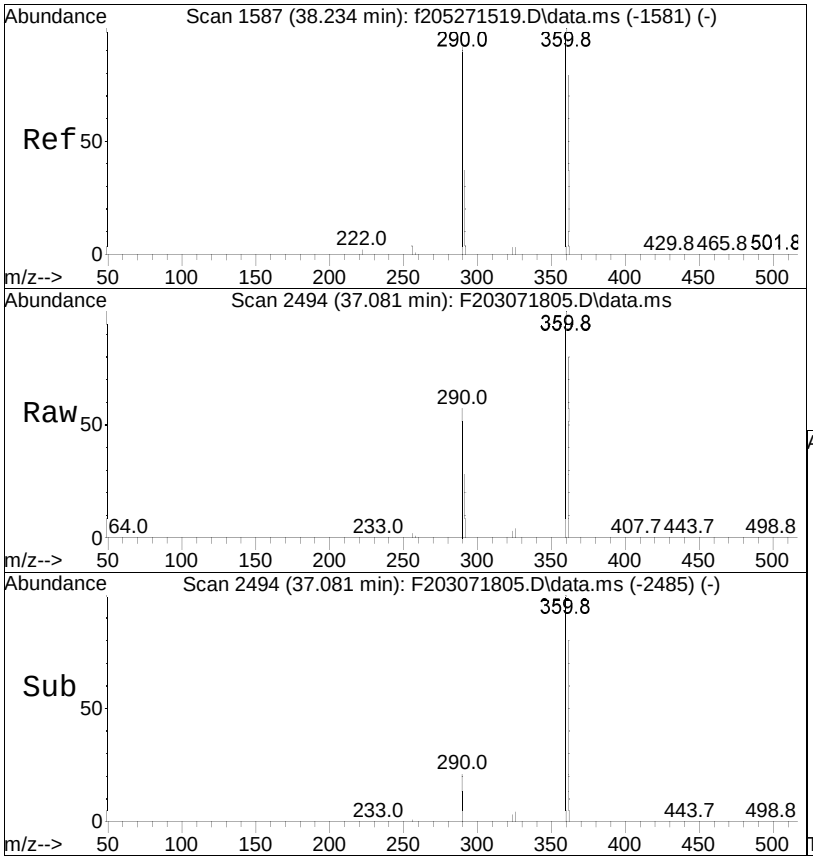


#128
Cl4-BZ#77-RTW
Concen: 85.99 ng/mL M4
RT: 36.949 min Scan# 2486
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:292 Resp: 92908

Ion	Ratio	Lower	Upper
292	100		
290	78.4	62.0	93.0

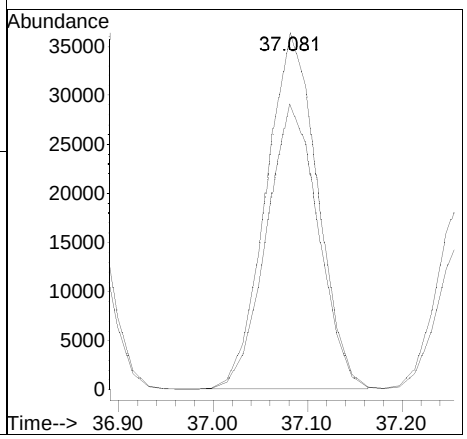


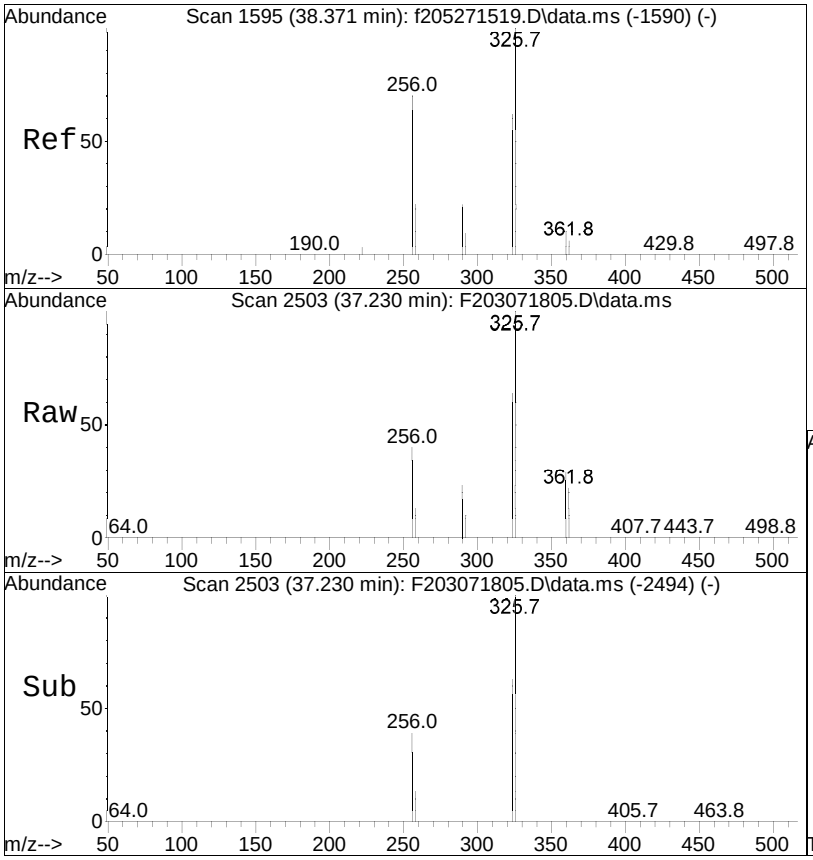


#129
Cl6-BZ#143/#139
Concen: 180.94 ng/mL
RT: 37.081 min Scan# 2494
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 137475

Ion	Ratio	Lower	Upper
360	100		
362	80.6	64.7	97.1

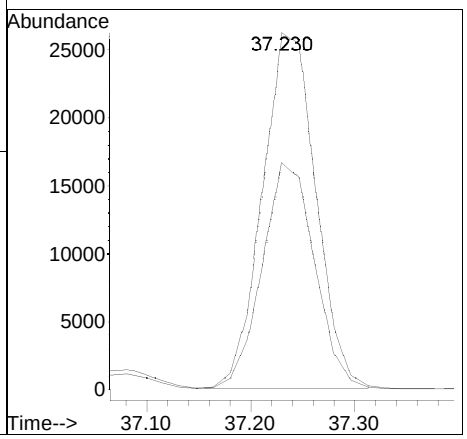


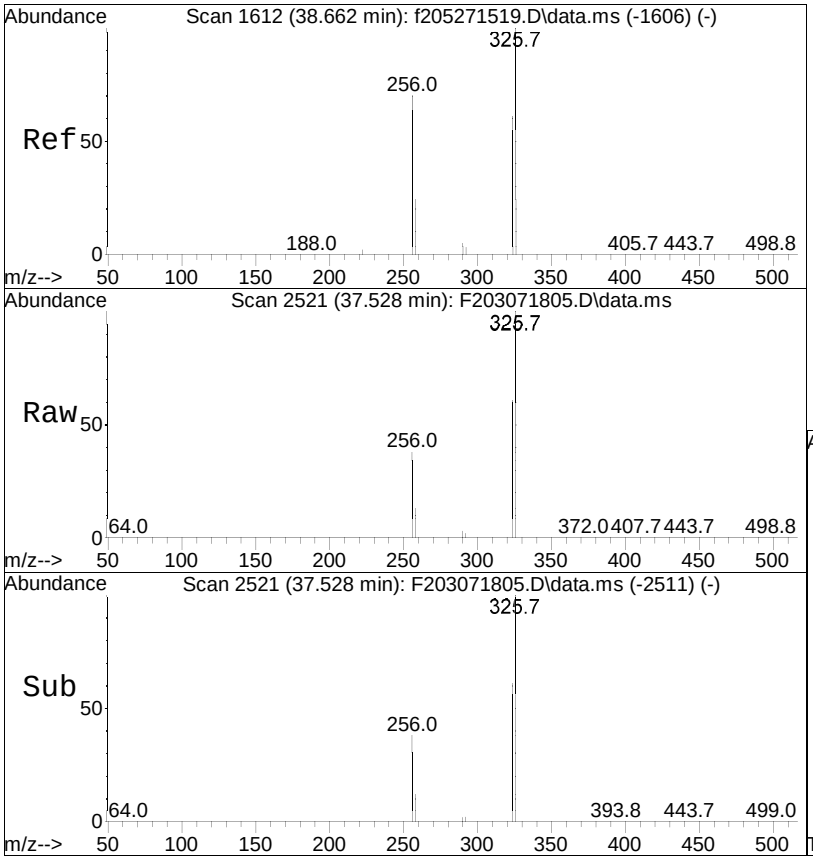


#130
Cl5-BZ#124
Concen: 90.80 ng/mL
RT: 37.230 min Scan# 2503
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 92754

Ion	Ratio	Lower	Upper
326	100		
324	62.5	49.2	73.8

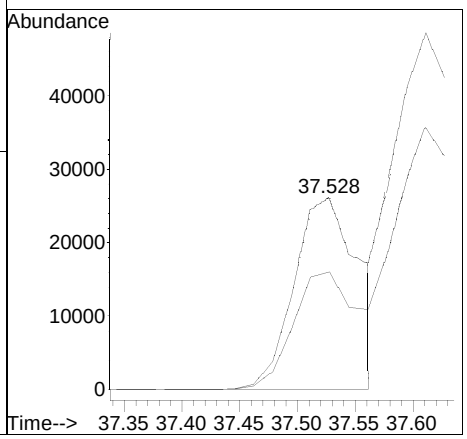


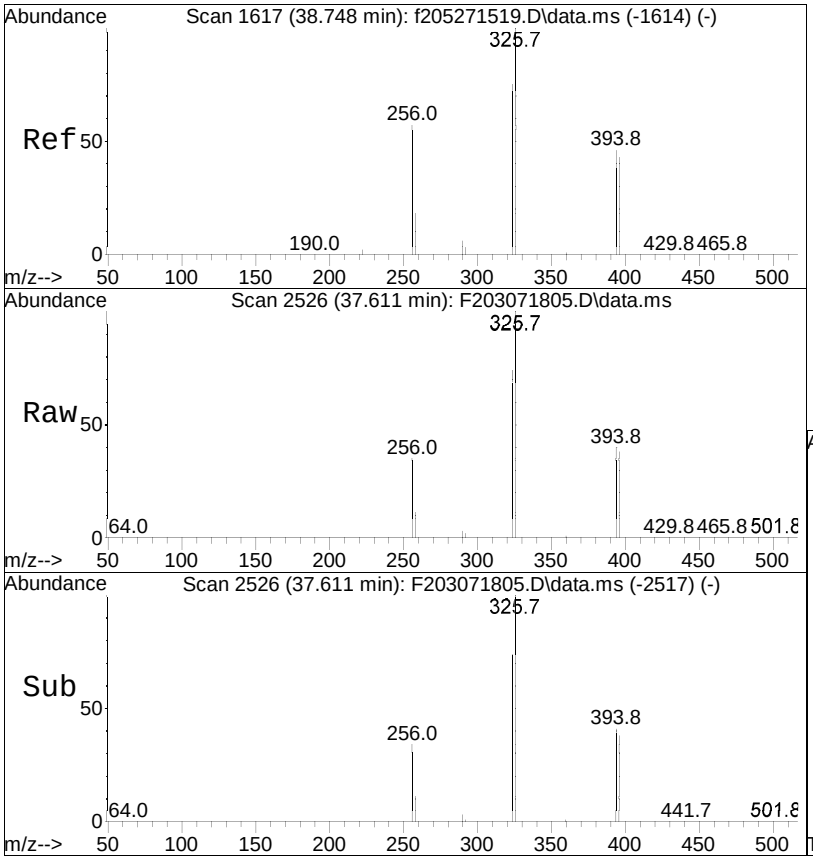


#131
Cl5-BZ#108
Concen: 98.63 ng/mL
RT: 37.528 min Scan# 2521
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 102344

Ion	Ratio	Lower	Upper
326	100		
324	62.6	50.0	75.0

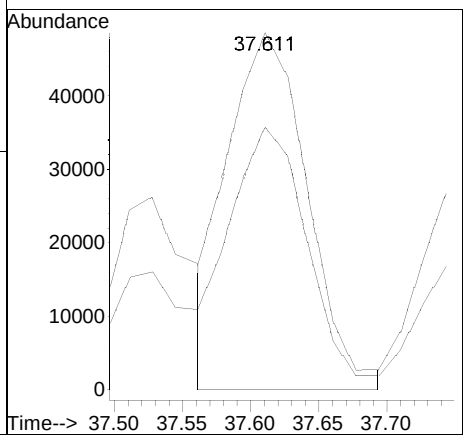


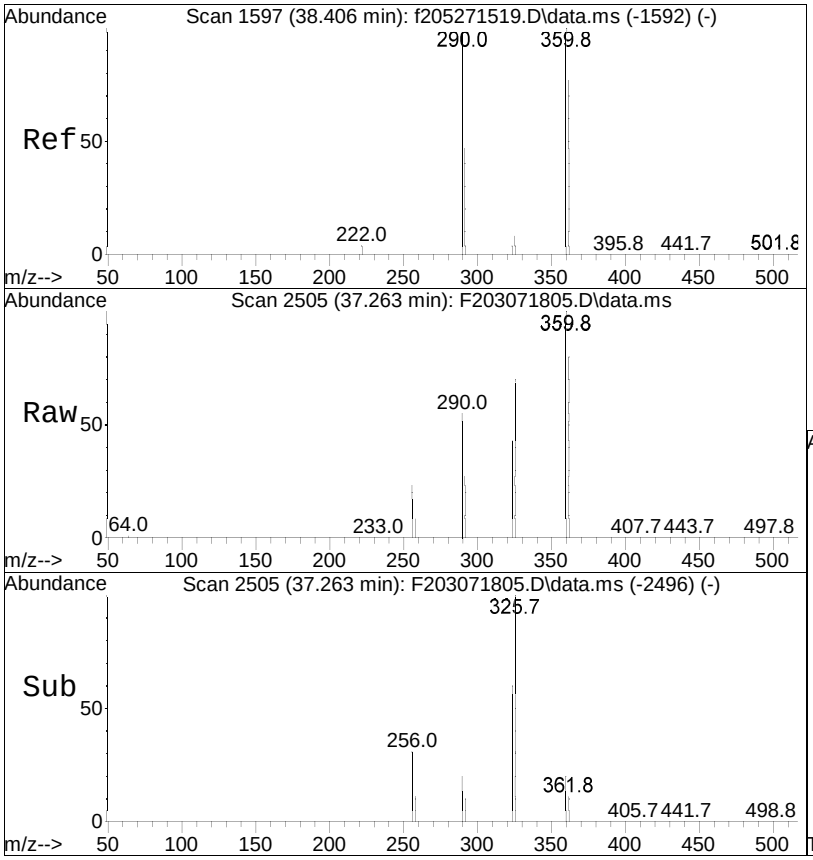


#132
Cl5-BZ#107/#123
Concen: 178.74 ng/mL M4
RT: 37.611 min Scan# 2526
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 197744

Ion	Ratio	Lower	Upper
326	100		
324	64.4	57.6	86.4

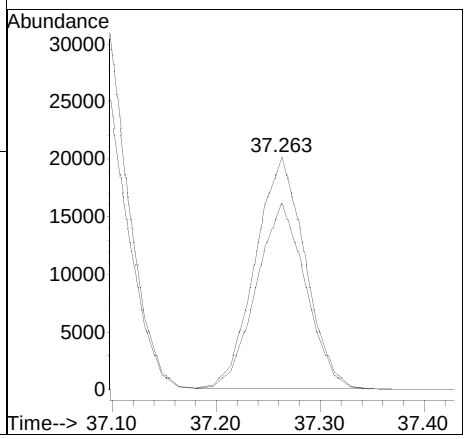


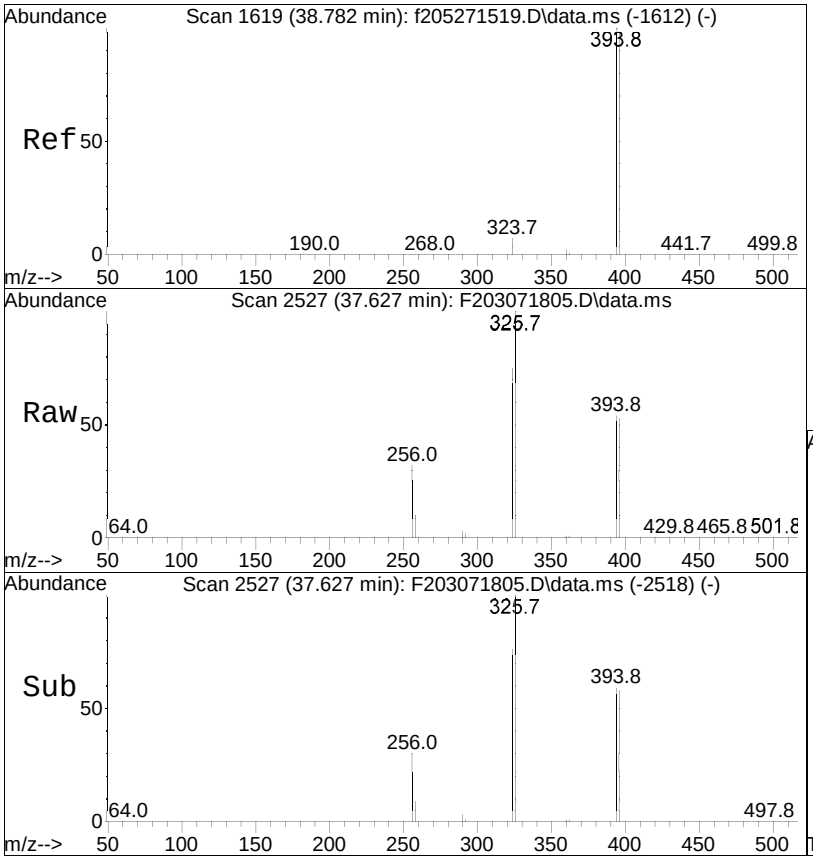


#133
Cl6-BZ#140
Concen: 90.75 ng/mL
RT: 37.263 min Scan# 2505
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 66641

Ion	Ratio	Lower	Upper
360	100		
362	79.8	64.8	97.2

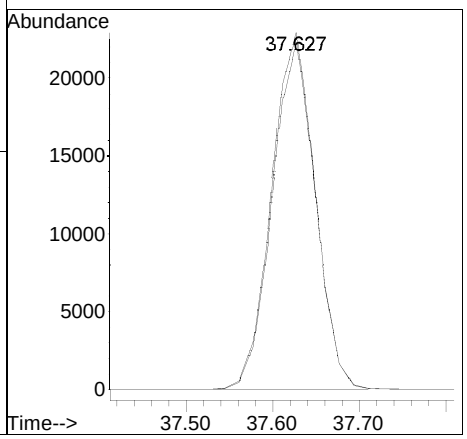


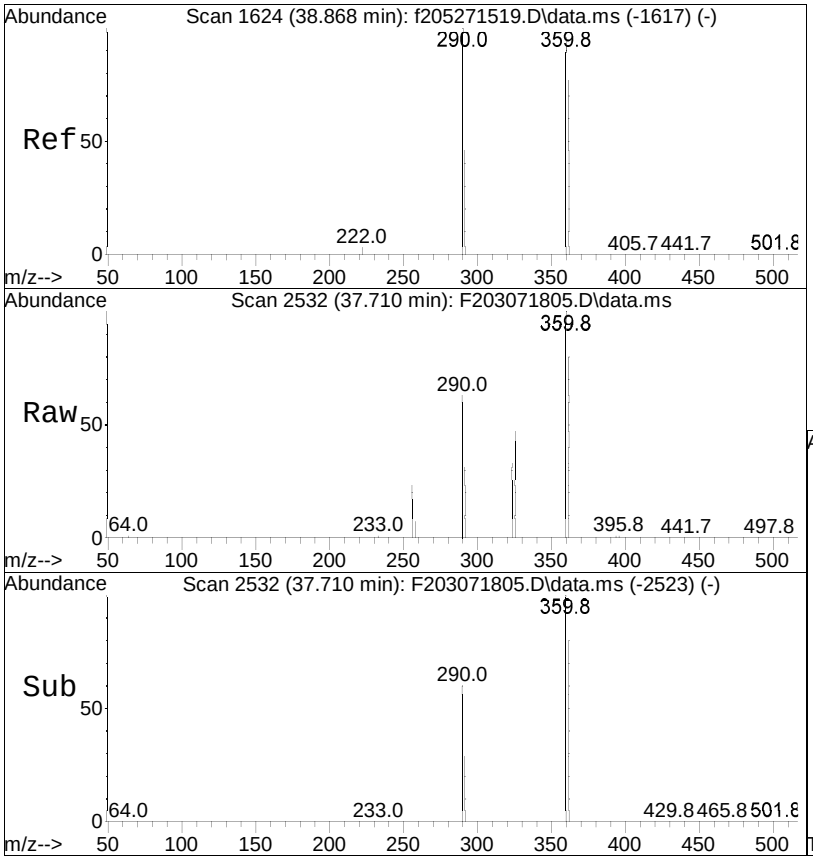


#134
Cl7-BZ#188-Cal/RTW
Concen: 91.84 ng/mL
RT: 37.627 min Scan# 2527
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 79309

Ion	Ratio	Lower	Upper
394	100		
396	96.4	76.3	114.5

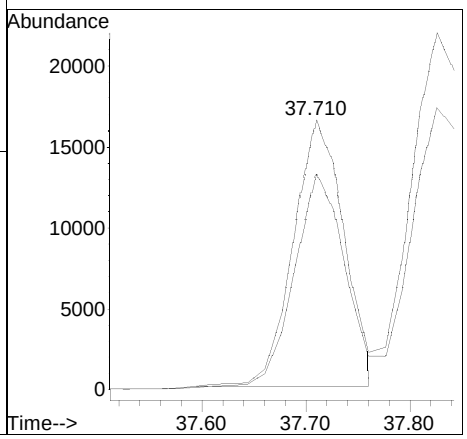


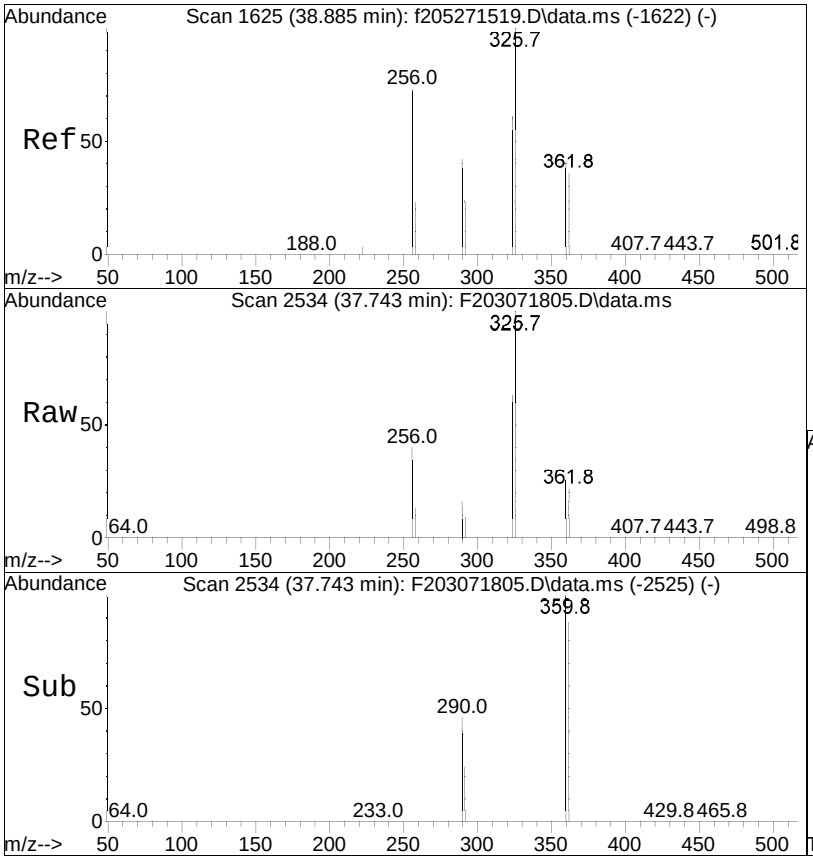


#137
Cl6-BZ#134
Concen: 89.53 ng/mL
RT: 37.710 min Scan# 2532
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 56029

Ion	Ratio	Lower	Upper
360	100		
362	83.6	61.2	91.8

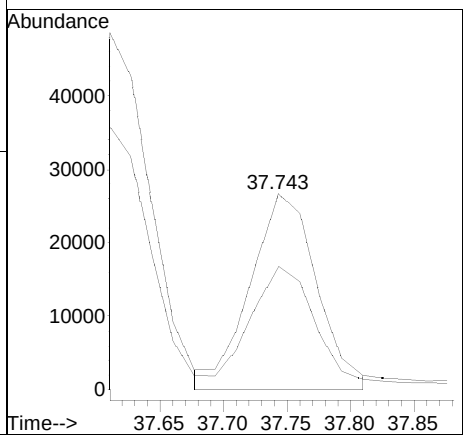


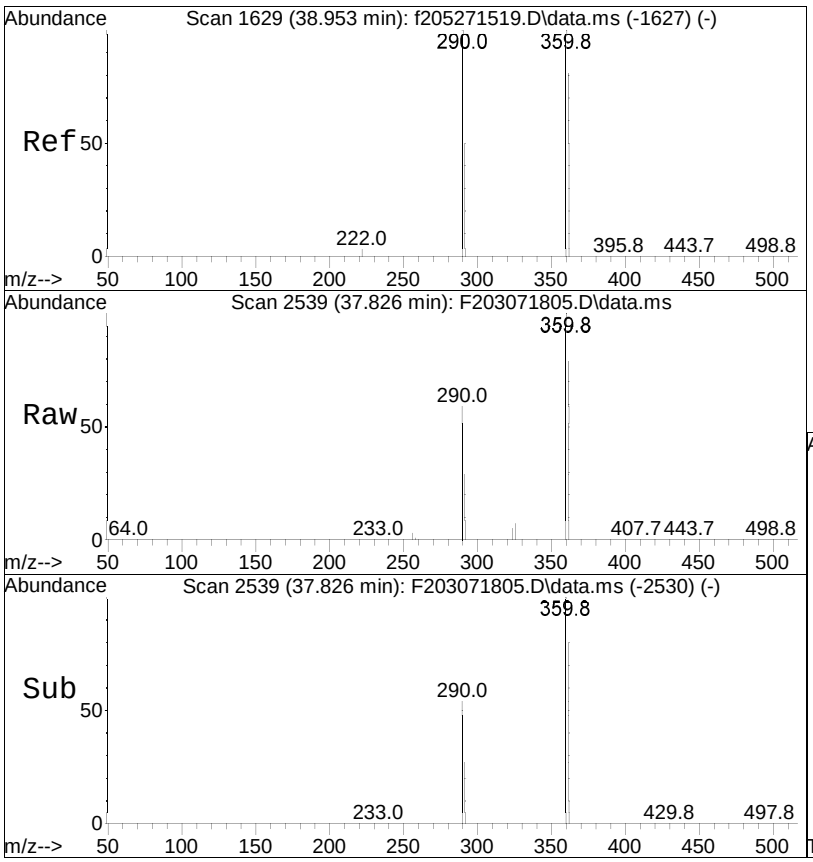


#138
Cl5-BZ#106
Concen: 96.61 ng/mL M4
RT: 37.743 min Scan# 2534
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 97188

Ion	Ratio	Lower	Upper
326	100		
324	53.1	49.8	74.8

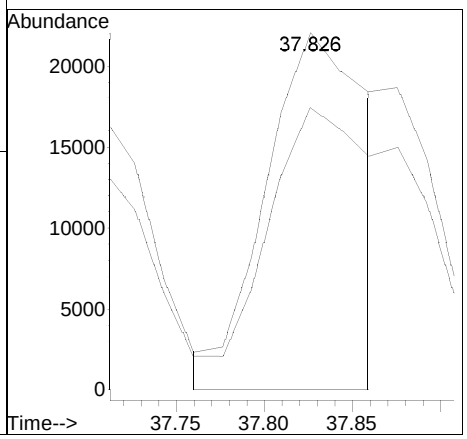


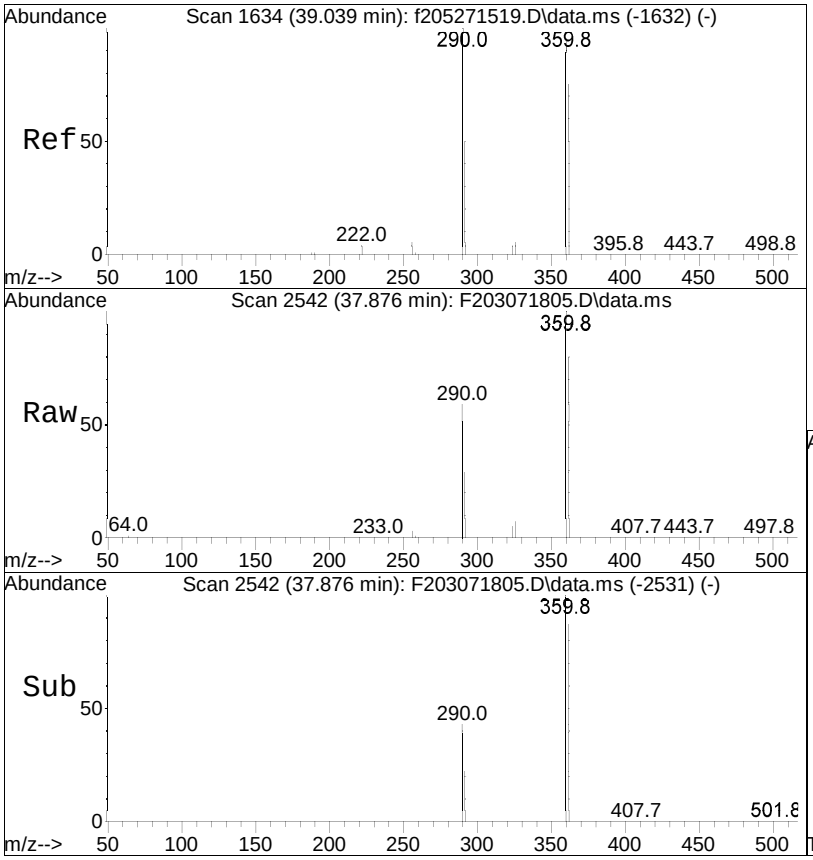


#139
Cl6-BZ#133
Concen: 102.87 ng/mL M4
RT: 37.826 min Scan# 2539
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 87627

Ion	Ratio	Lower	Upper
360	100		
362	94.4	62.5	93.7#

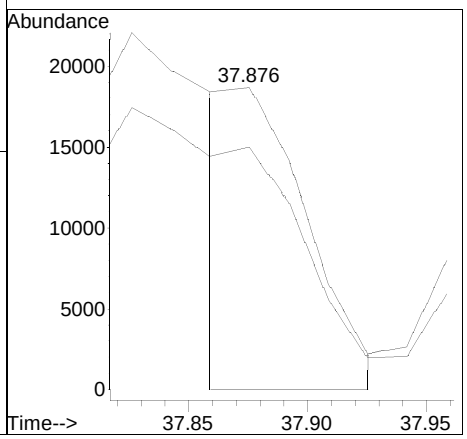


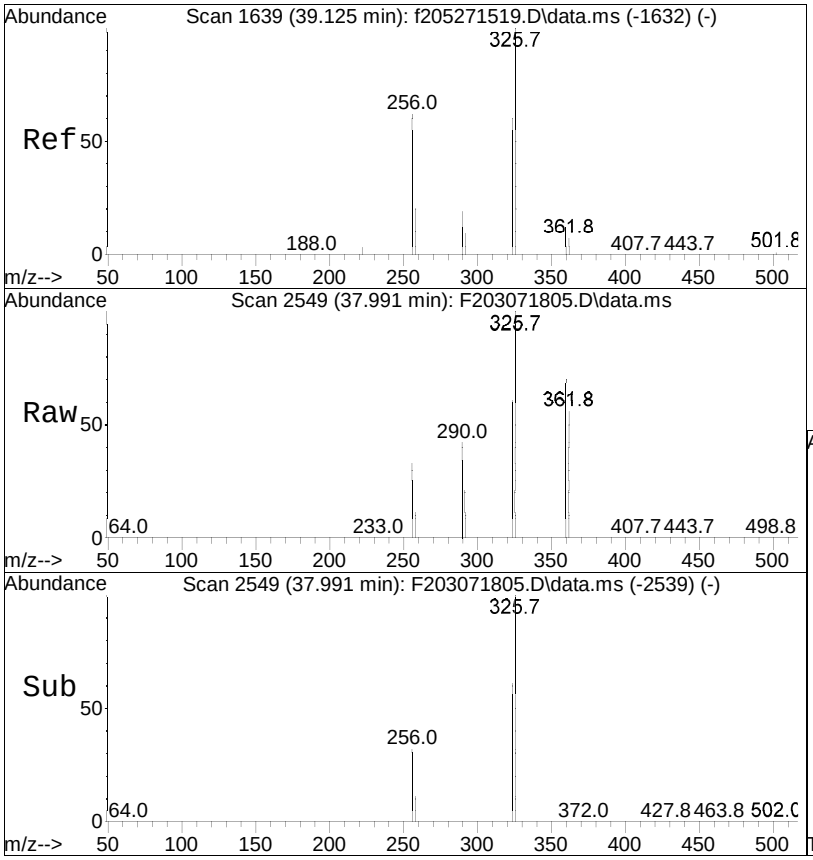


#140
Cl6-BZ#142
Concen: 72.44 ng/mL M4
RT: 37.876 min Scan# 2542
Delta R.T. 0.033 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 41465

Ion	Ratio	Lower	Upper
360	100		
362	201.2	63.2	94.8#

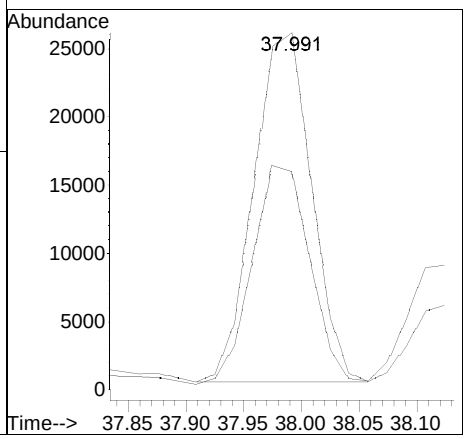


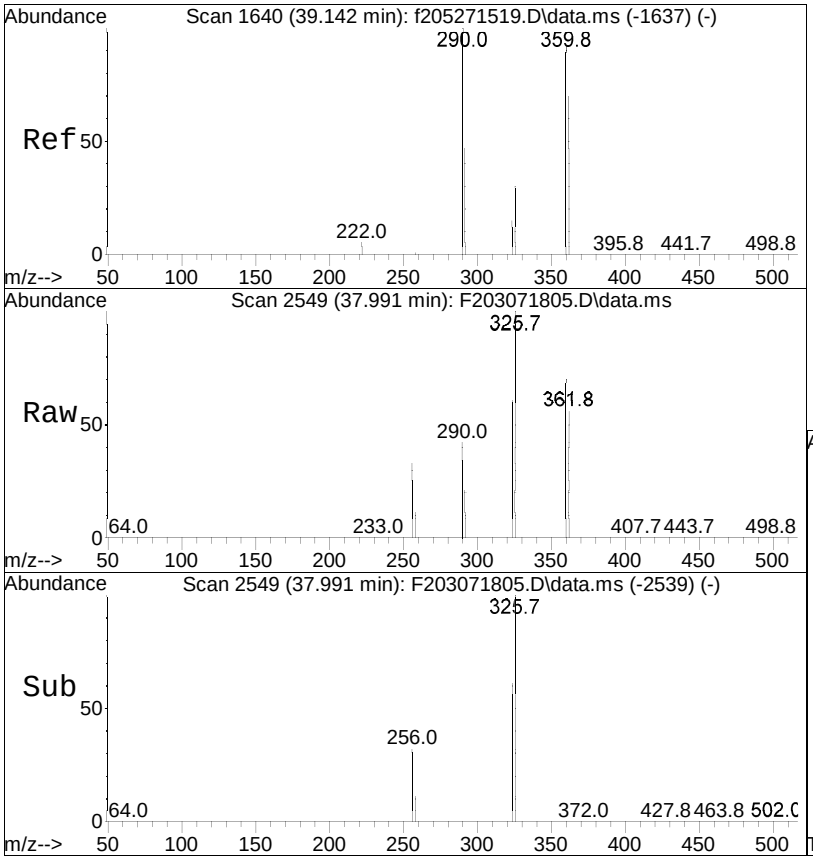


#141
Cl5-BZ#118
Concen: 91.02 ng/mL
RT: 37.991 min Scan# 2549
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 88874

Ion	Ratio	Lower	Upper
326	100		
324	63.0	51.4	77.0

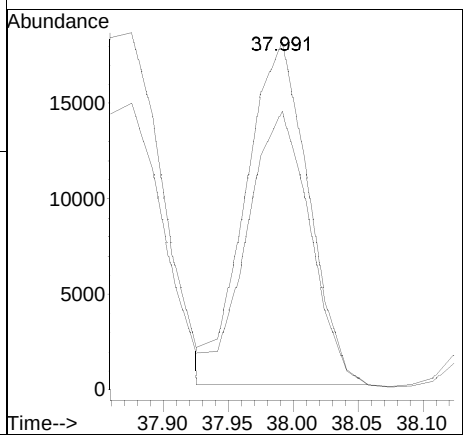


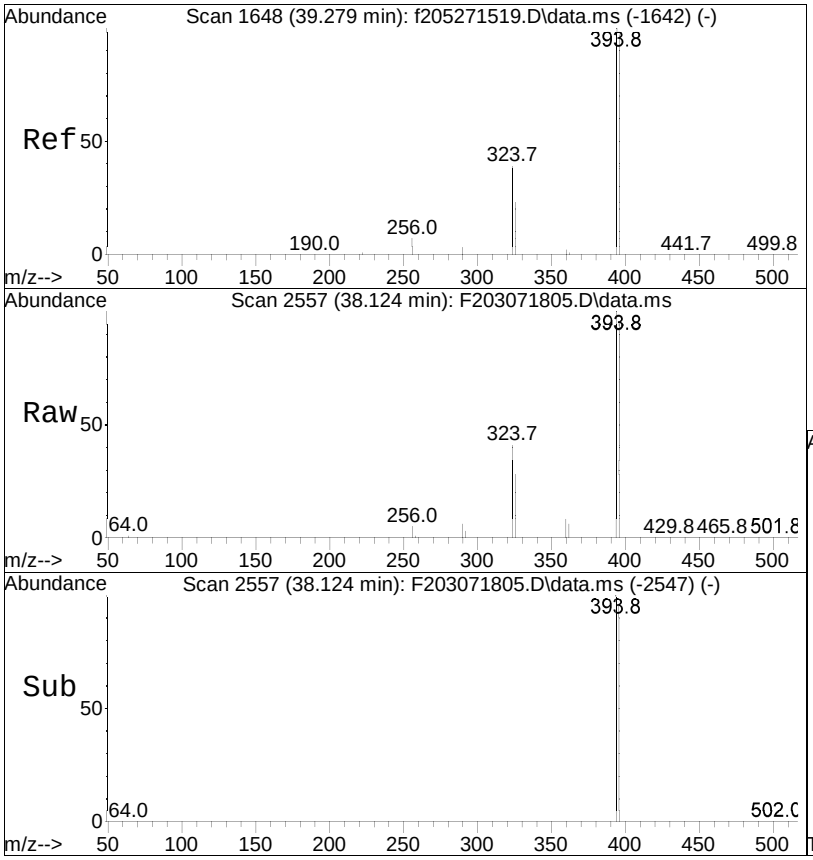


#142
Cl6-BZ#131
Concen: 91.04 ng/mL
RT: 37.991 min Scan# 2549
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 60044

Ion	Ratio	Lower	Upper
360	100		
362	80.5	64.2	96.4

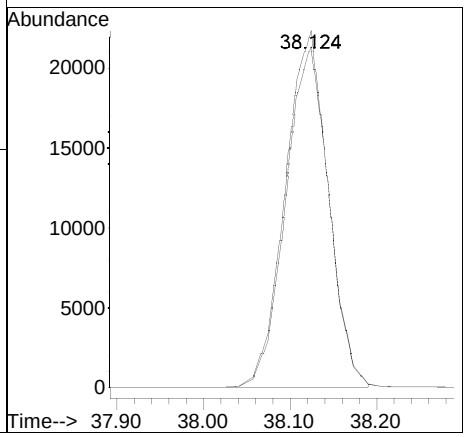


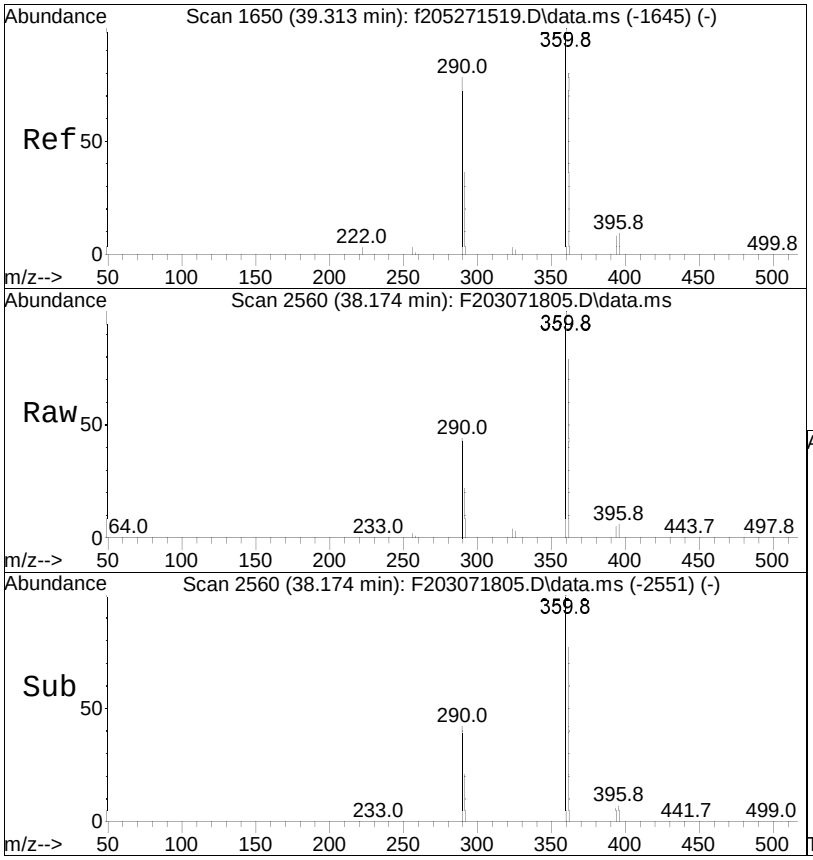


#143
Cl7-BZ#184
Concen: 89.58 ng/mL
RT: 38.124 min Scan# 2557
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 76446

Ion	Ratio	Lower	Upper
394	100		
396	96.0	75.3	112.9

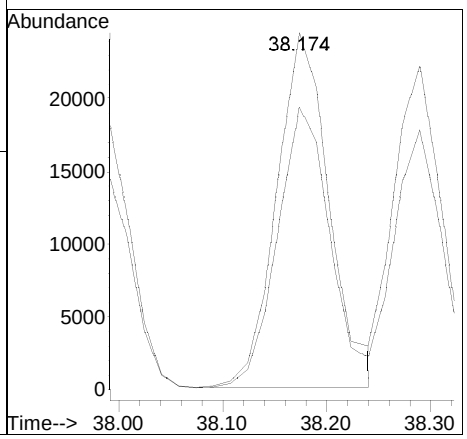


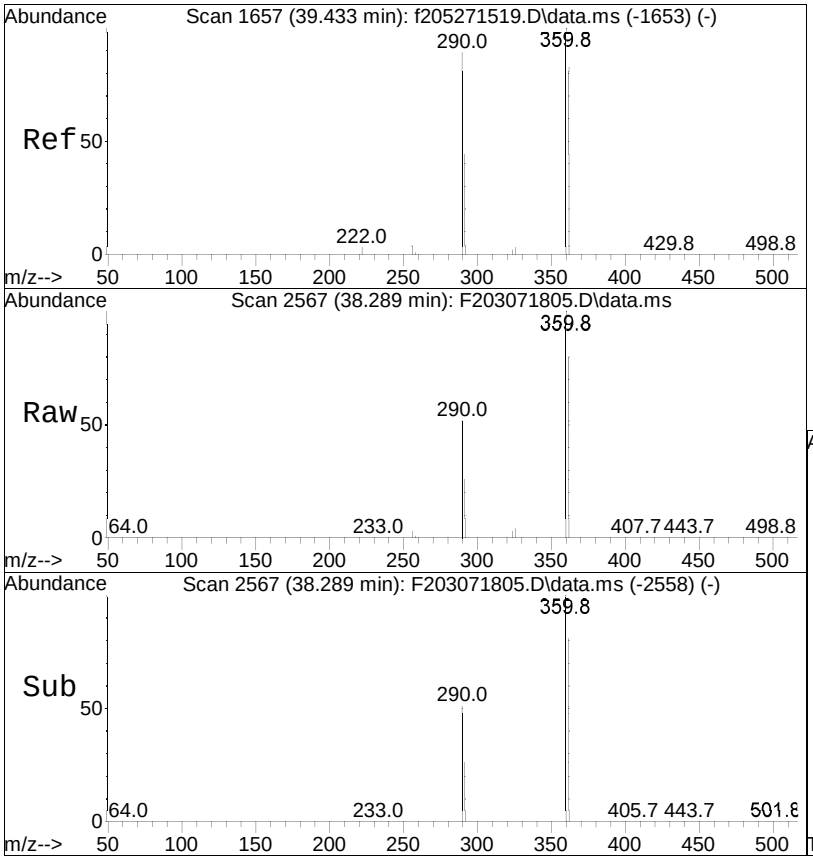


#144
Cl6-BZ#165
Concen: 92.37 ng/mL
RT: 38.174 min Scan# 2560
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 85709

Ion	Ratio	Lower	Upper
360	100		
362	79.9	65.8	98.8

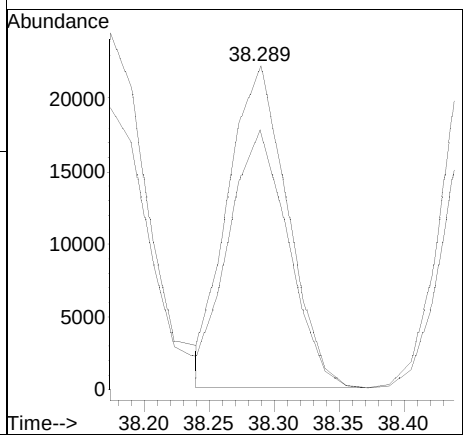


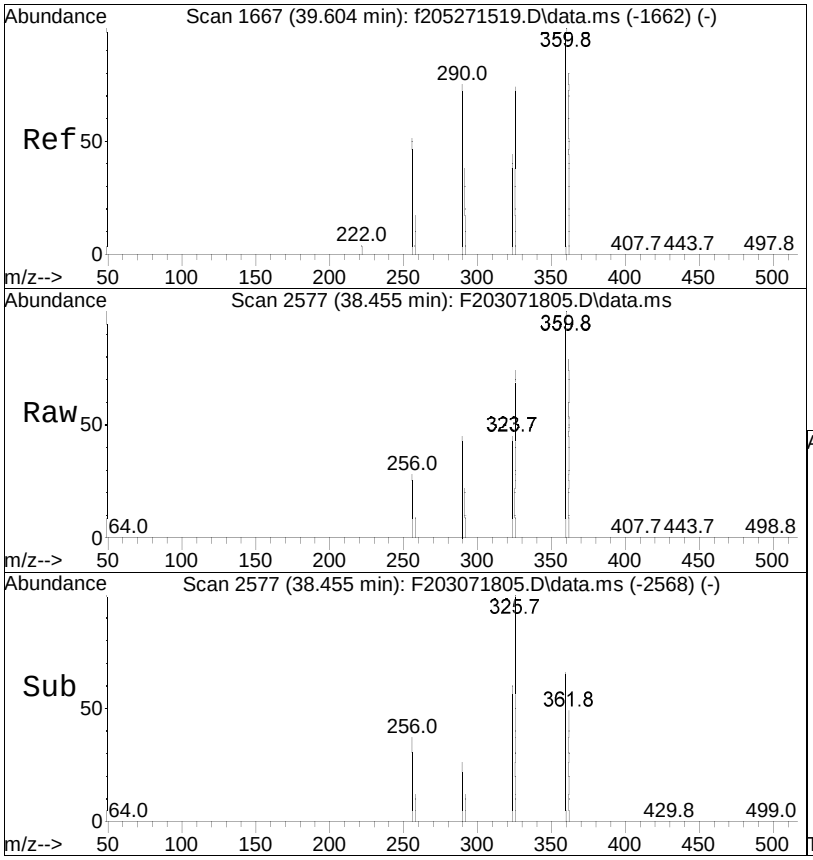


#145
Cl6-BZ#146
Concen: 86.65 ng/mL
RT: 38.289 min Scan# 2567
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 70381

Ion	Ratio	Lower	Upper
360	100		
362	80.0	63.4	95.0

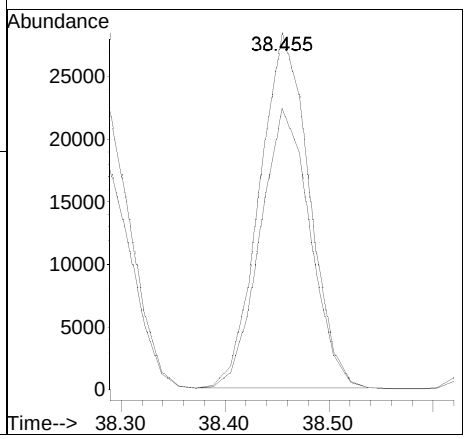


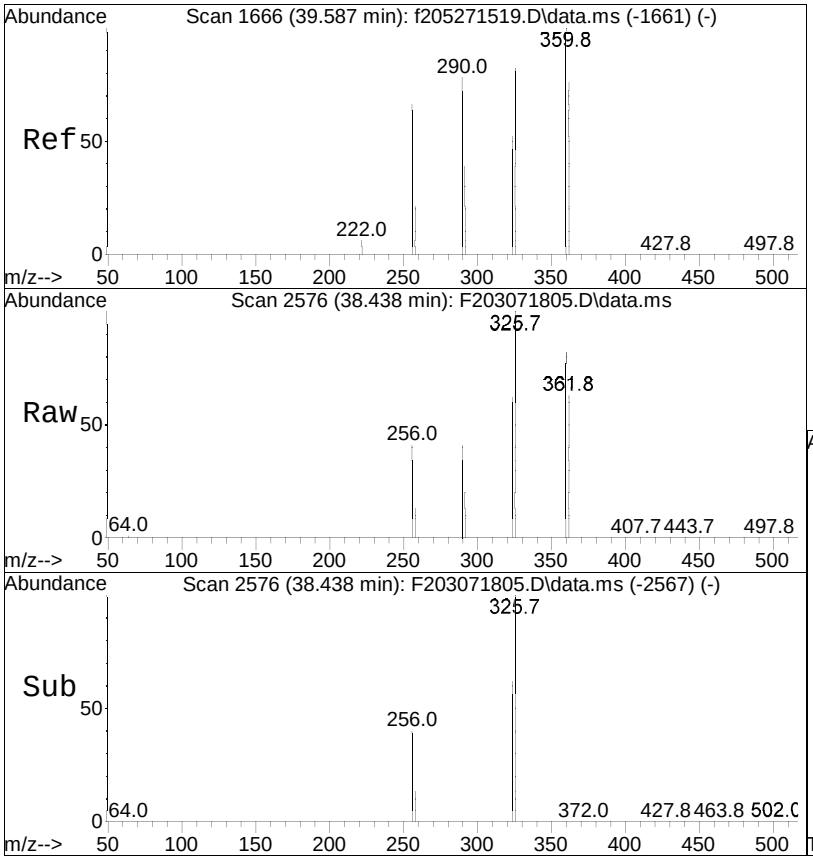


#146
Cl6-BZ#161
Concen: 91.55 ng/mL
RT: 38.455 min Scan# 2577
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 94610

Ion	Ratio	Lower	Upper
360	100		
362	79.1	64.0	96.0

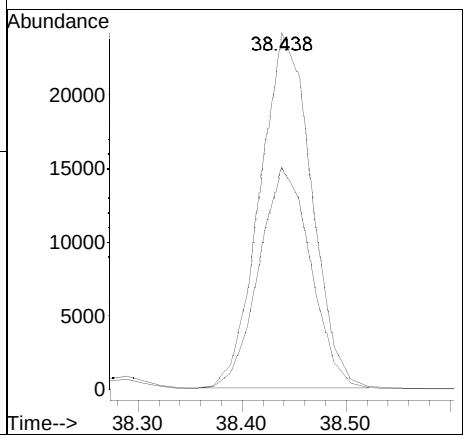


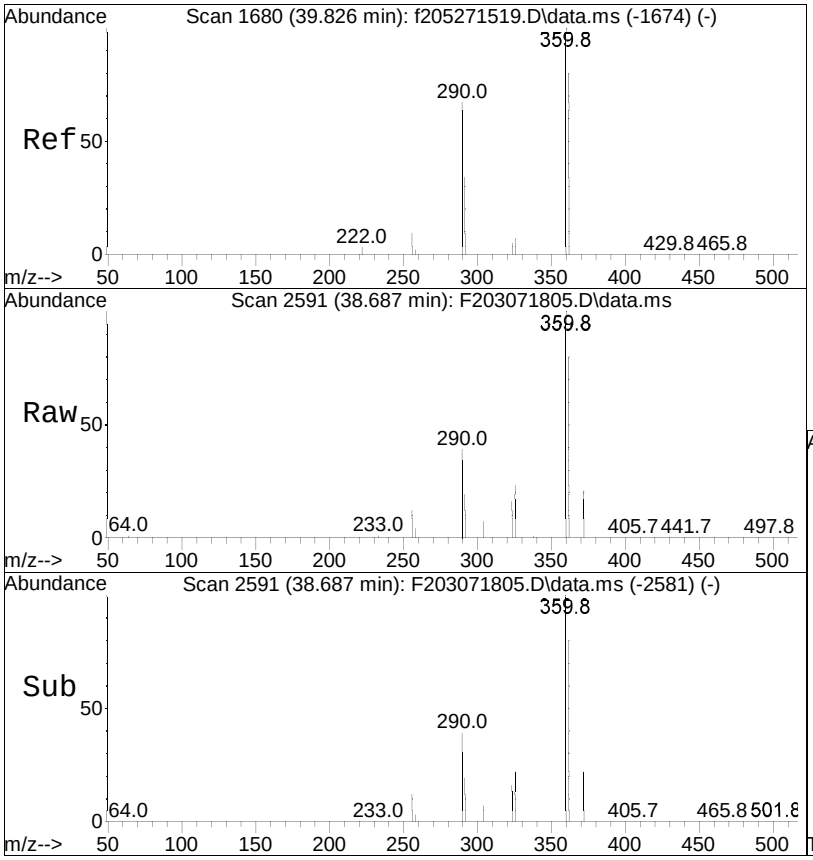


#147
Cl5-BZ#122
Concen: 92.01 ng/mL
RT: 38.438 min Scan# 2576
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 82764

Ion	Ratio	Lower	Upper
326	100		
324	62.5	50.1	75.1

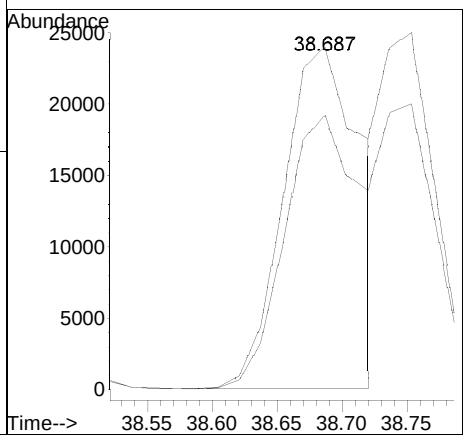


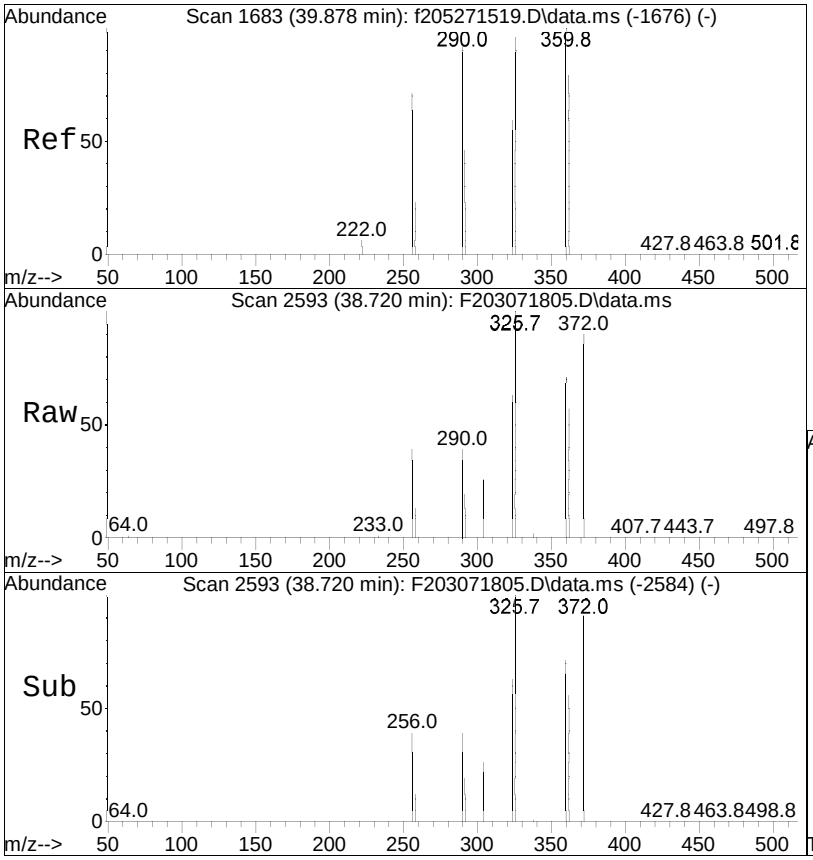


#148
Cl6-BZ#168
Concen: 99.97 ng/mL
RT: 38.687 min Scan# 2591
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 99266

Ion	Ratio	Lower	Upper
360	100		
362	79.1	64.2	96.4

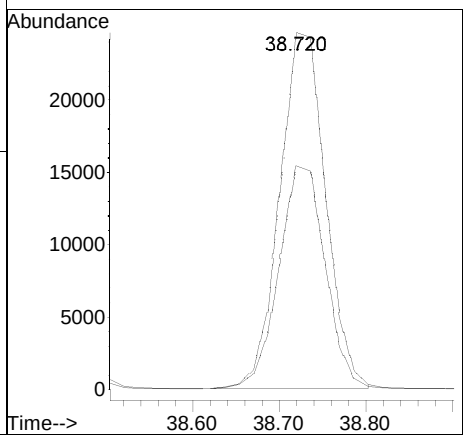


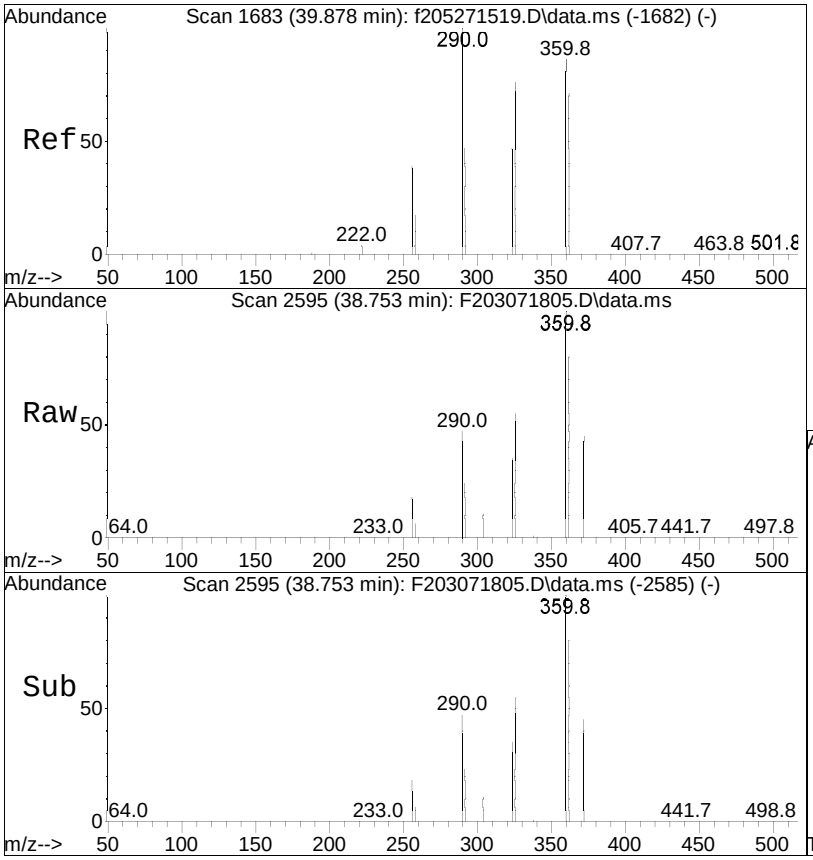


#149
Cl5-BZ#114
Concen: 91.39 ng/mL
RT: 38.720 min Scan# 2593
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 90271

Ion	Ratio	Lower	Upper
326	100		
324	63.5	50.4	75.6

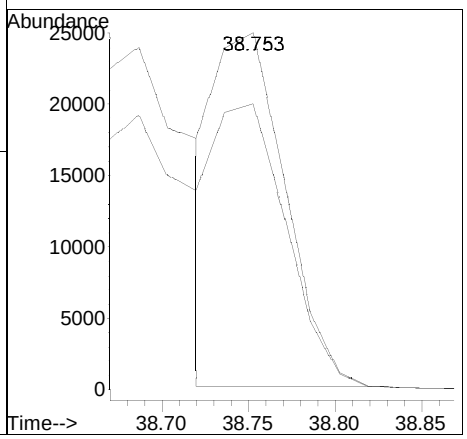


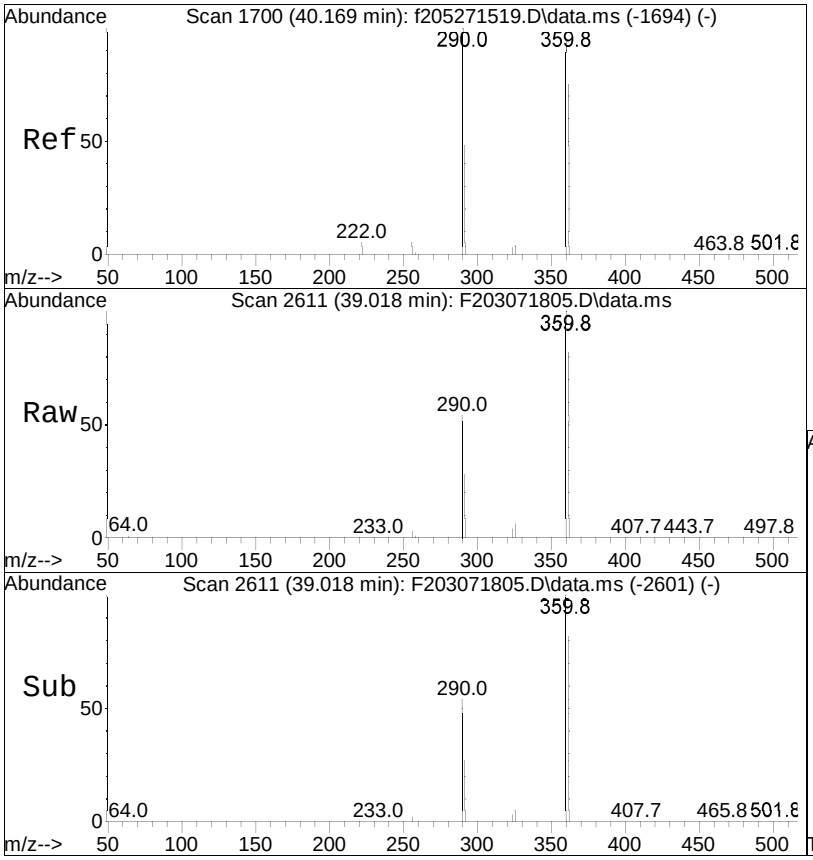


#150
Cl6-BZ#153
Concen: 78.09 ng/mL
RT: 38.753 min Scan# 2595
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 69040

Ion	Ratio	Lower	Upper
360	100		
362	81.8	63.0	94.6

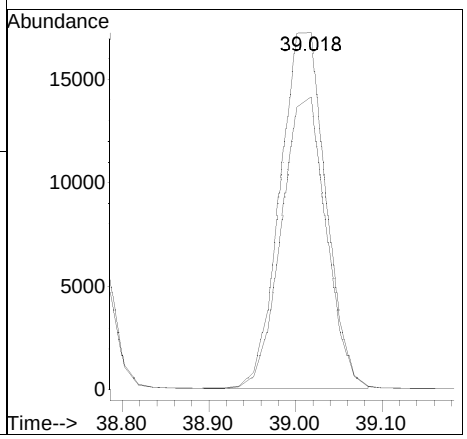


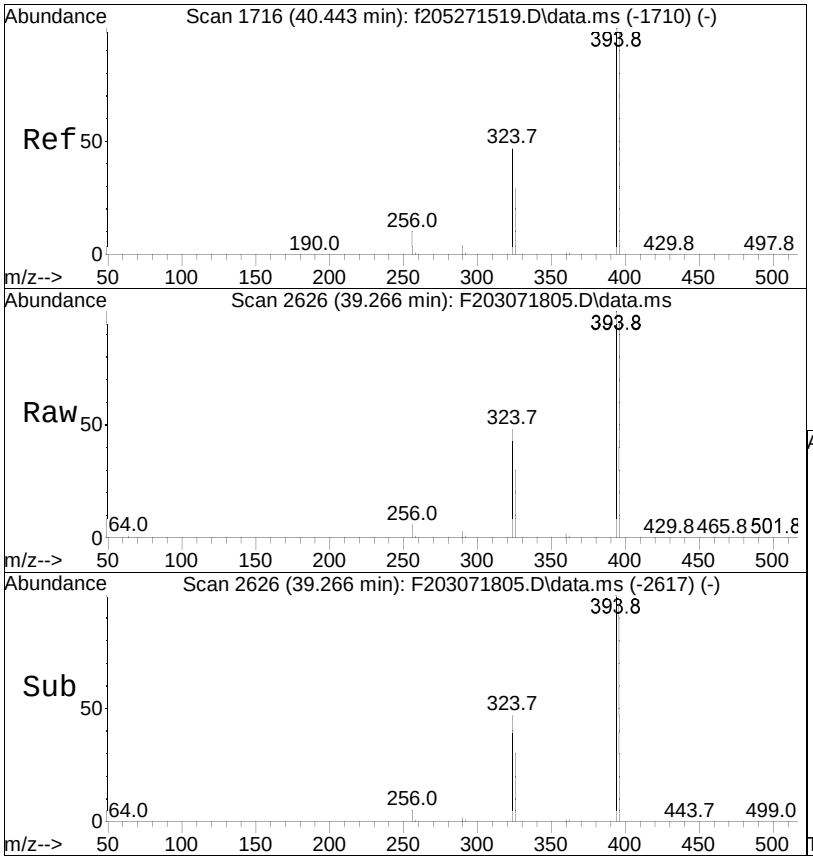


#152
Cl6-BZ#132
Concen: 88.47 ng/mL
RT: 39.018 min Scan# 2611
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 62770

Ion	Ratio	Lower	Upper
360	100		
362	80.4	65.2	97.8

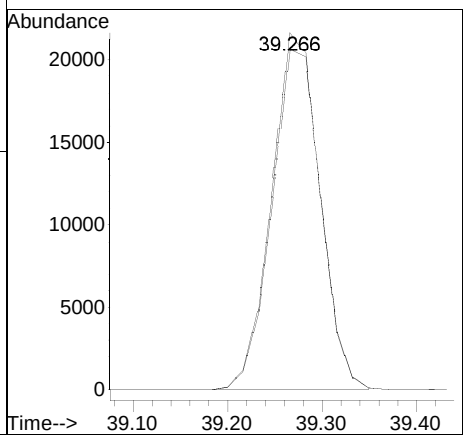


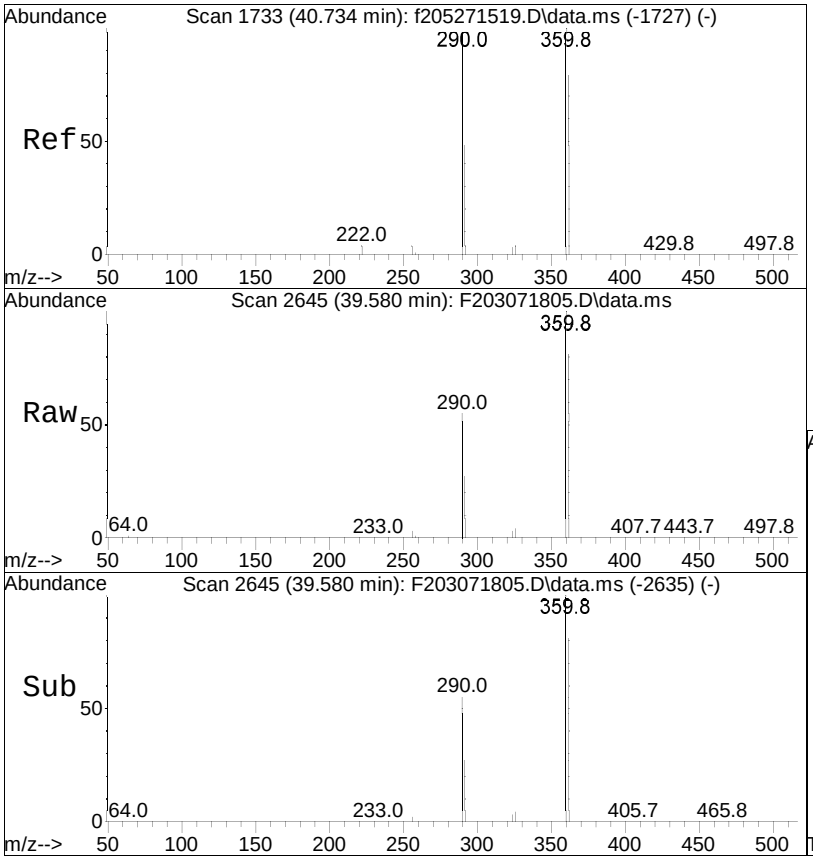


#153
Cl7-BZ#179
Concen: 86.32 ng/mL
RT: 39.266 min Scan# 2626
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 76056

Ion	Ratio	Lower	Upper
394	100		
396	97.1	76.2	114.4

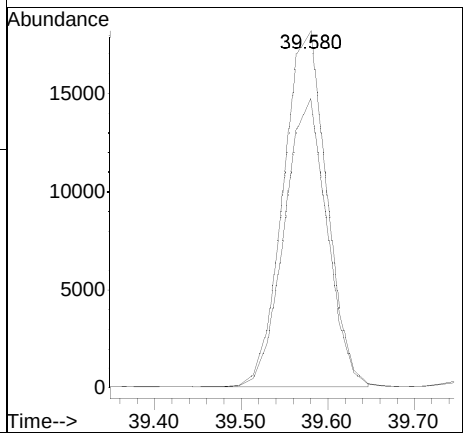


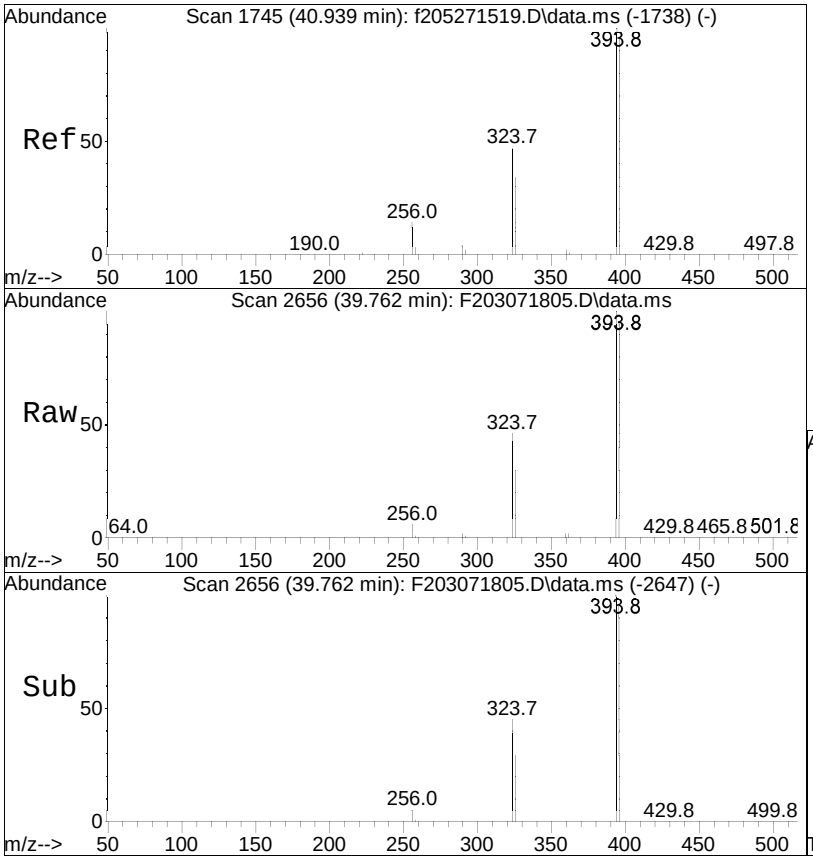


#154
Cl6-BZ#141
Concen: 89.14 ng/mL
RT: 39.580 min Scan# 2645
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 63275

Ion	Ratio	Lower	Upper
360	100		
362	79.6	64.1	96.1

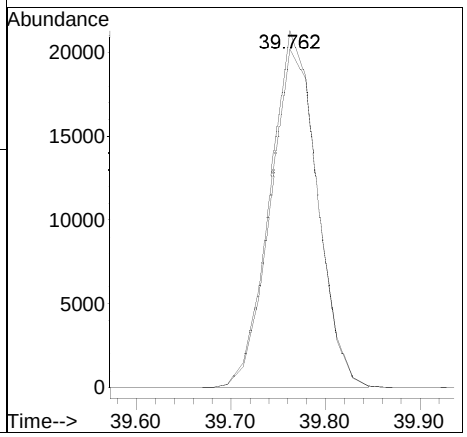


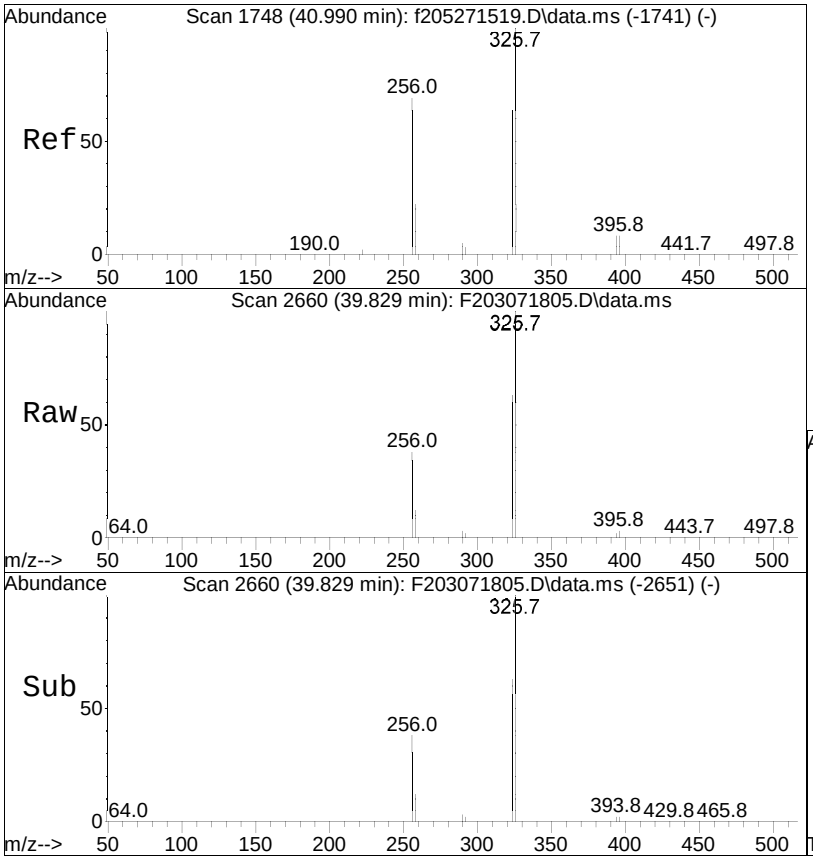


#155
Cl7-BZ#176
Concen: 87.29 ng/mL
RT: 39.762 min Scan# 2656
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 73043

Ion	Ratio	Lower	Upper
394	100		
396	96.2	77.4	116.0

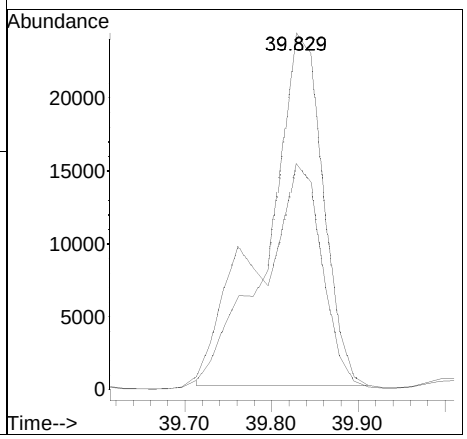


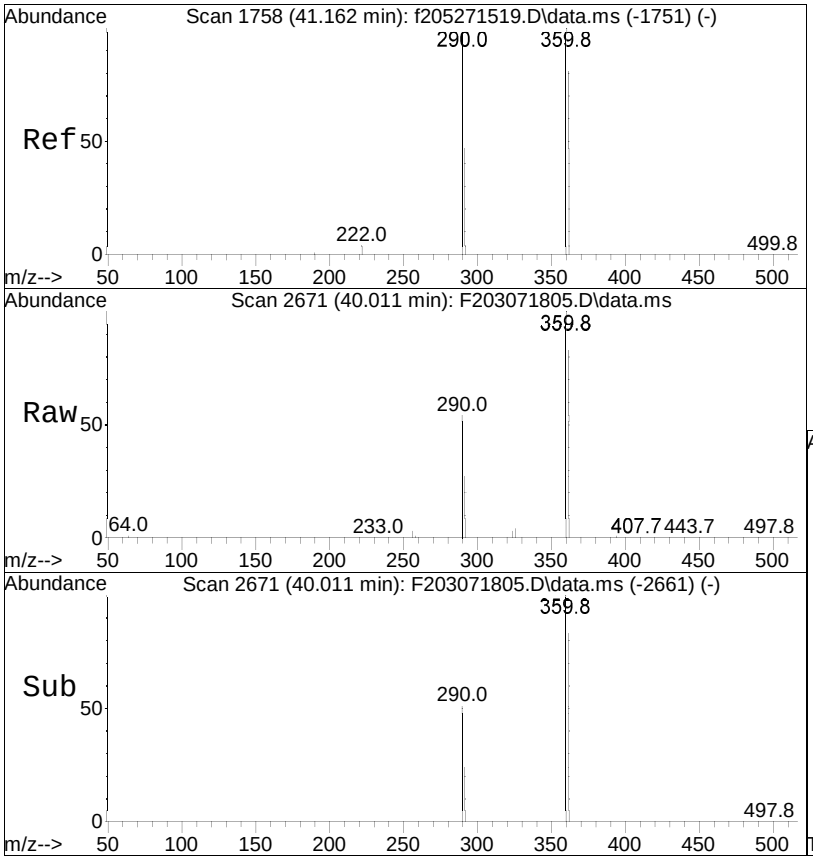


#156
Cl5-BZ#105
Concen: 85.80 ng/mL
RT: 39.829 min Scan# 2660
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 103724

Ion	Ratio	Lower	Upper
326	100		
324	47.0	49.0	73.4#

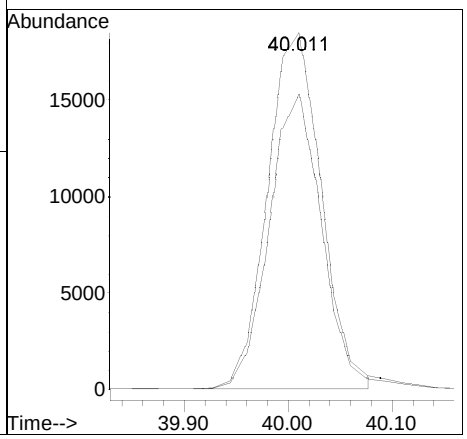


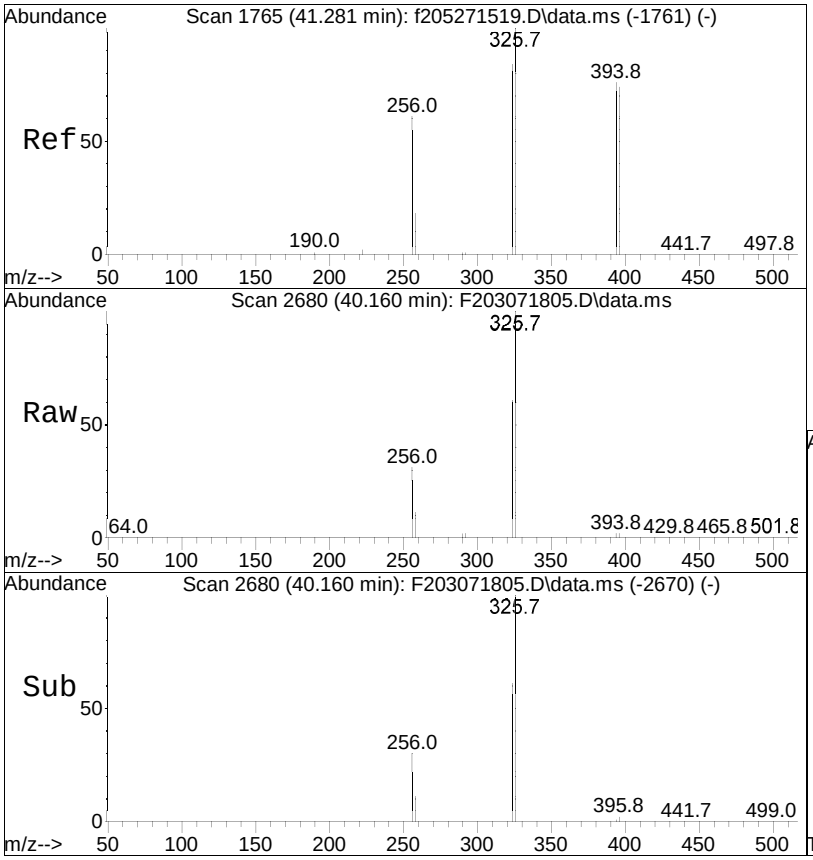


#157
Cl6-BZ#137
Concen: 91.04 ng/mL
RT: 40.011 min Scan# 2671
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 66235

Ion	Ratio	Lower	Upper
360	100		
362	80.5	65.7	98.5

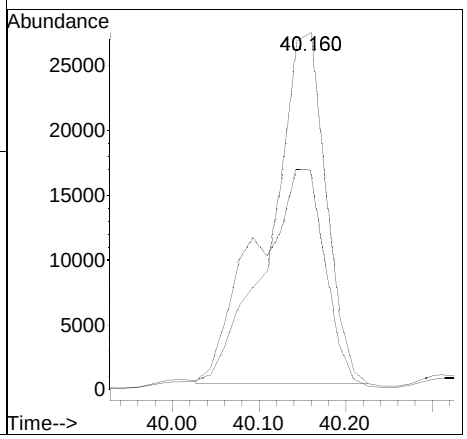


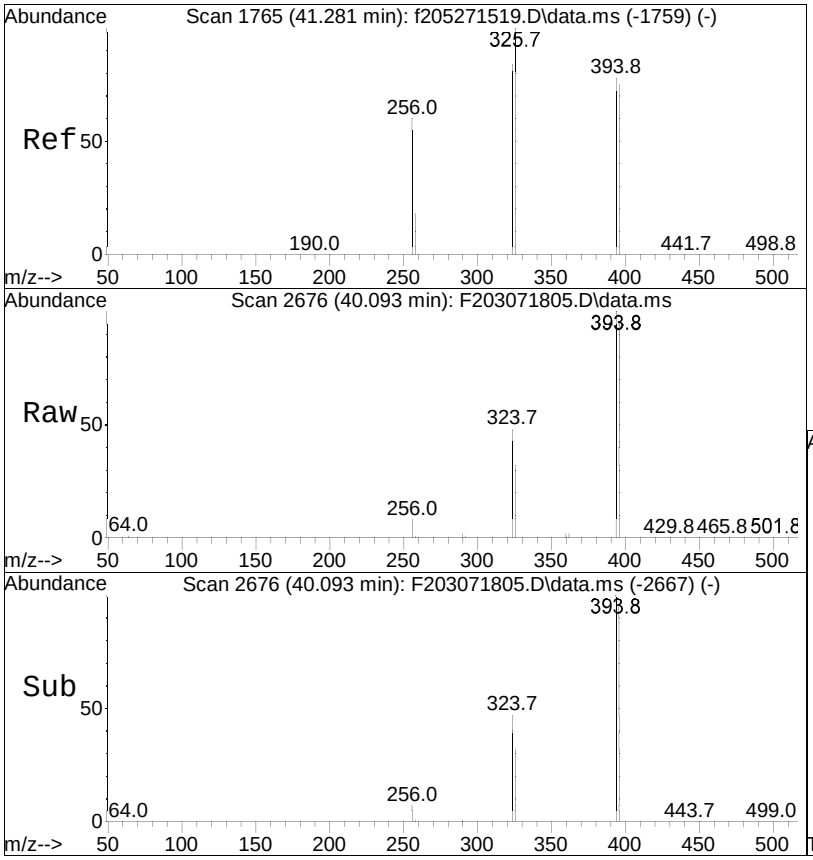


#158
Cl5-BZ#127
Concen: 87.67 ng/mL
RT: 40.160 min Scan# 2680
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 116248

Ion	Ratio	Lower	Upper
326	100		
324	81.8	49.2	73.8#

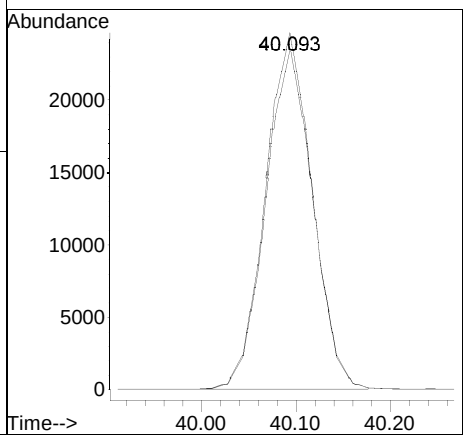


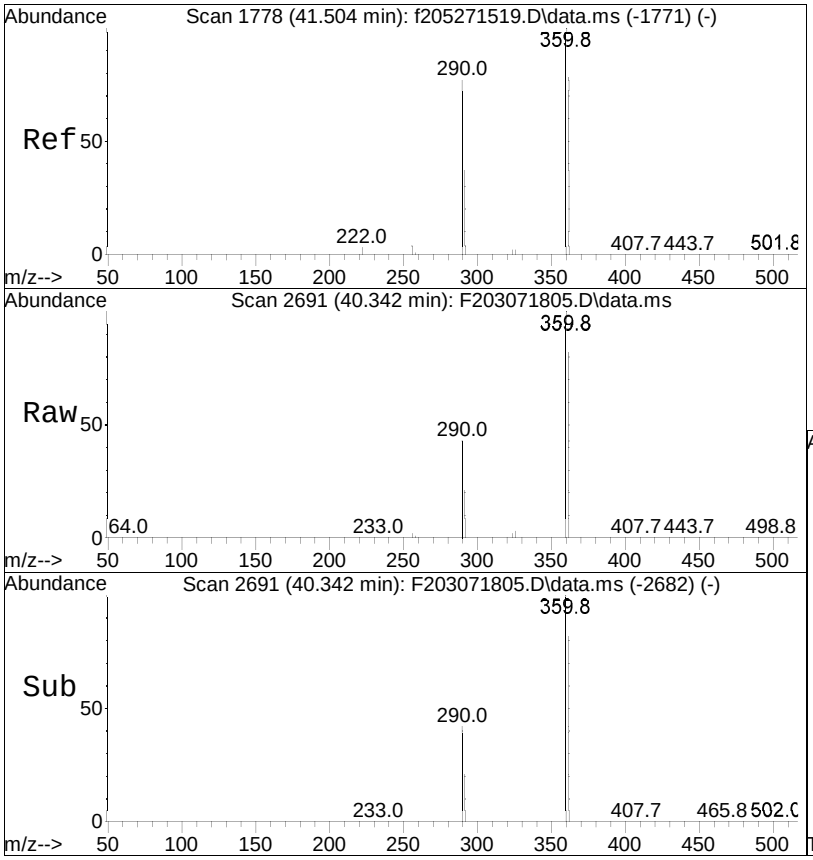


#159
Cl7-BZ#186
Concen: 90.45 ng/mL
RT: 40.093 min Scan# 2676
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 84231

Ion	Ratio	Lower	Upper
394	100		
396	96.1	76.7	115.1

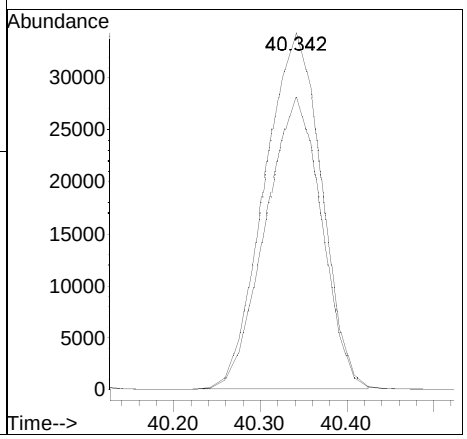


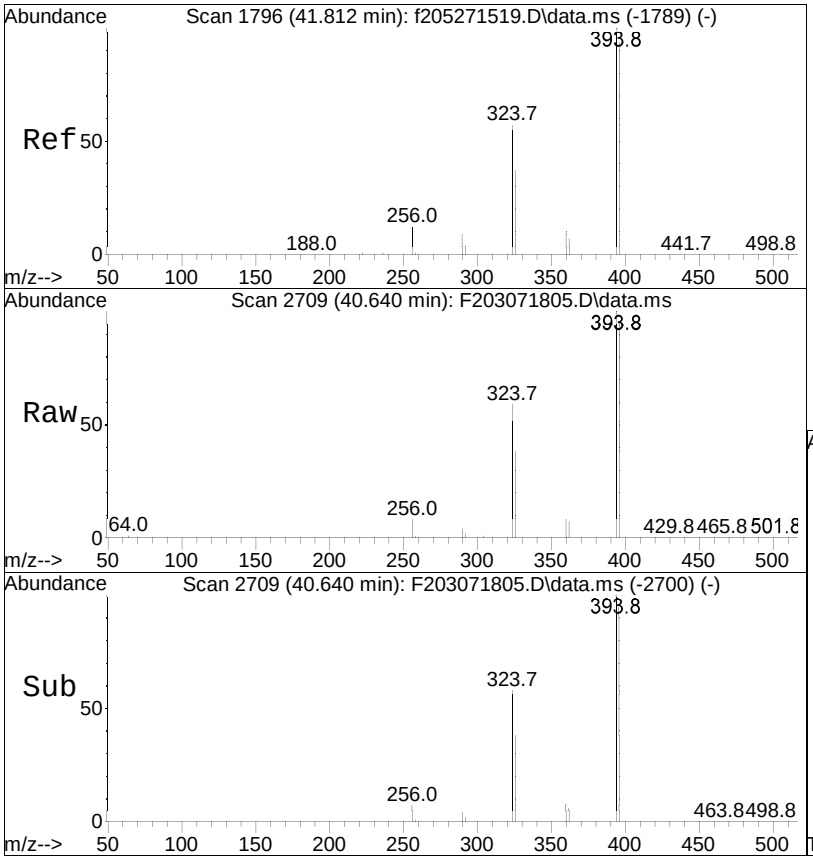


#160
Cl6-BZ#130/#164
Concen: 184.08 ng/mL
RT: 40.342 min Scan# 2691
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 156230

Ion	Ratio	Lower	Upper
360	100		
362	80.8	65.6	98.4

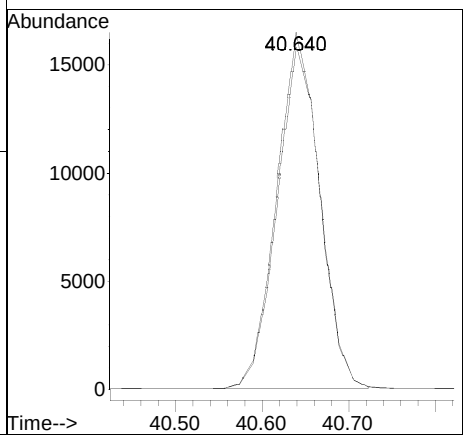


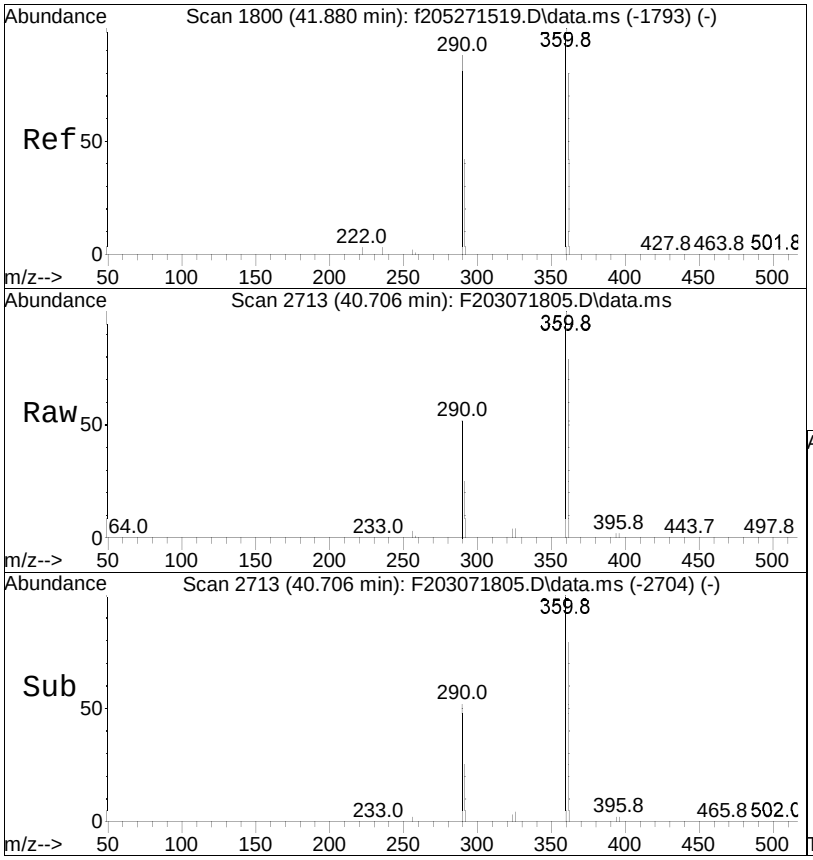


#161
Cl7-BZ#178
Concen: 88.29 ng/mL
RT: 40.640 min Scan# 2709
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 56343

Ion	Ratio	Lower	Upper
394	100		
396	96.9	78.0	117.0

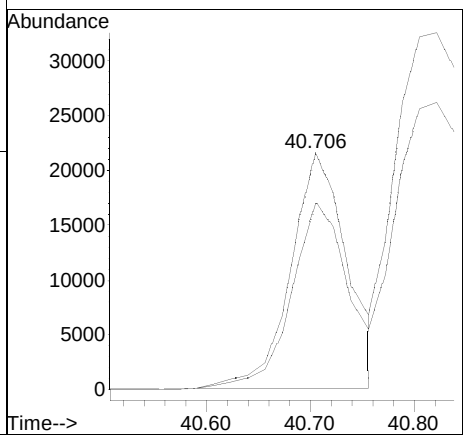


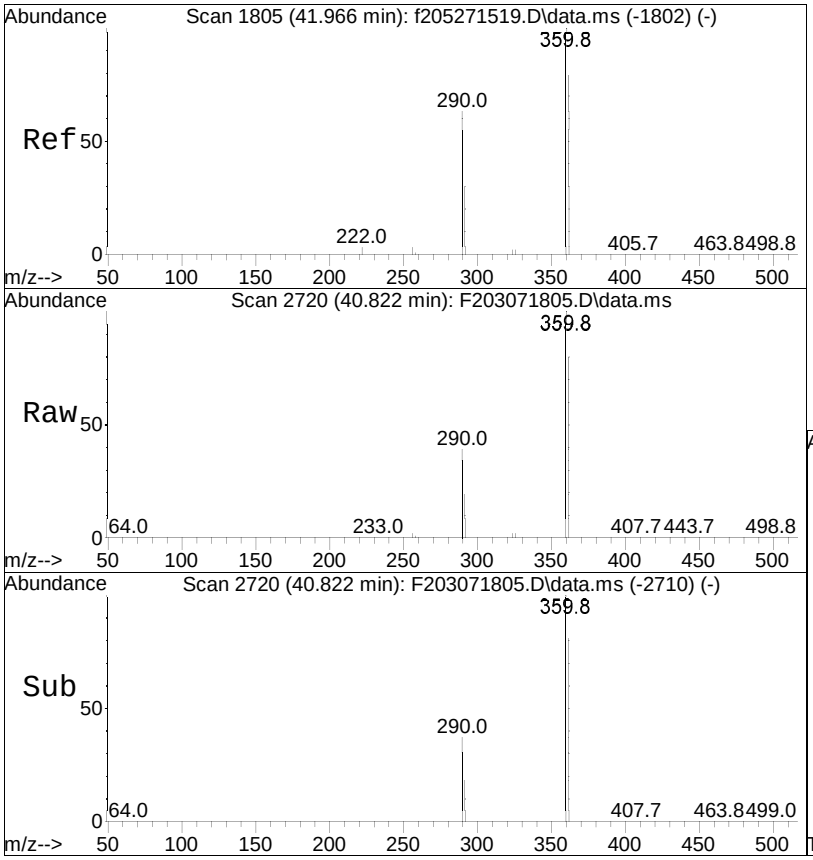


#162
Cl6-BZ#138
Concen: 94.19 ng/mL
RT: 40.706 min Scan# 2713
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 81258

Ion	Ratio	Lower	Upper
360	100		
362	79.7	65.3	97.9

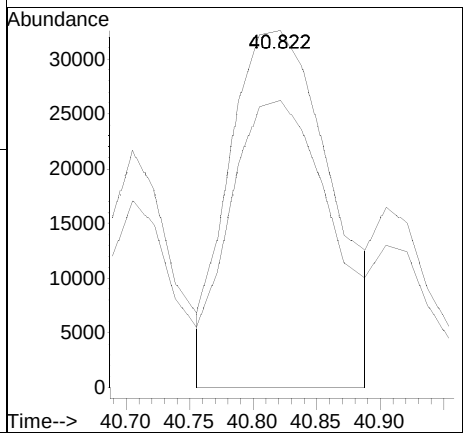


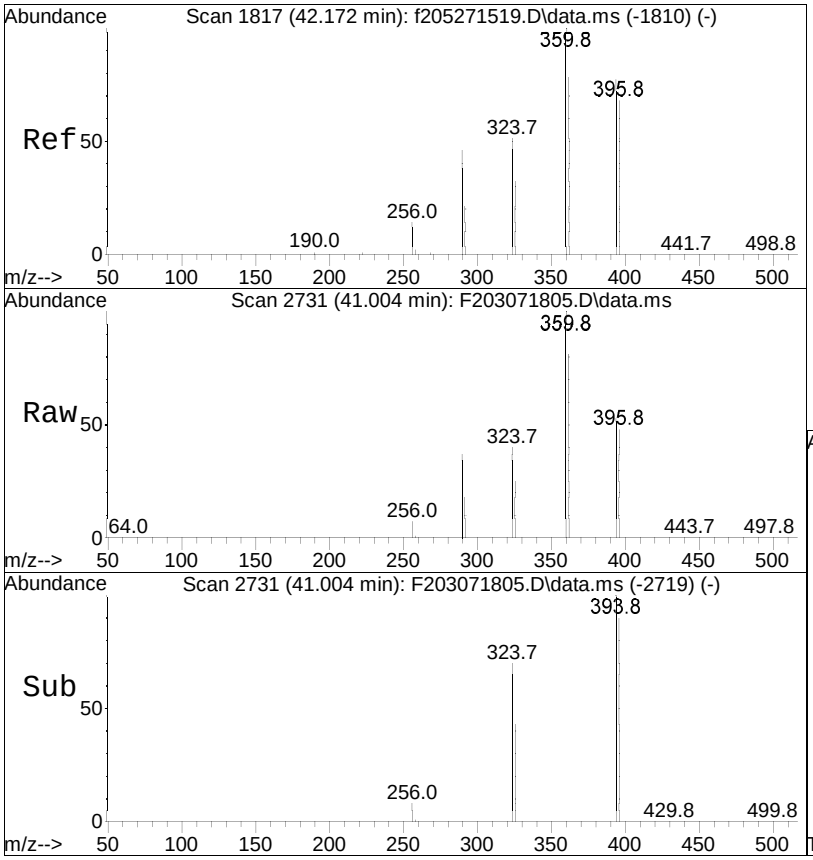


#163
Cl6-BZ#163/#160
Concen: 185.93 ng/mL M4
RT: 40.822 min Scan# 2720
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 181404

Ion	Ratio	Lower	Upper
360	100		
362	55.7	64.6	96.8#

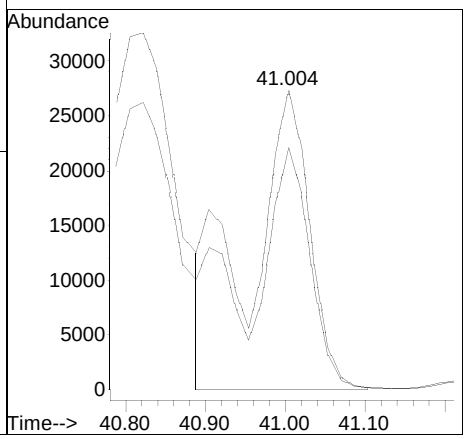


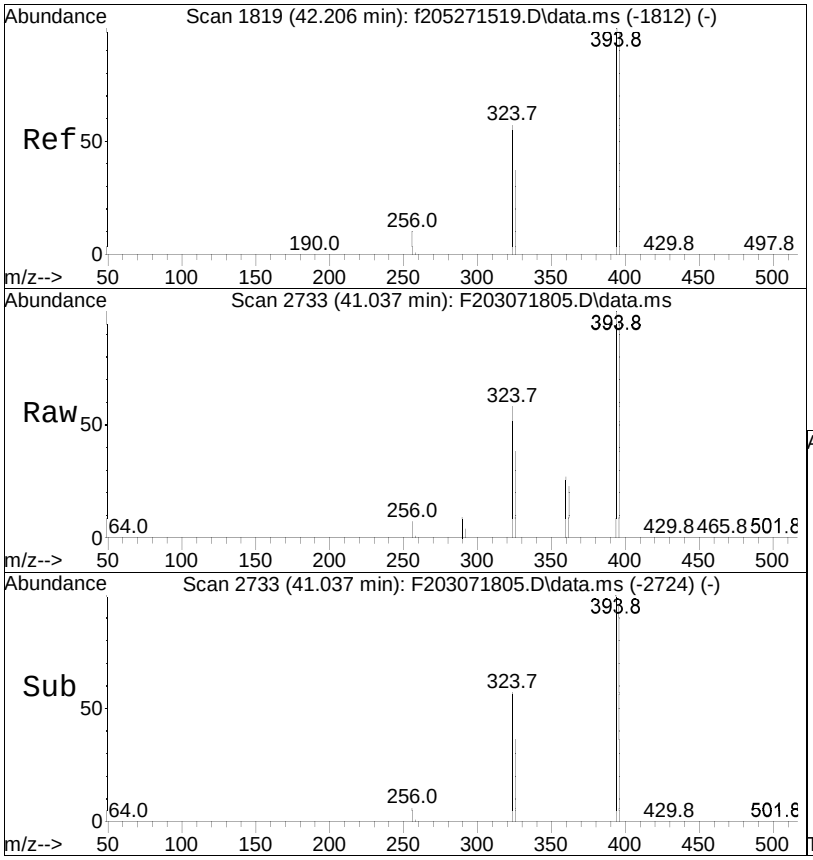


#164
Cl6-BZ#129/#158
Concen: 176.15 ng/mL M4
RT: 41.004 min Scan# 2731
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 143264

Ion	Ratio	Lower	Upper
360	100		
362	52.5	64.0	96.0#

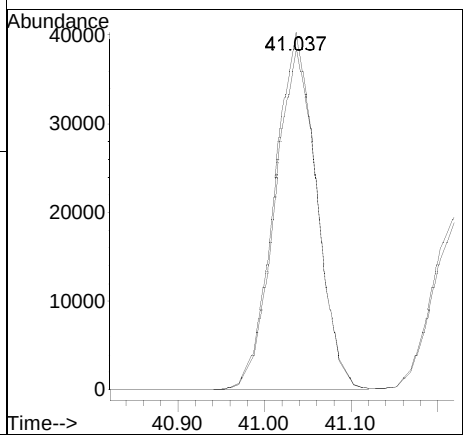


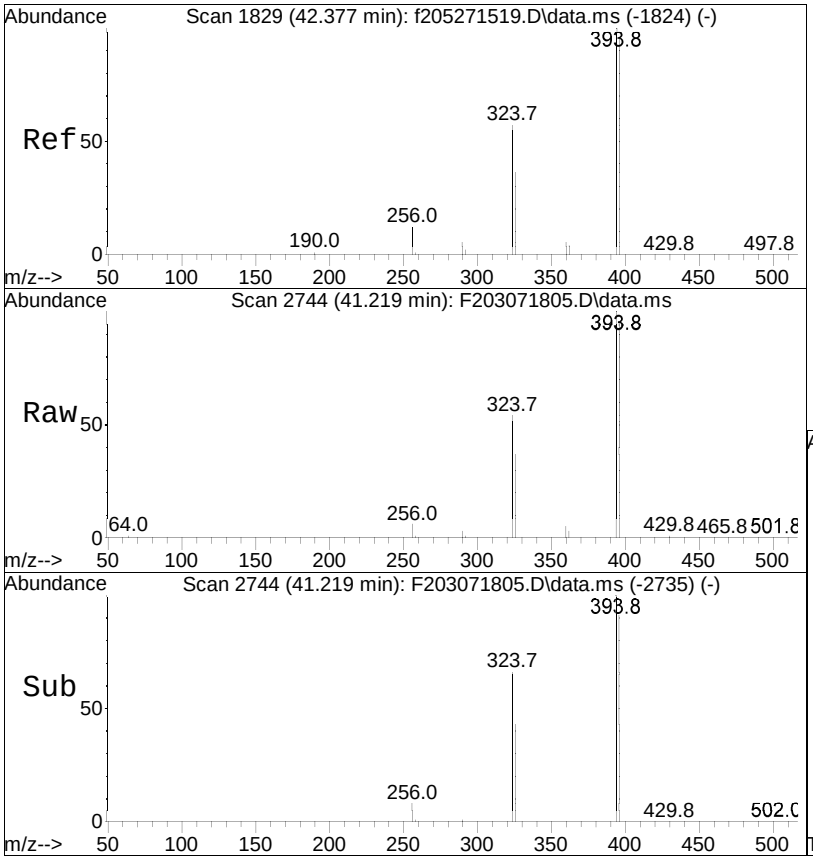


#165
Cl7-BZ#182/#175
Concen: 186.04 ng/mL
RT: 41.037 min Scan# 2733
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 135897

Ion	Ratio	Lower	Upper
394	100		
396	95.6	76.9	115.3

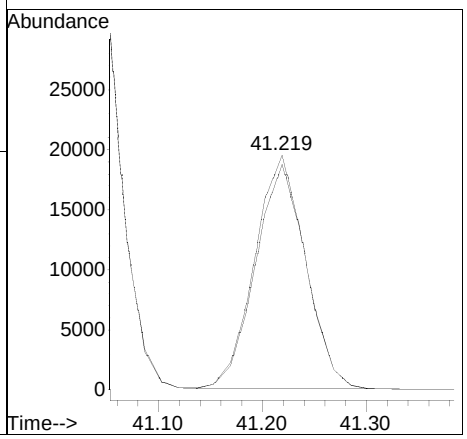


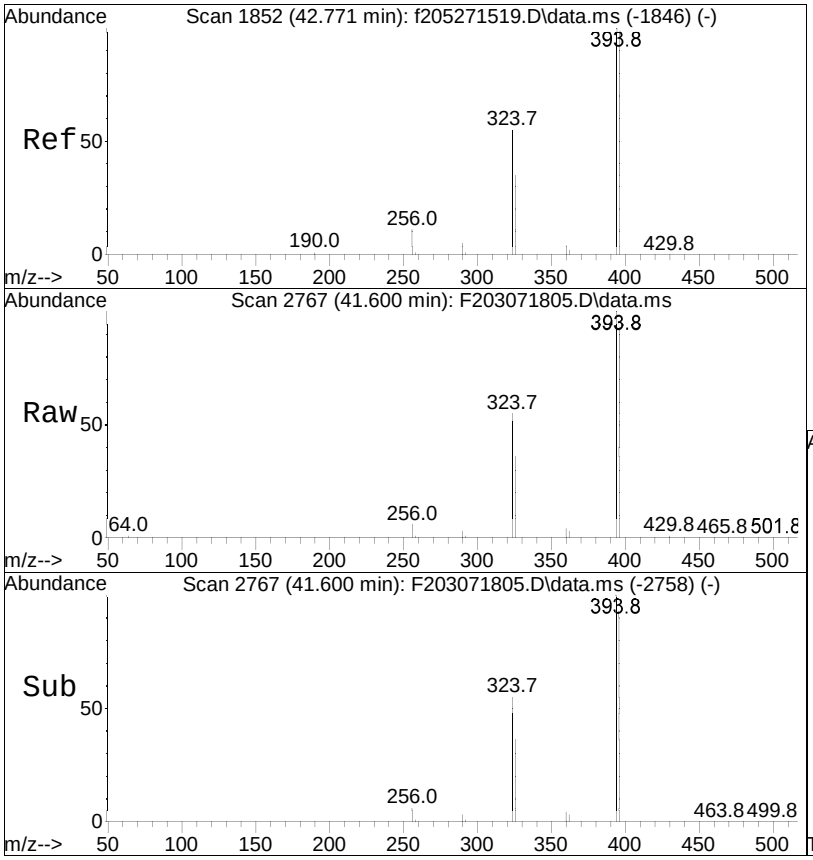


#166
Cl7-BZ#187
Concen: 88.15 ng/mL
RT: 41.219 min Scan# 2744
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 65949

Ion	Ratio	Lower	Upper
394	100		
396	95.7	73.7	110.5

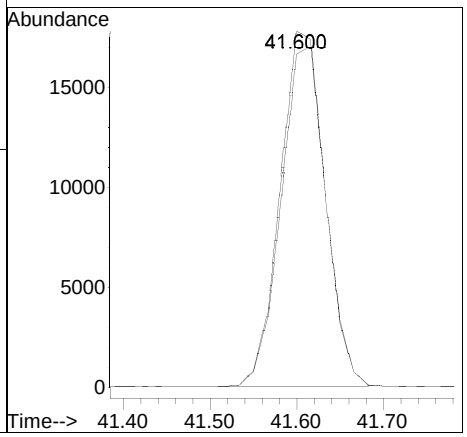


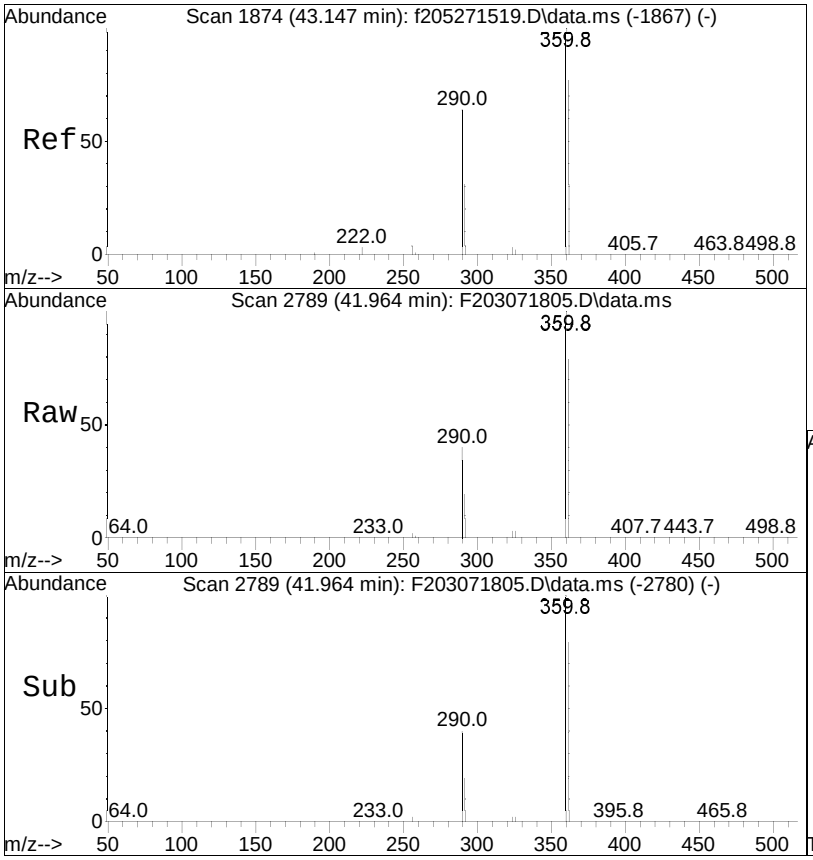


#167
Cl7-BZ#183
Concen: 88.78 ng/mL
RT: 41.600 min Scan# 2767
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 63833

Ion	Ratio	Lower	Upper
394	100		
396	95.6	76.2	114.2

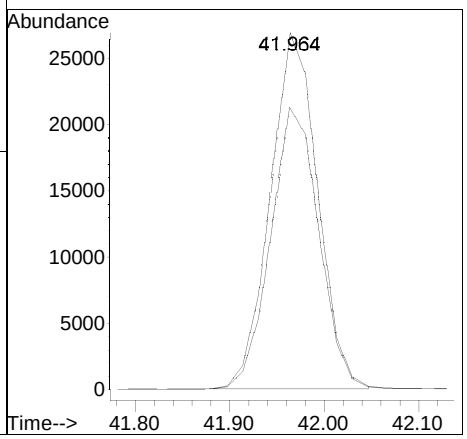


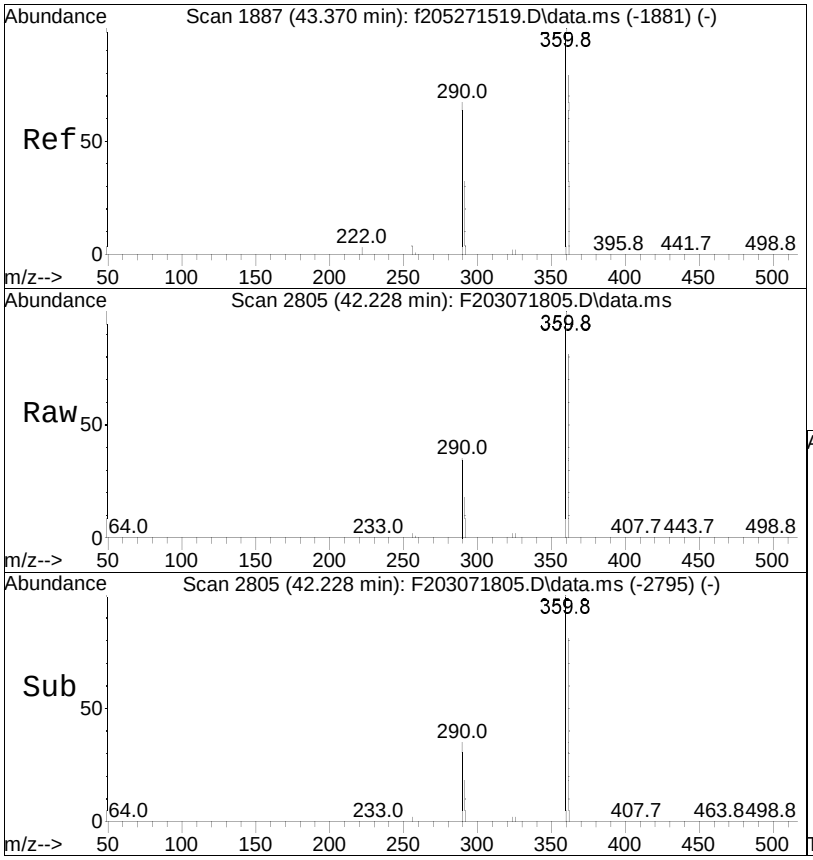


#168
Cl6-BZ#166
Concen: 88.12 ng/mL
RT: 41.964 min Scan# 2789
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 93386

Ion	Ratio	Lower	Upper
360	100		
362	80.3	65.8	98.6

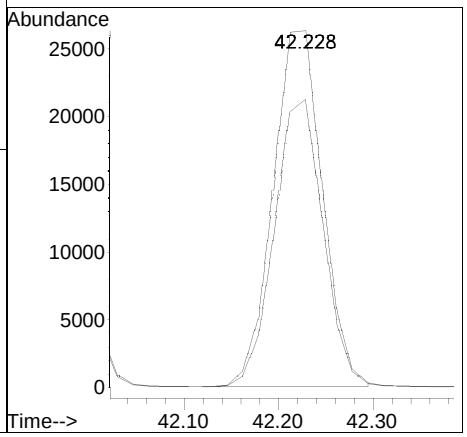


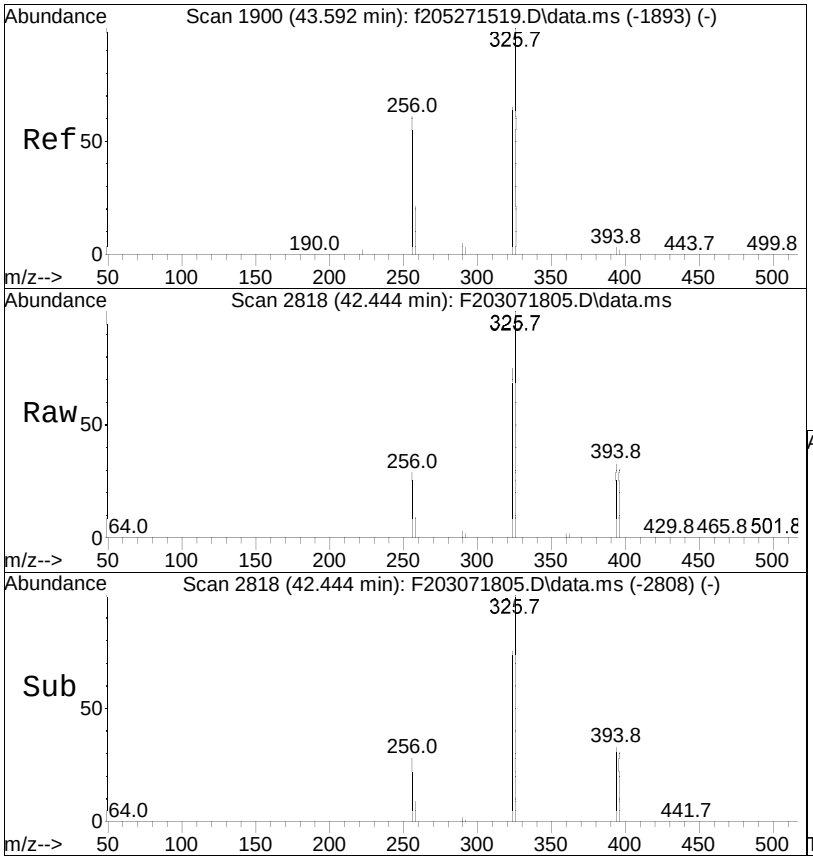


#169
Cl6-BZ#159
Concen: 89.92 ng/mL
RT: 42.228 min Scan# 2805
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 95304

Ion	Ratio	Lower	Upper
360	100		
362	79.4	65.0	97.6

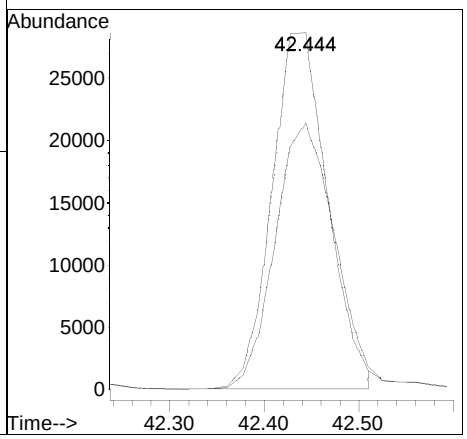


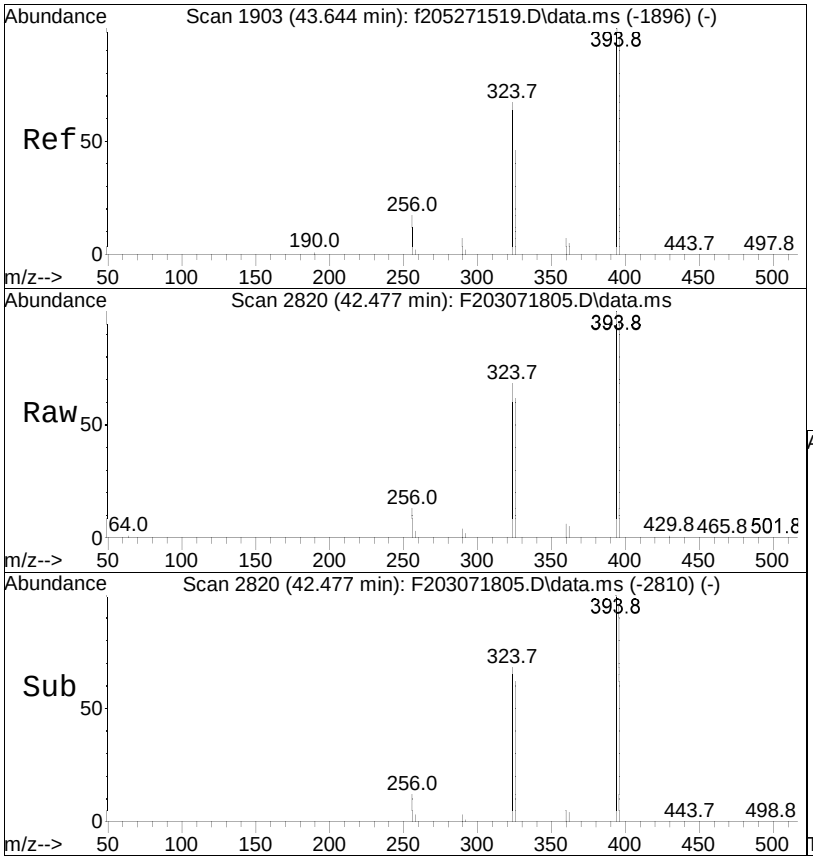


#170
Cl5-BZ#126-RTW
Concen: 90.23 ng/mL
RT: 42.444 min Scan# 2818
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:326 Resp: 116948

Ion	Ratio	Lower	Upper
326	100		
324	79.6	56.5	84.7

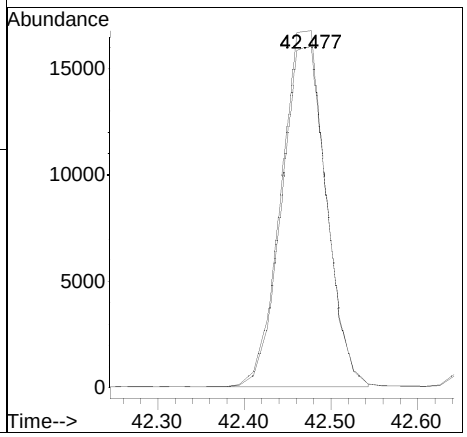


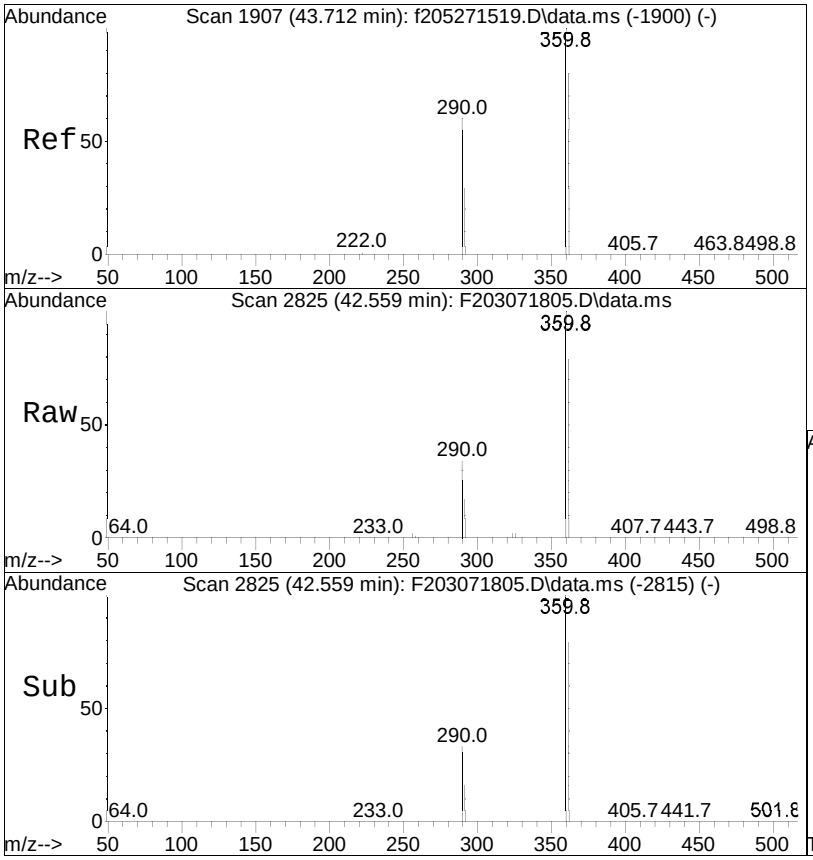


#171
Cl7-BZ#185
Concen: 89.64 ng/mL
RT: 42.477 min Scan# 2820
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 59952

Ion	Ratio	Lower	Upper
394	100		
396	95.3	75.9	113.9

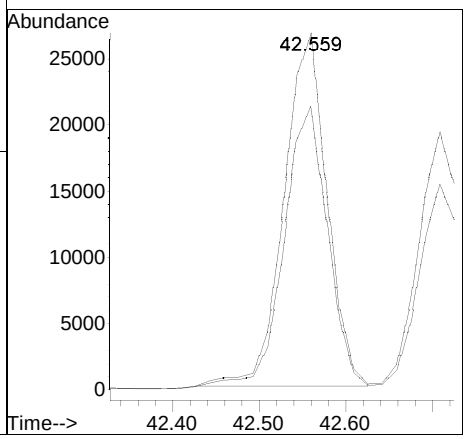


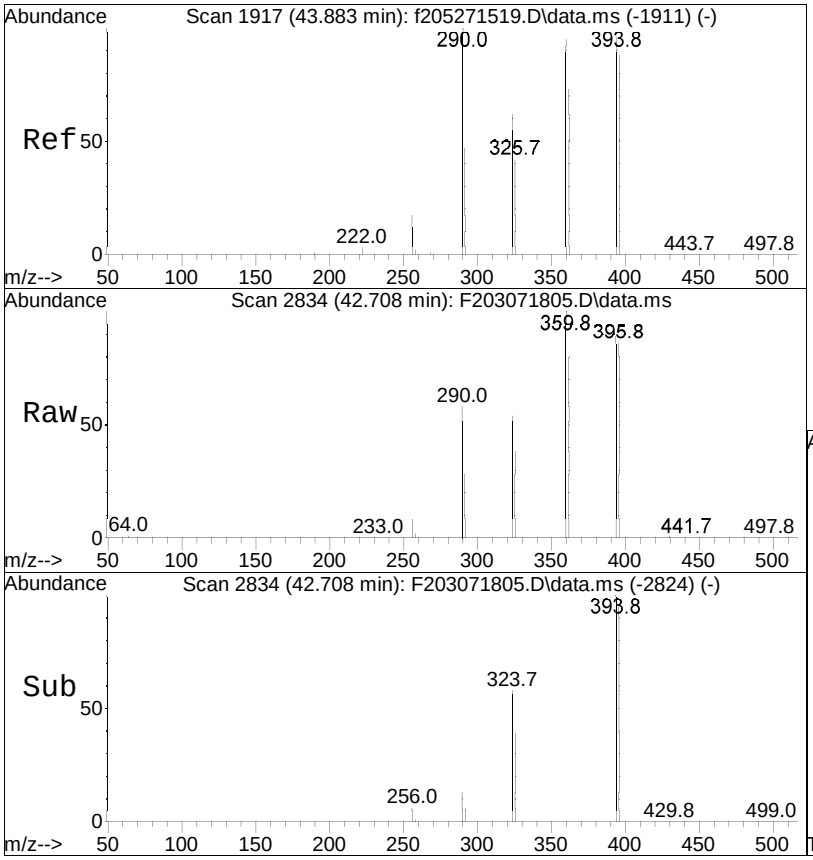


#172
Cl6-BZ#162
Concen: 93.40 ng/mL
RT: 42.559 min Scan# 2825
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 91731

Ion	Ratio	Lower	Upper
360	100		
362	80.0	62.8	94.2

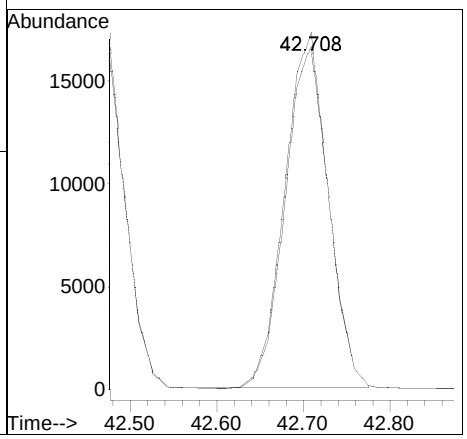


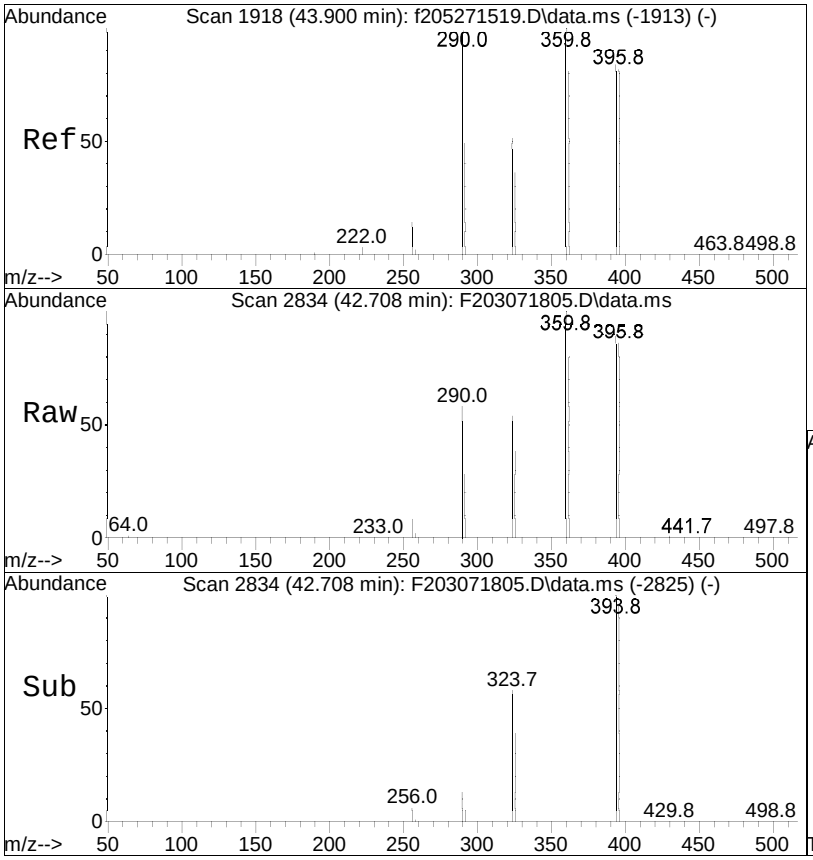


#173
Cl7-BZ#174
Concen: 90.21 ng/mL
RT: 42.708 min Scan# 2834
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 59900

Ion	Ratio	Lower	Upper
394	100		
396	96.6	77.1	115.7

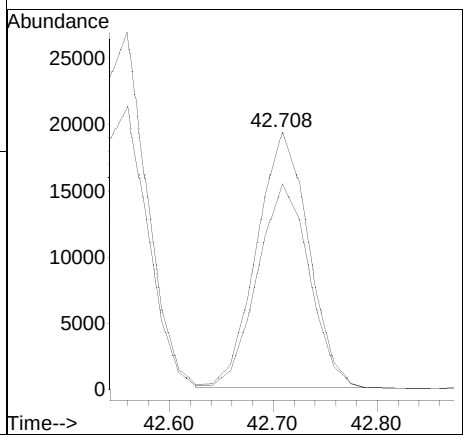


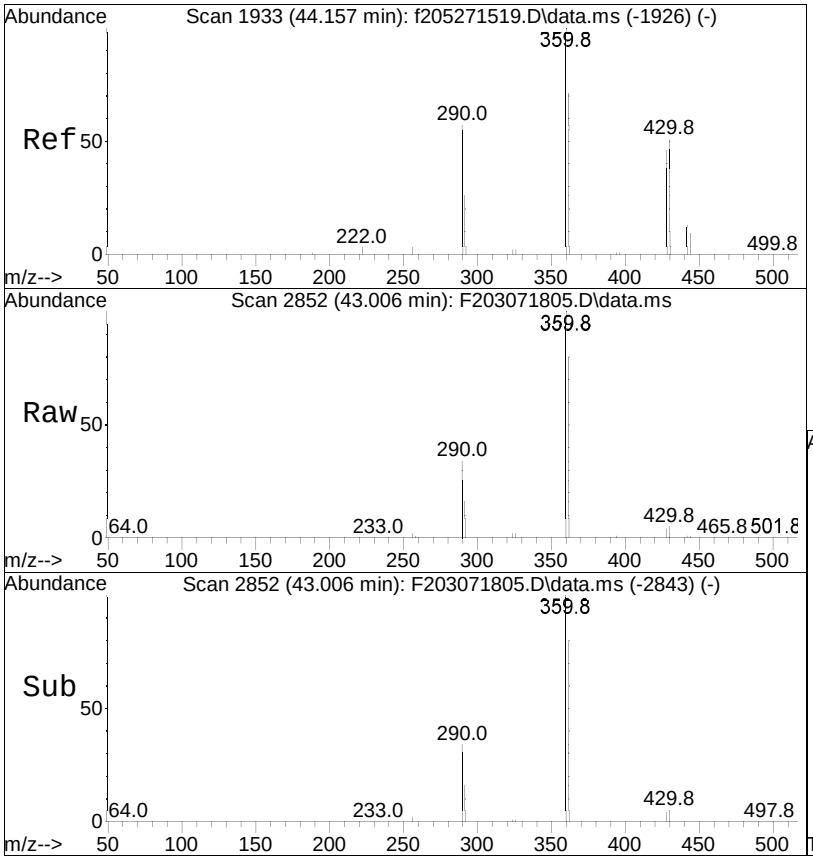


#174
Cl6-BZ#128
Concen: 91.77 ng/mL
RT: 42.708 min Scan# 2834
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 66659

Ion	Ratio	Lower	Upper
360	100		
362	80.2	64.4	96.6

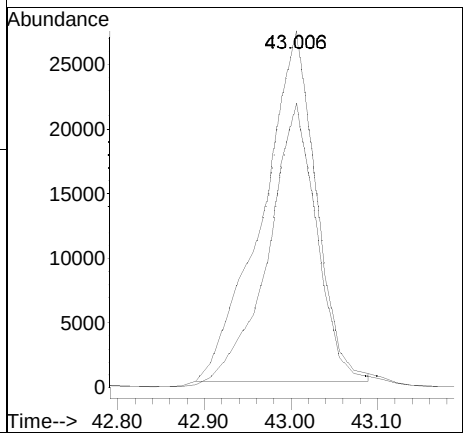


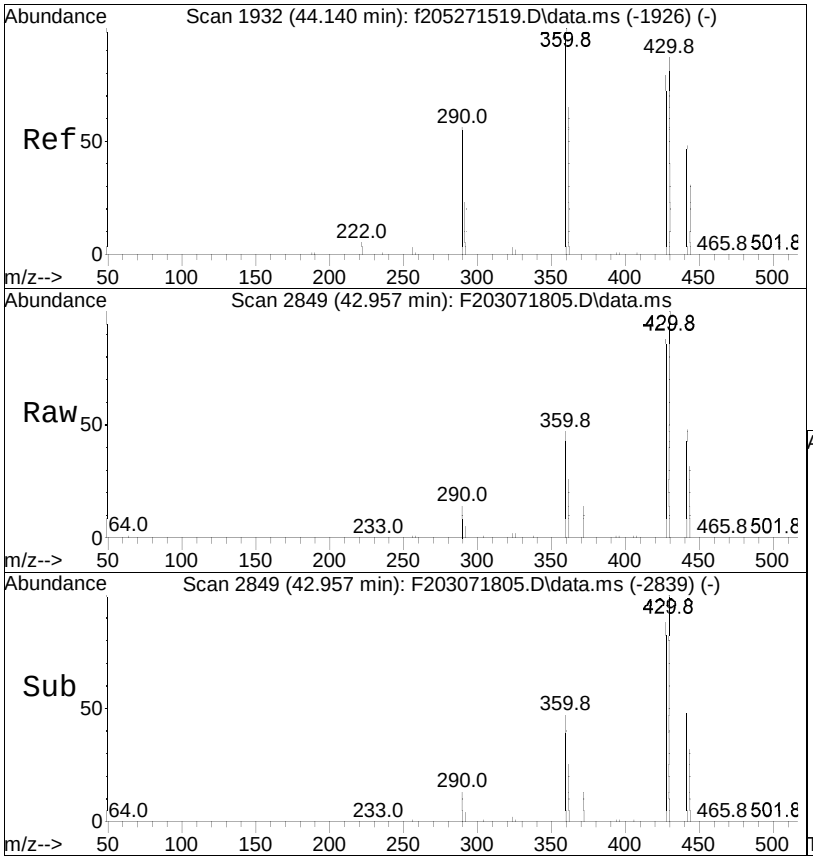


#175
Cl6-BZ#167
Concen: 89.58 ng/mL
RT: 43.006 min Scan# 2852
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 116750

Ion	Ratio	Lower	Upper
360	100		
362	73.1	63.0	94.4

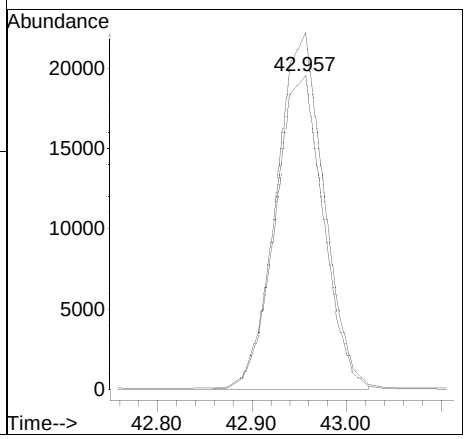


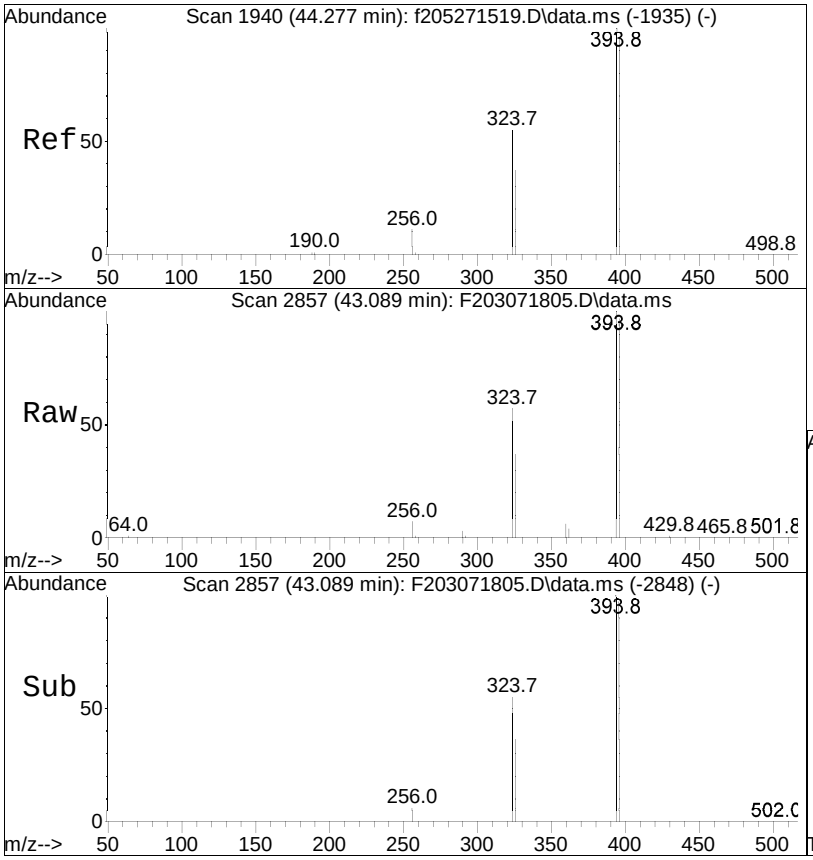


#176
Cl8-BZ#202-RTW
Concen: 91.28 ng/mL
RT: 42.957 min Scan# 2849
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 68594

Ion	Ratio	Lower	Upper
428	100		
430	112.2	89.4	134.2

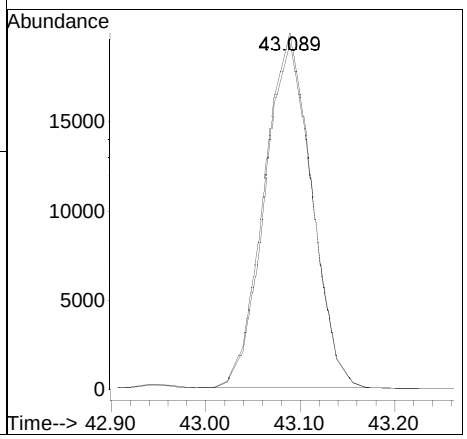


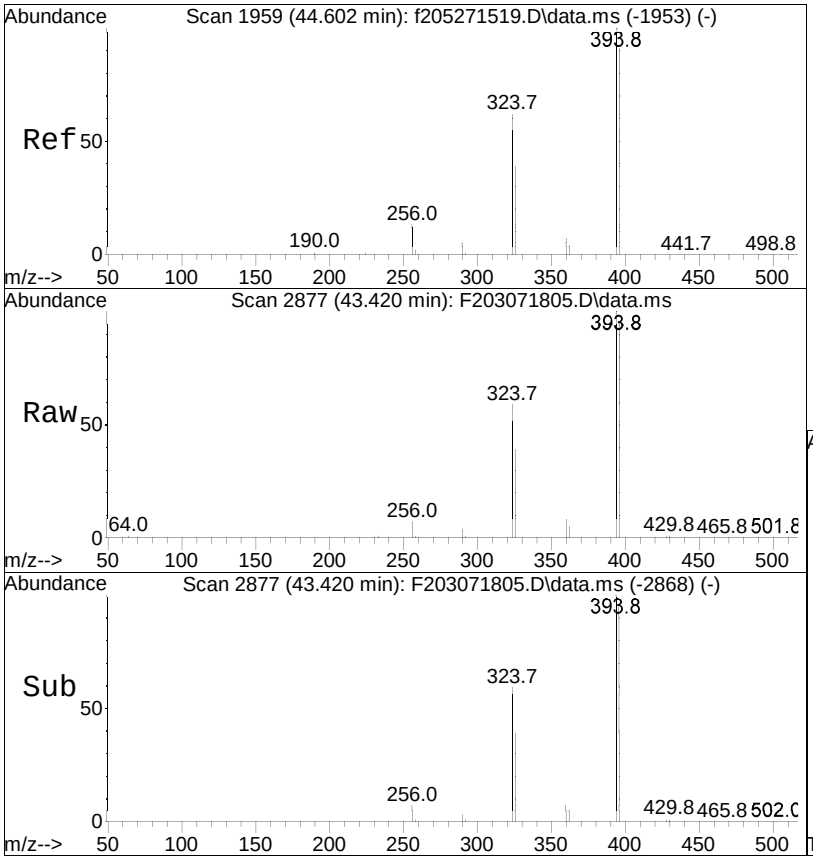


#178
Cl7-BZ#181
Concen: 92.85 ng/mL
RT: 43.089 min Scan# 2857
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 69315

Ion	Ratio	Lower	Upper
394	100		
396	96.8	75.3	112.9

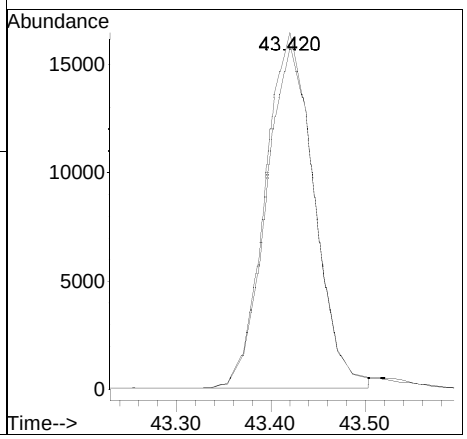


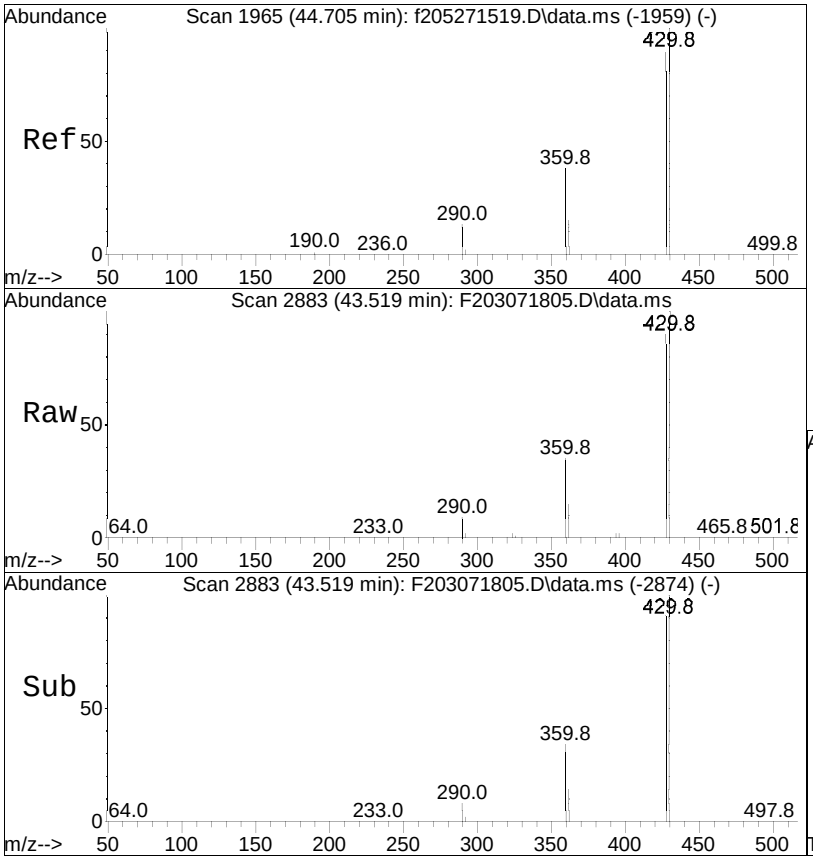


#179
Cl7-BZ#177
Concen: 91.02 ng/mL
RT: 43.420 min Scan# 2877
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 58917

Ion	Ratio	Lower	Upper
394	100		
396	95.9	77.8	116.6

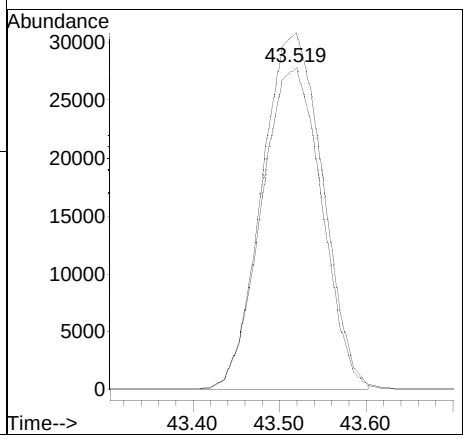


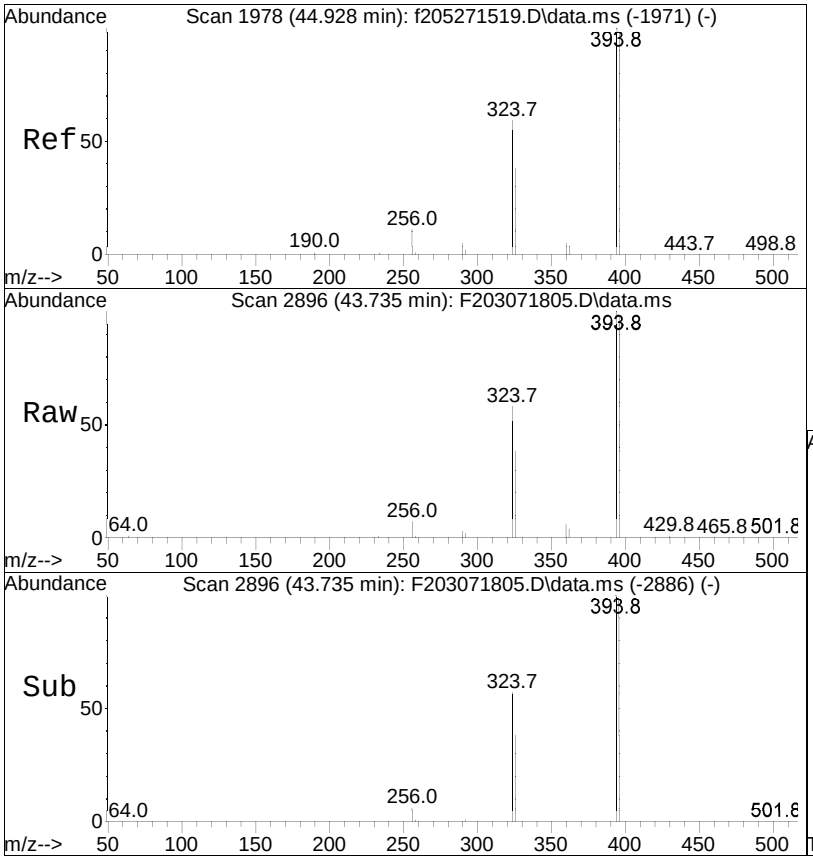


#180
Cl8-BZ#204/#200-Cal
Concen: 181.24 ng/mL
RT: 43.519 min Scan# 2883
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 133744

Ion	Ratio	Lower	Upper
428	100		
430	111.2	89.8	134.6

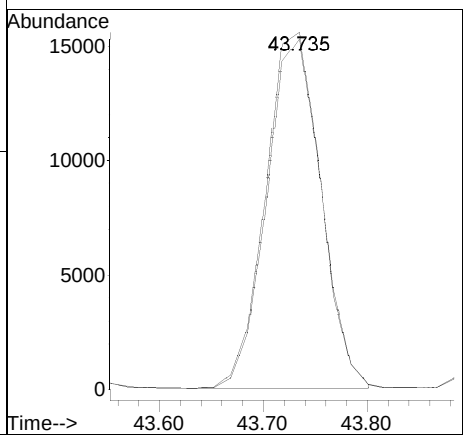


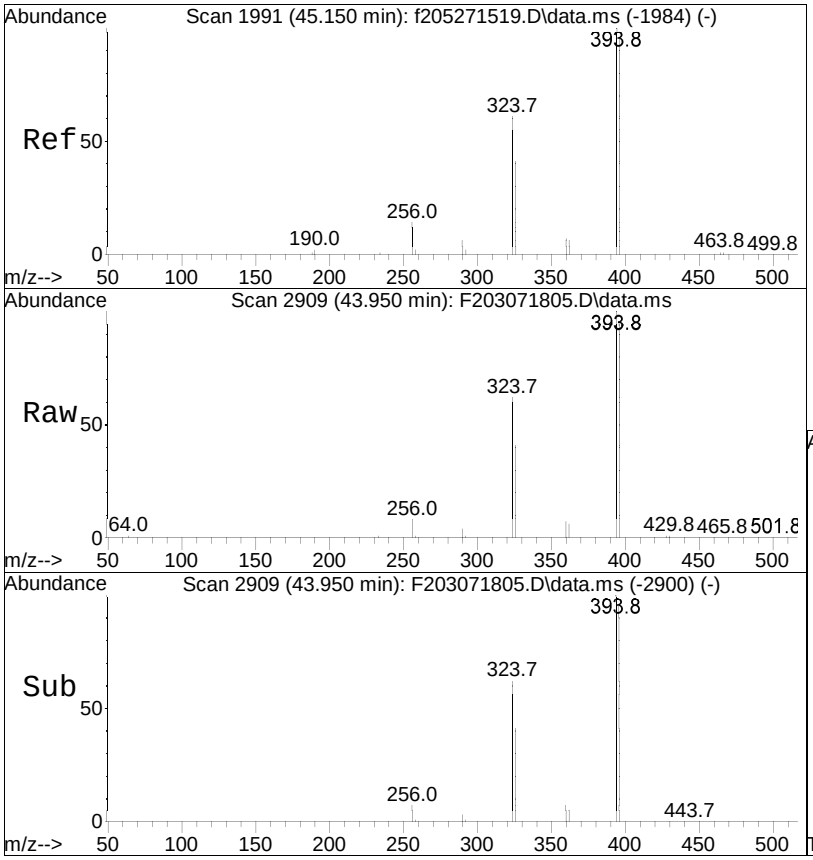


#183
Cl7-BZ#171
Concen: 90.25 ng/mL
RT: 43.735 min Scan# 2896
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 57213

Ion	Ratio	Lower	Upper
394	100		
396	96.8	75.4	113.0

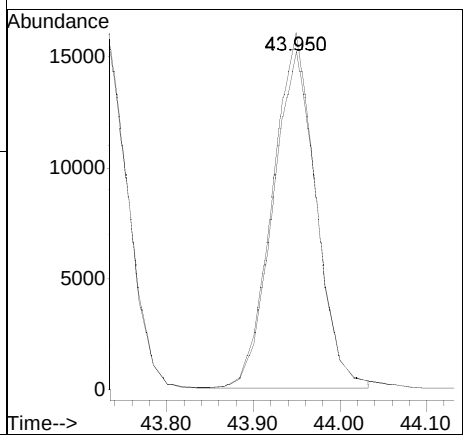


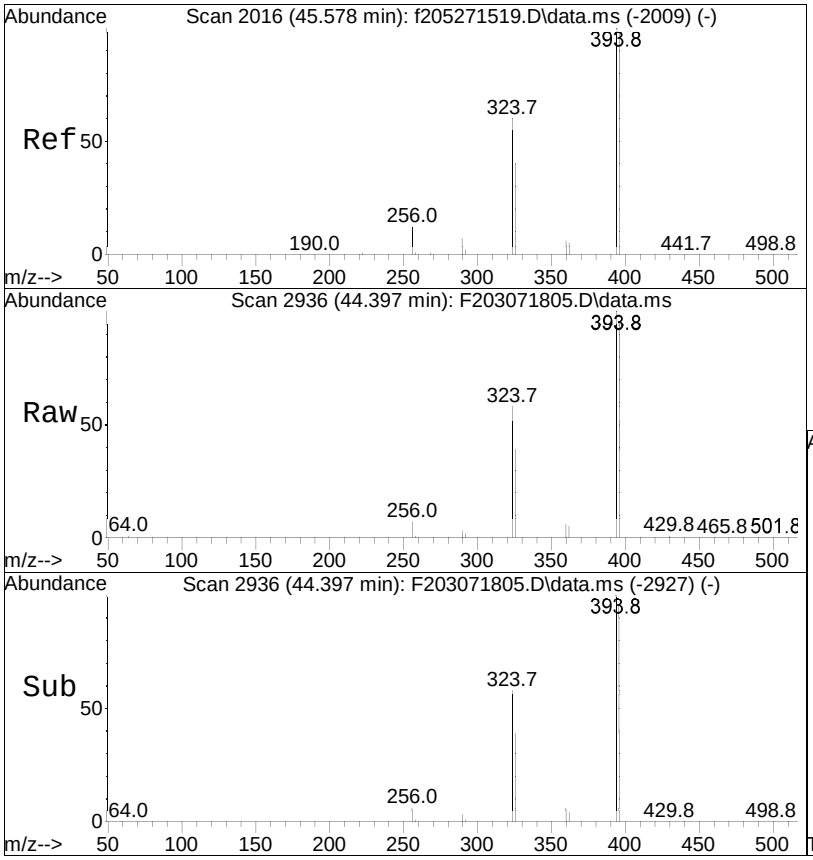


#184
Cl7-BZ#173
Concen: 88.98 ng/mL
RT: 43.950 min Scan# 2909
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 55580

Ion	Ratio	Lower	Upper
394	100		
396	95.1	76.3	114.5

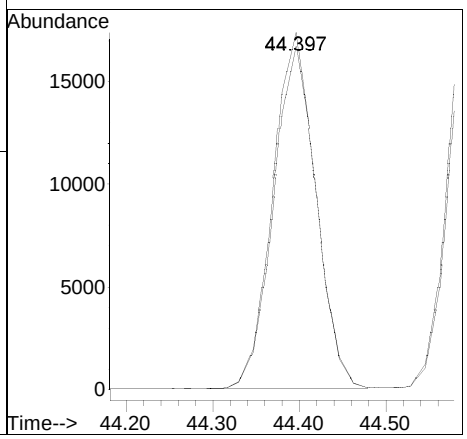


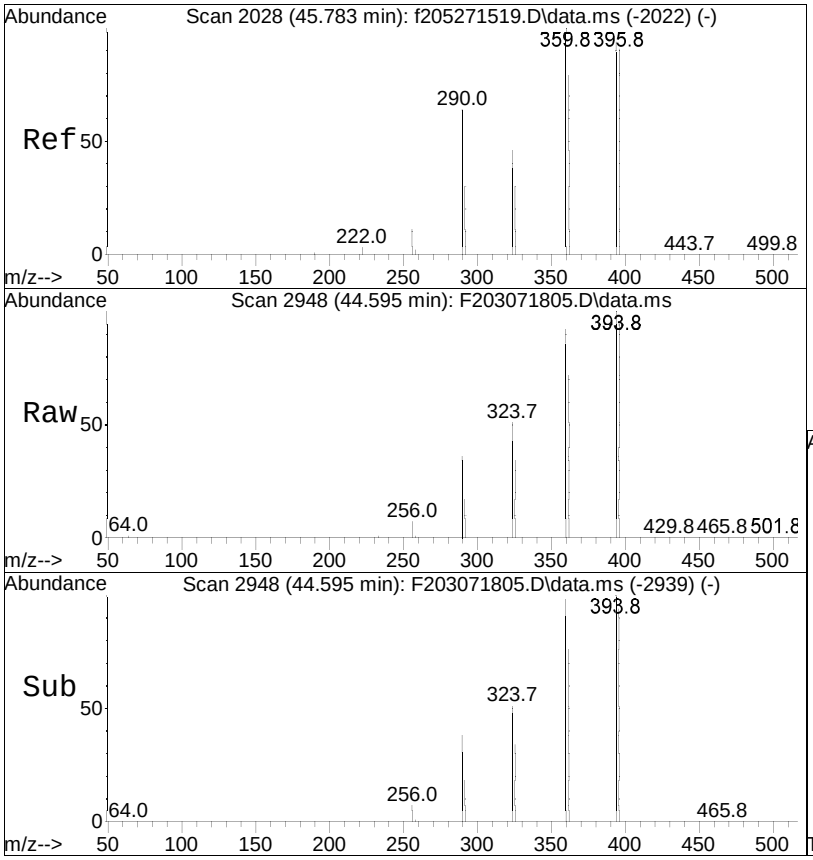


#185
Cl7-BZ#172
Concen: 88.91 ng/mL
RT: 44.397 min Scan# 2936
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 59710

Ion	Ratio	Lower	Upper
394	100		
396	96.2	75.4	113.2

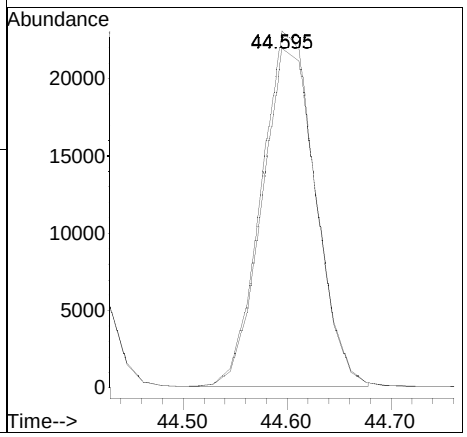


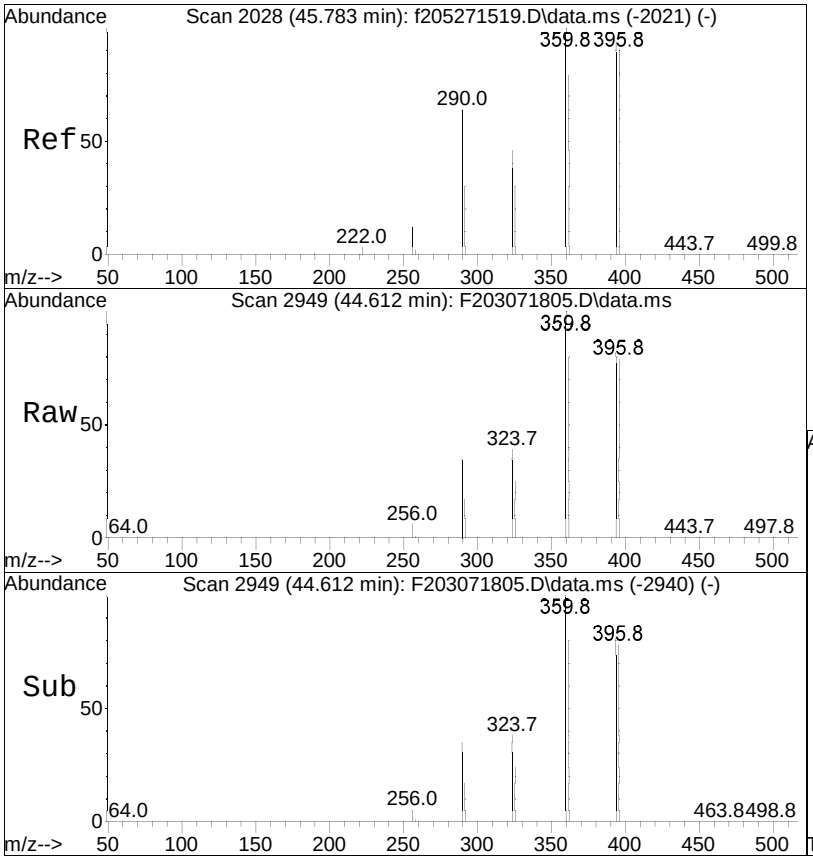


#186
Cl7-BZ#192
Concen: 90.03 ng/mL
RT: 44.595 min Scan# 2948
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 82815

Ion	Ratio	Lower	Upper
394	100		
396	95.7	76.9	115.3

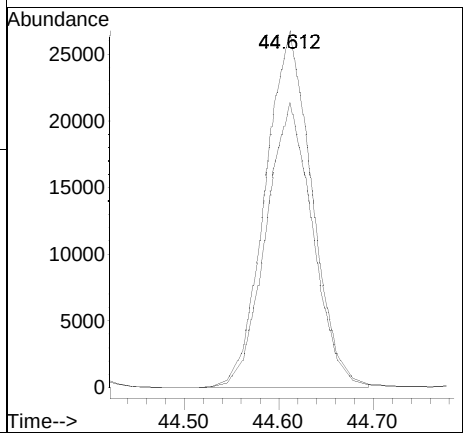


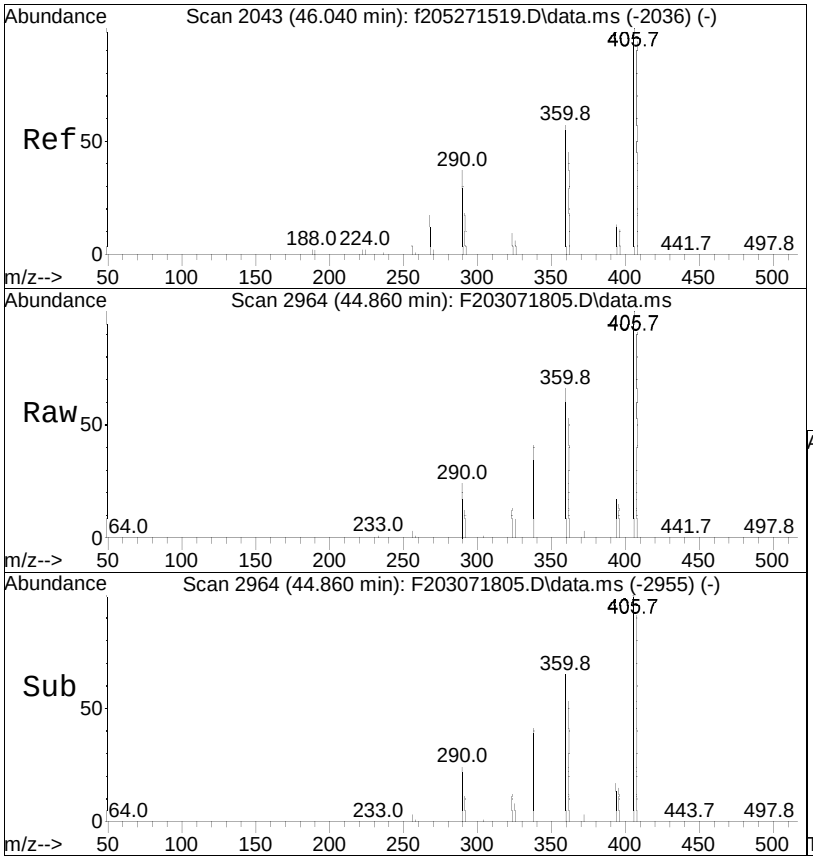


#187
Cl6-BZ#156
Concen: 89.92 ng/mL
RT: 44.612 min Scan# 2949
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 91319

Ion	Ratio	Lower	Upper
360	100		
362	79.8	63.4	95.2

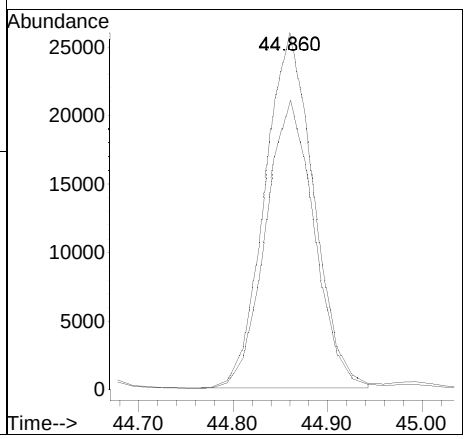


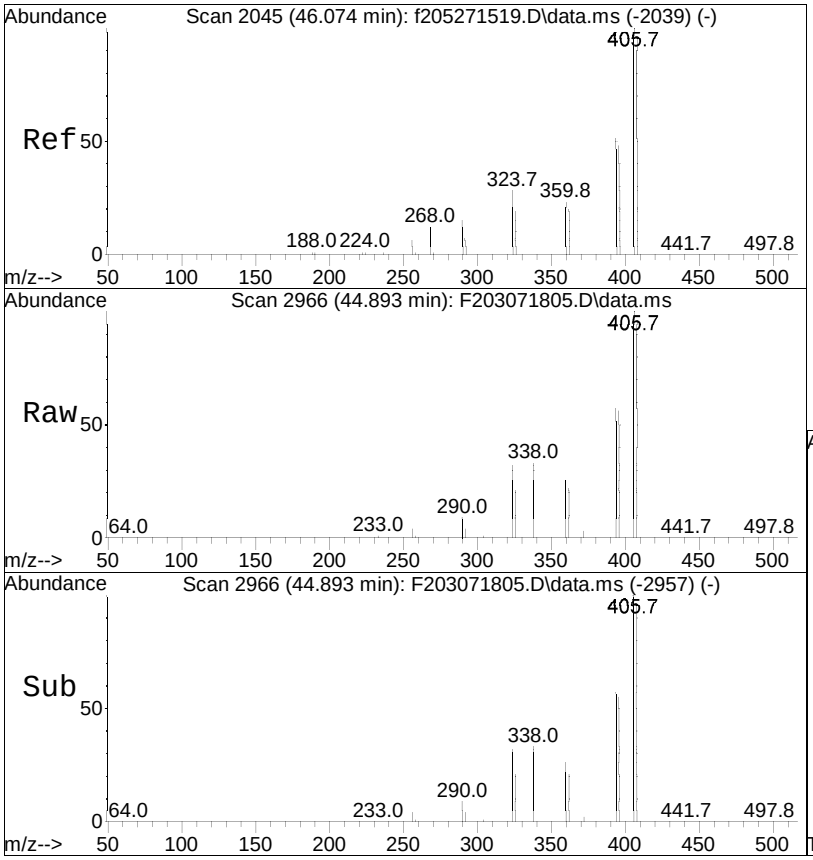


#188
Cl6-BZ#157
Concen: 88.48 ng/mL
RT: 44.860 min Scan# 2964
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 92819

Ion	Ratio	Lower	Upper
360	100		
362	80.9	62.6	93.8

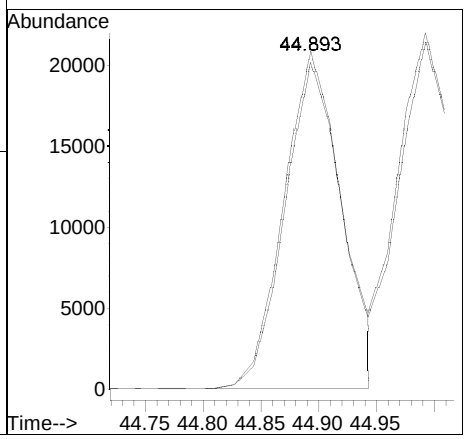


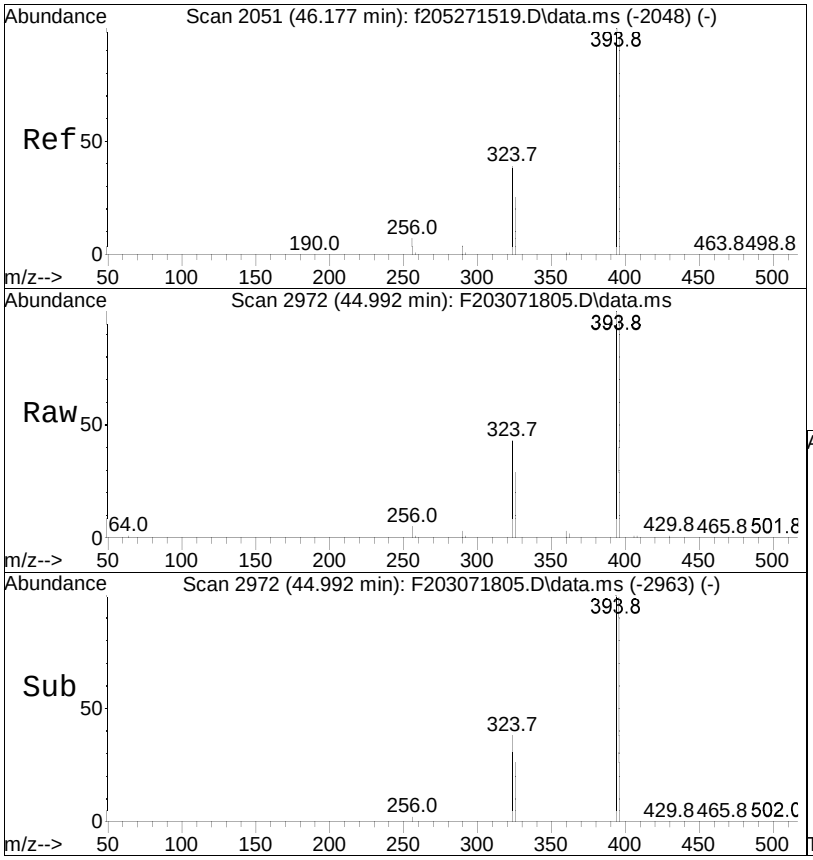


#189
Cl7-BZ#180
Concen: 89.53 ng/mL
RT: 44.893 min Scan# 2966
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 73146

Ion	Ratio	Lower	Upper
394	100		
396	95.6	74.2	111.2

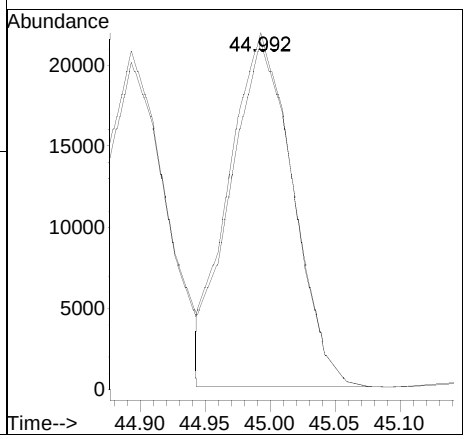


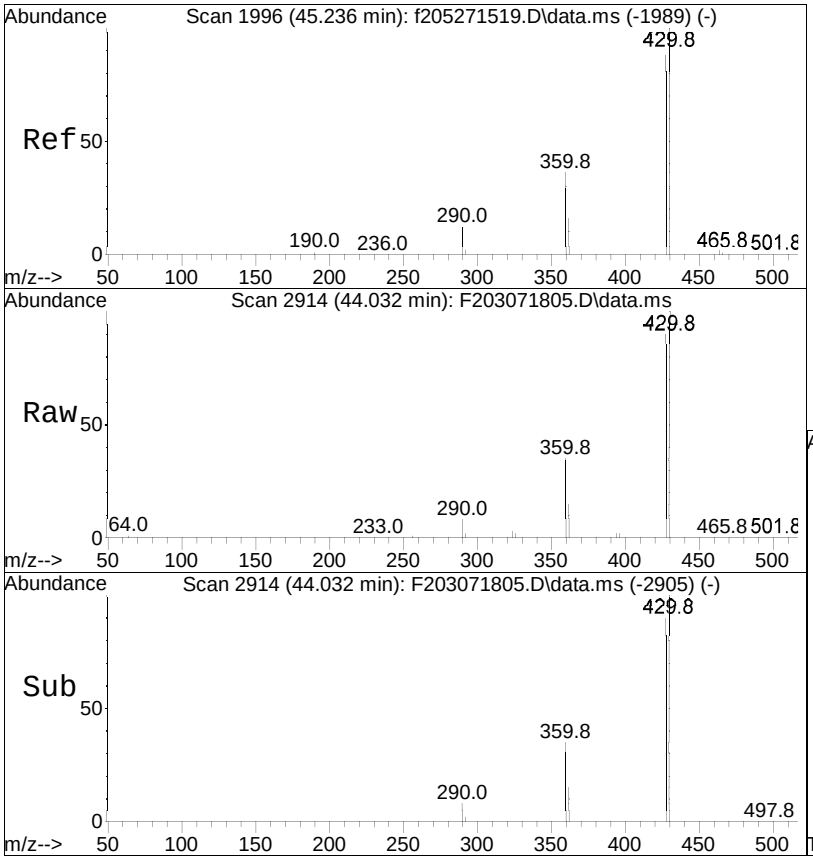


#190
Cl7-BZ#193
Concen: 87.45 ng/mL
RT: 44.992 min Scan# 2972
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 73528

Ion	Ratio	Lower	Upper
394	100		
396	96.5	76.3	114.5

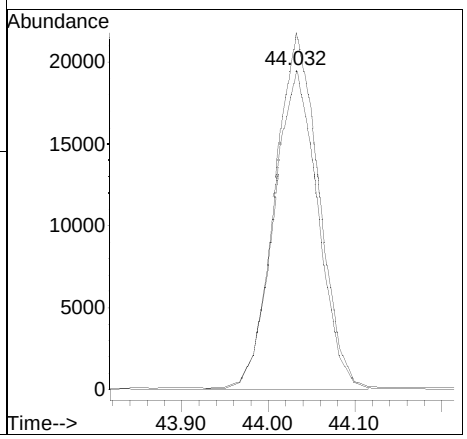


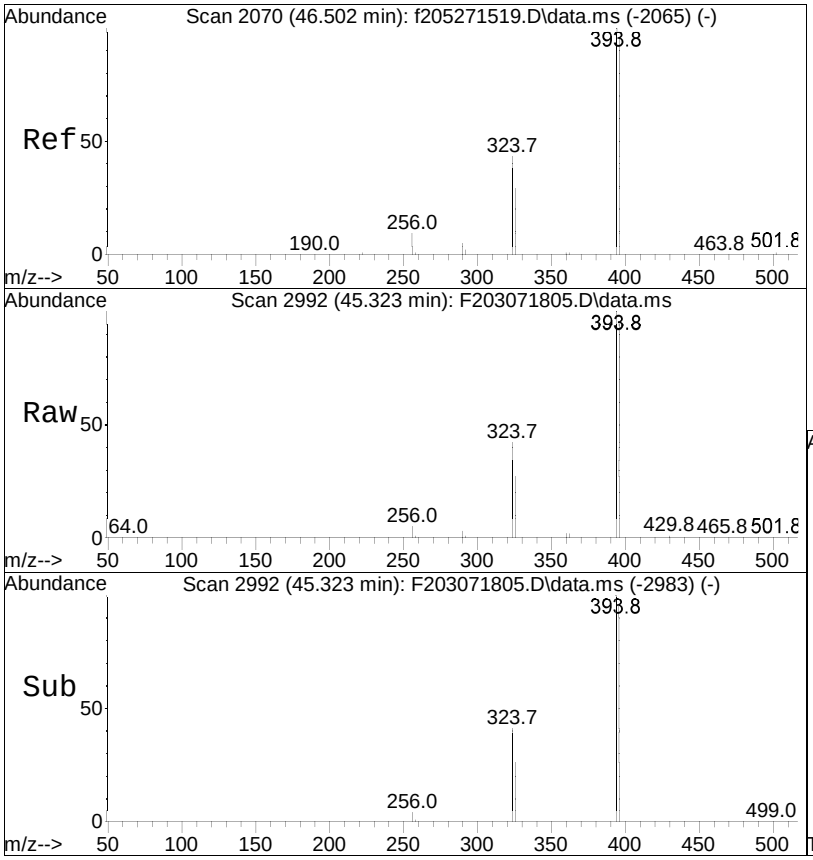


#191
Cl8-BZ#197
Concen: 90.49 ng/mL
RT: 44.032 min Scan# 2914
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 68161

Ion	Ratio	Lower	Upper
428	100		
430	111.2	88.4	132.6

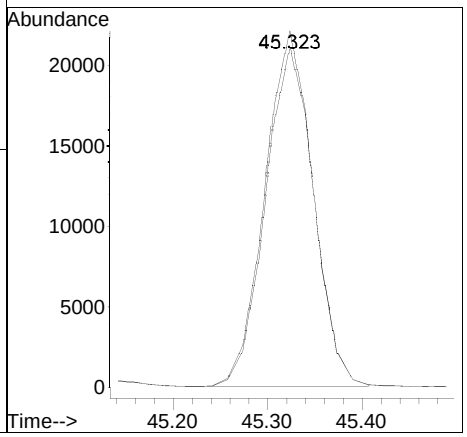


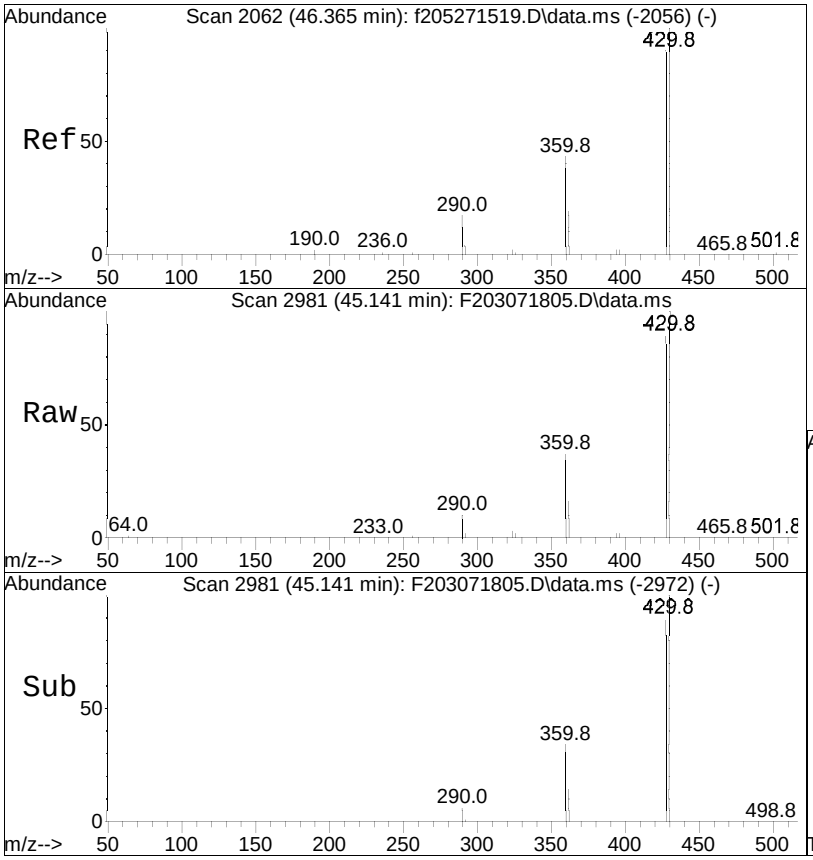


#192
Cl7-BZ#191
Concen: 88.91 ng/mL
RT: 45.323 min Scan# 2992
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 77630

Ion	Ratio	Lower	Upper
394	100		
396	96.2	74.6	111.8

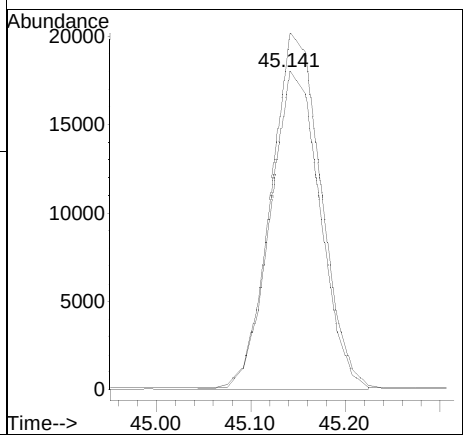


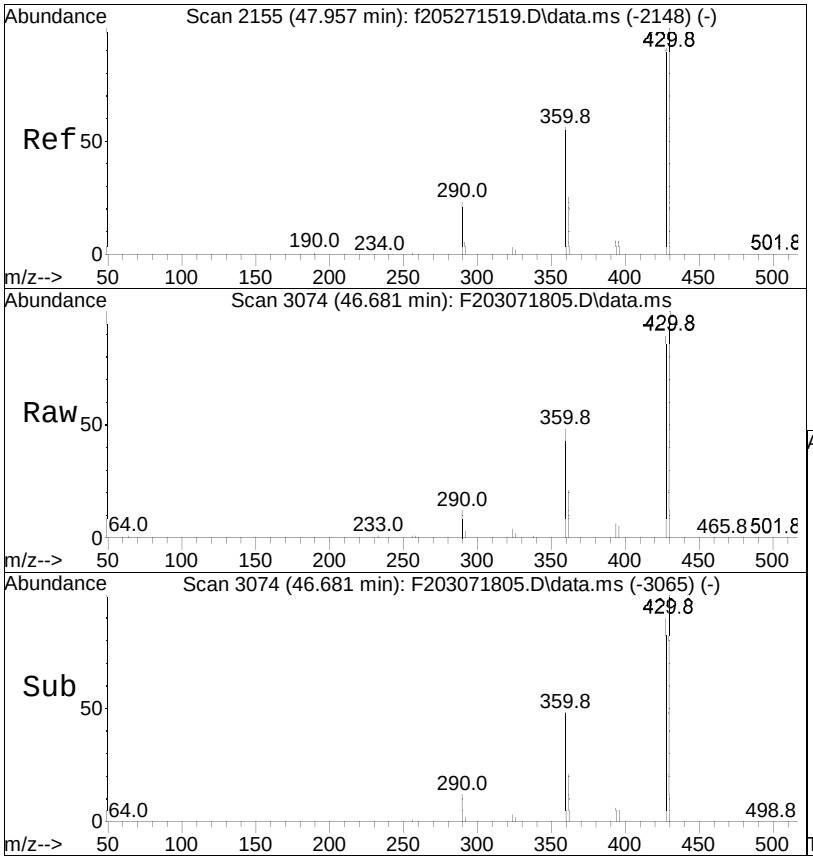


#193
Cl8-BZ#199
Concen: 87.57 ng/mL
RT: 45.141 min Scan# 2981
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 65544

Ion	Ratio	Lower	Upper
428	100		
430	112.1	90.5	135.7

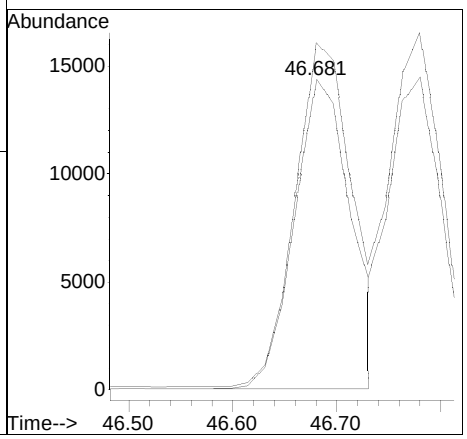


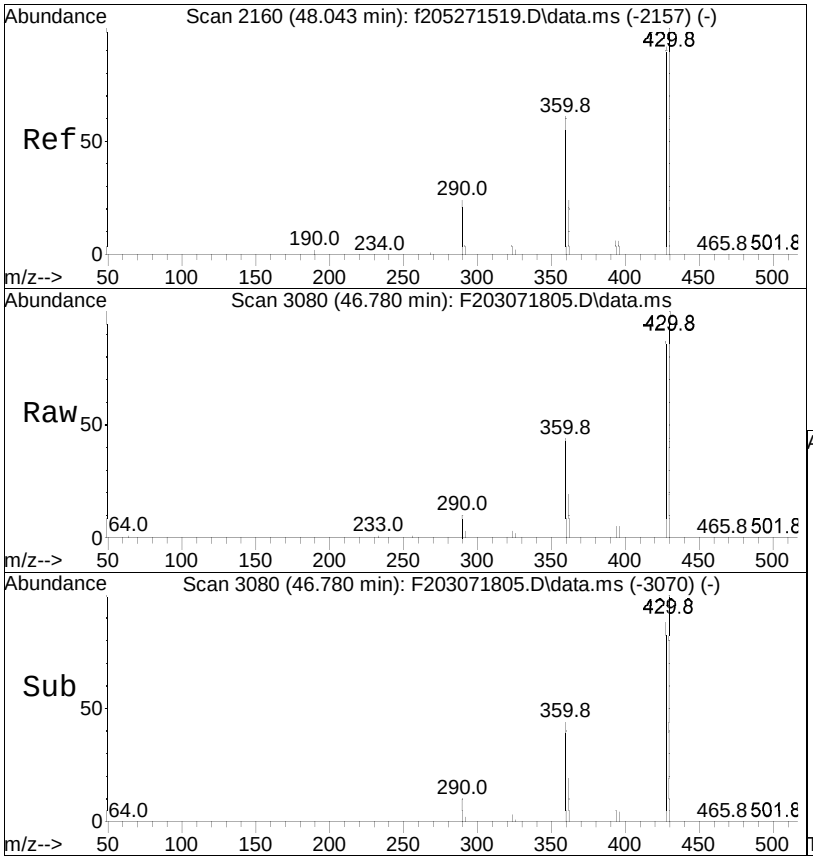


#194
Cl8-BZ#198
Concen: 85.91 ng/mL
RT: 46.681 min Scan# 3074
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 54568

Ion	Ratio	Lower	Upper
428	100		
430	111.6	90.0	135.0

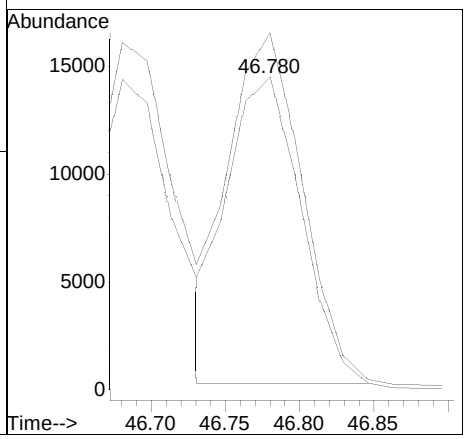


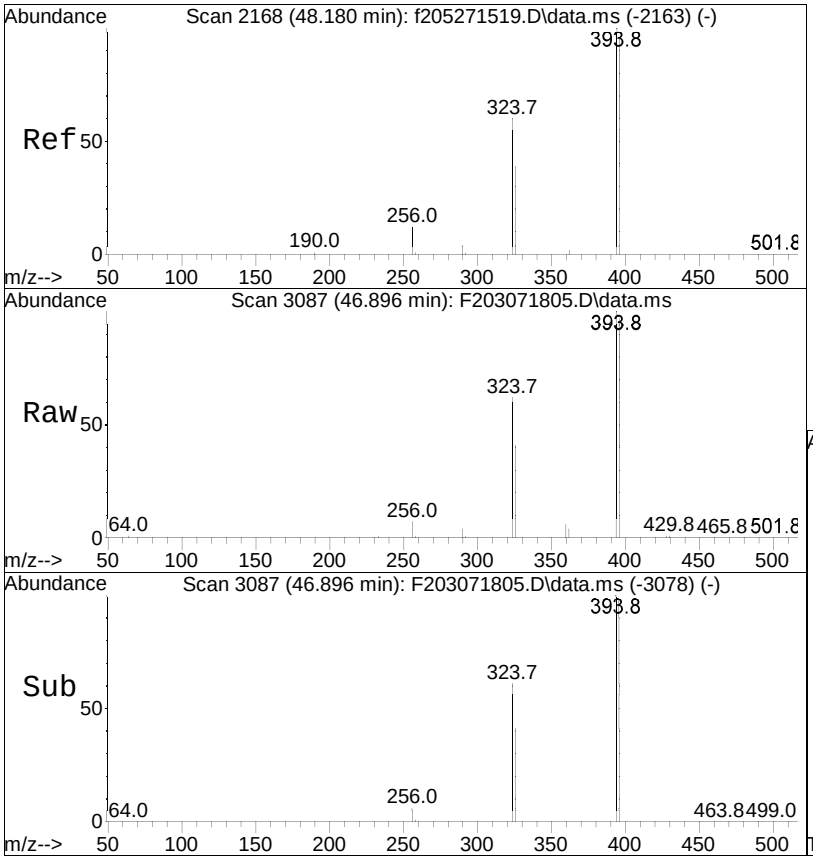


#195
Cl8-BZ#201
Concen: 89.21 ng/mL
RT: 46.780 min Scan# 3080
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 48908

Ion	Ratio	Lower	Upper
428	100		
430	112.2	91.3	136.9

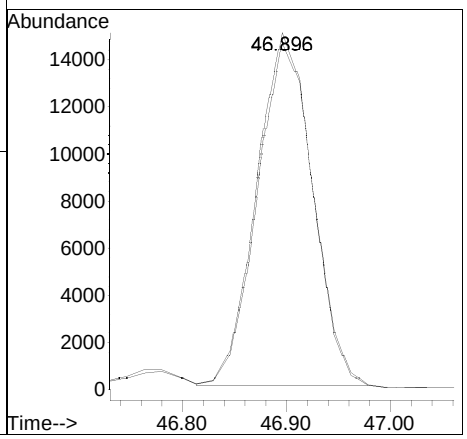


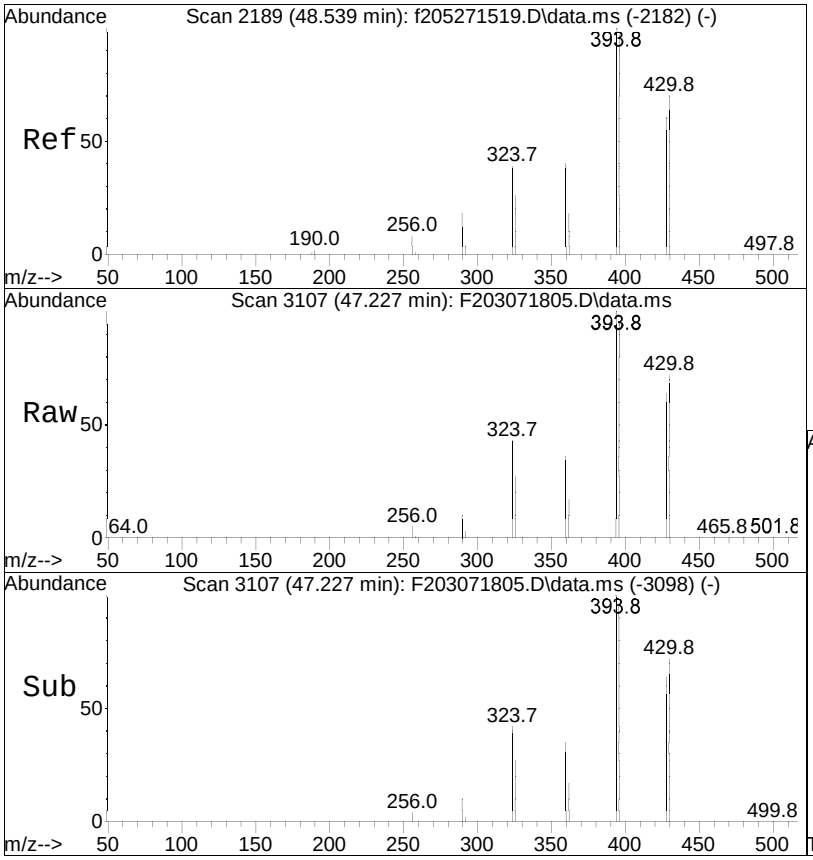


#196
Cl7-BZ#170
Concen: 87.39 ng/mL
RT: 46.896 min Scan# 3087
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 55282

Ion	Ratio	Lower	Upper
394	100		
396	97.2	80.2	120.4

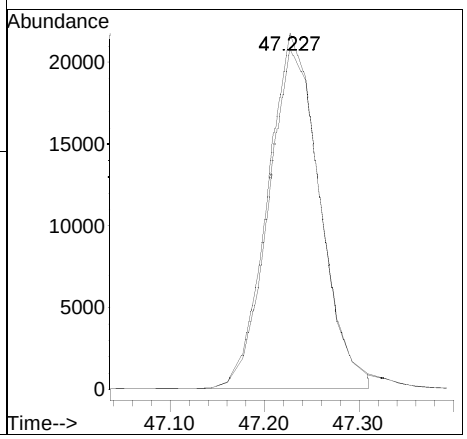


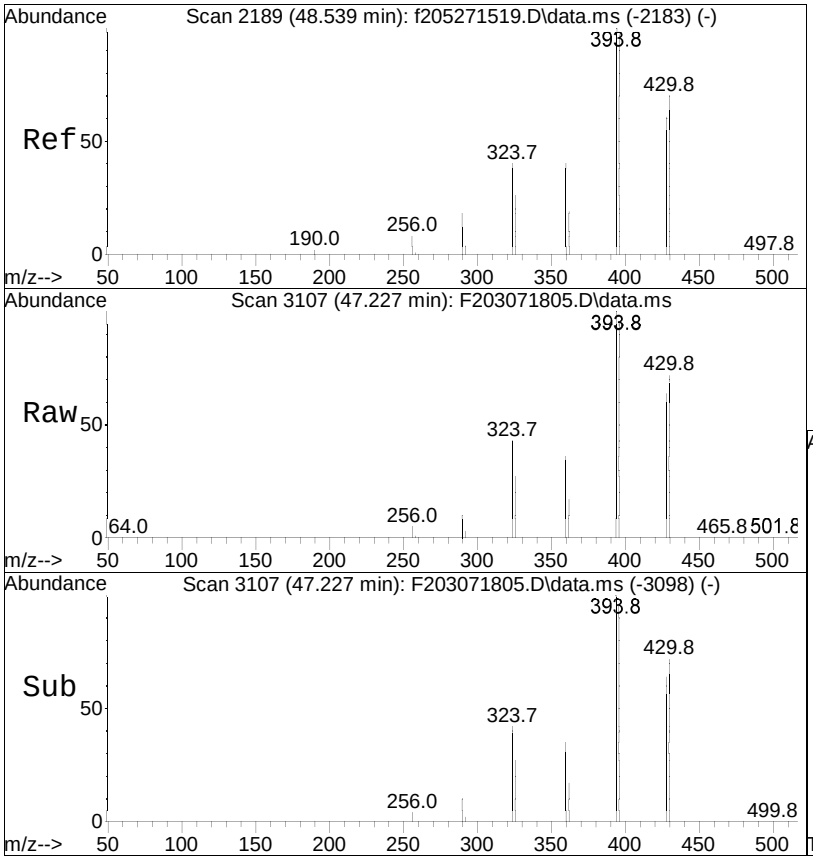


#197
Cl7-BZ#190
Concen: 89.73 ng/mL
RT: 47.227 min Scan# 3107
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 82614

Ion	Ratio	Lower	Upper
394	100		
396	96.2	78.9	118.3

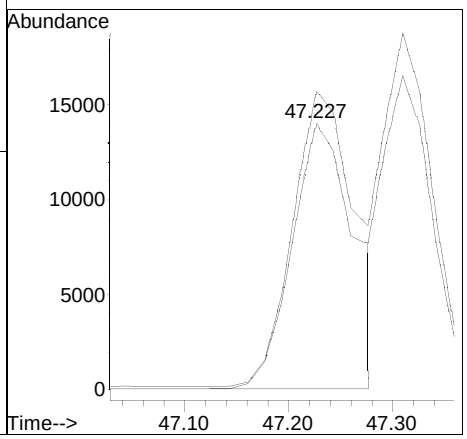


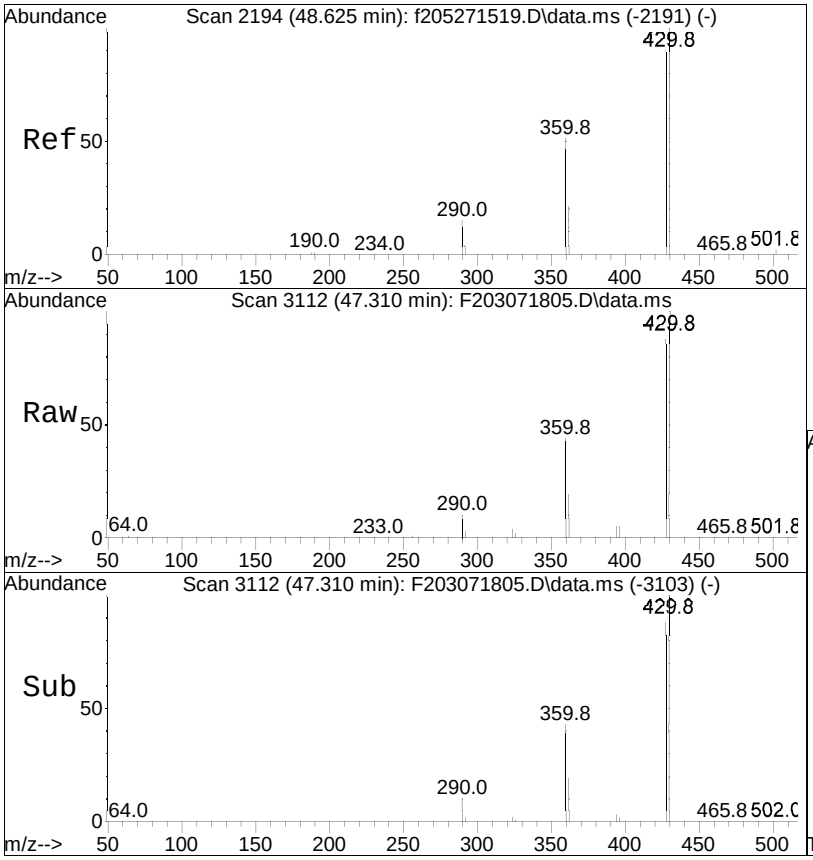


#198
Cl8-BZ#196
Concen: 97.53 ng/mL
RT: 47.227 min Scan# 3107
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 57983

Ion	Ratio	Lower	Upper
428	100		
430	111.6	90.2	135.2

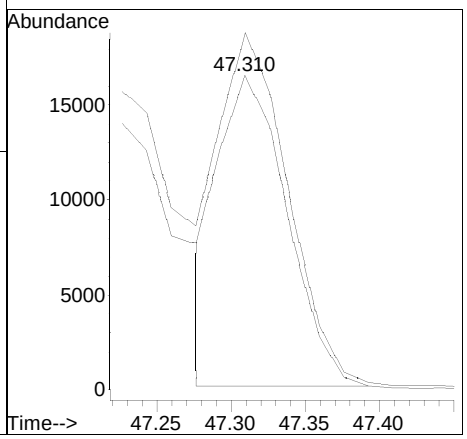


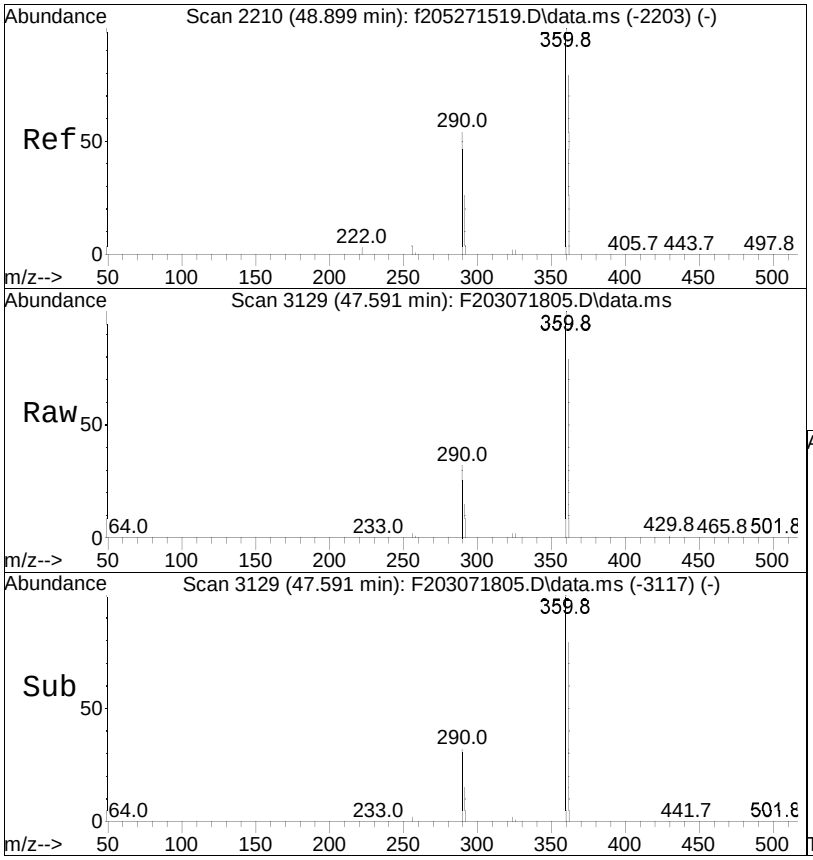


#199
Cl8-BZ#203
Concen: 81.76 ng/mL
RT: 47.310 min Scan# 3112
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 52518

Ion	Ratio	Lower	Upper
428	100		
430	112.3	90.0	135.0

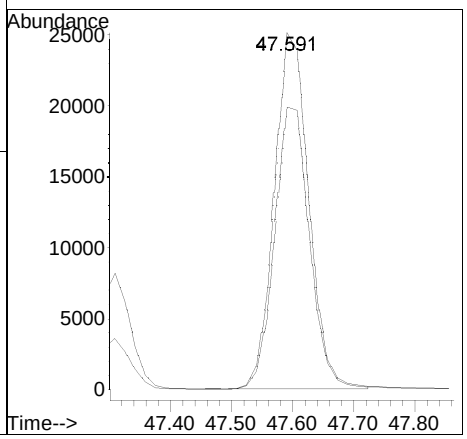


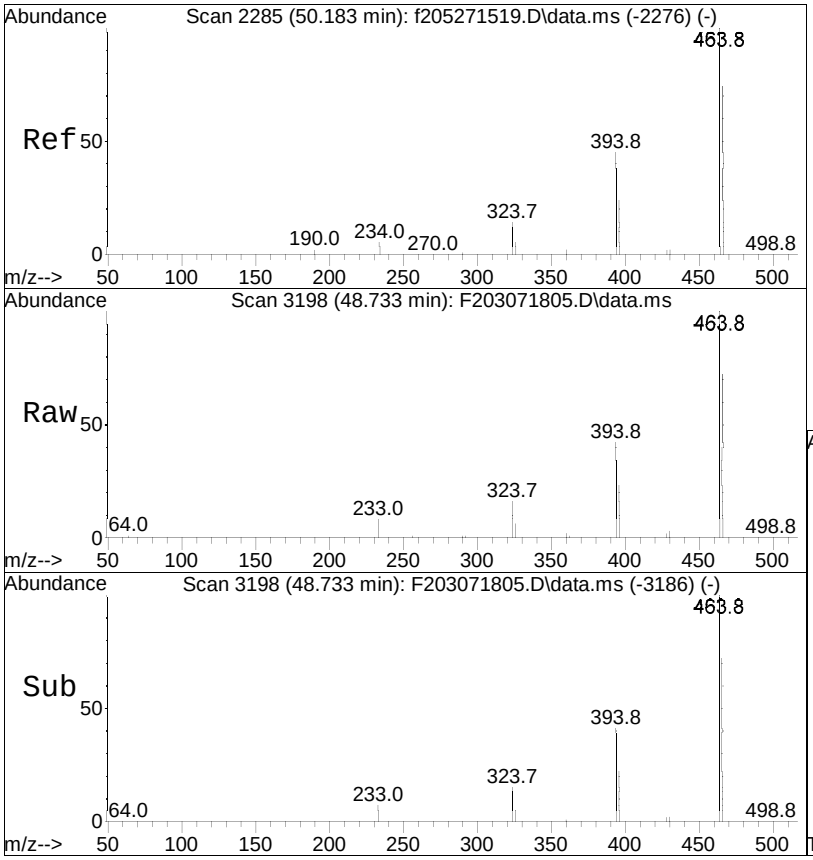


#200
Cl6-BZ#169-RTW
Concen: 86.92 ng/mL
RT: 47.591 min Scan# 3129
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:360 Resp: 97505

Ion	Ratio	Lower	Upper
360	100		
362	80.5	65.0	97.4

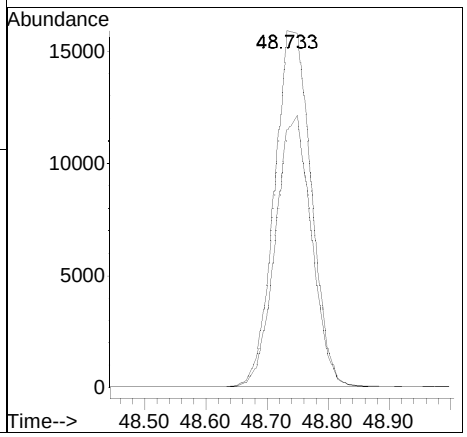


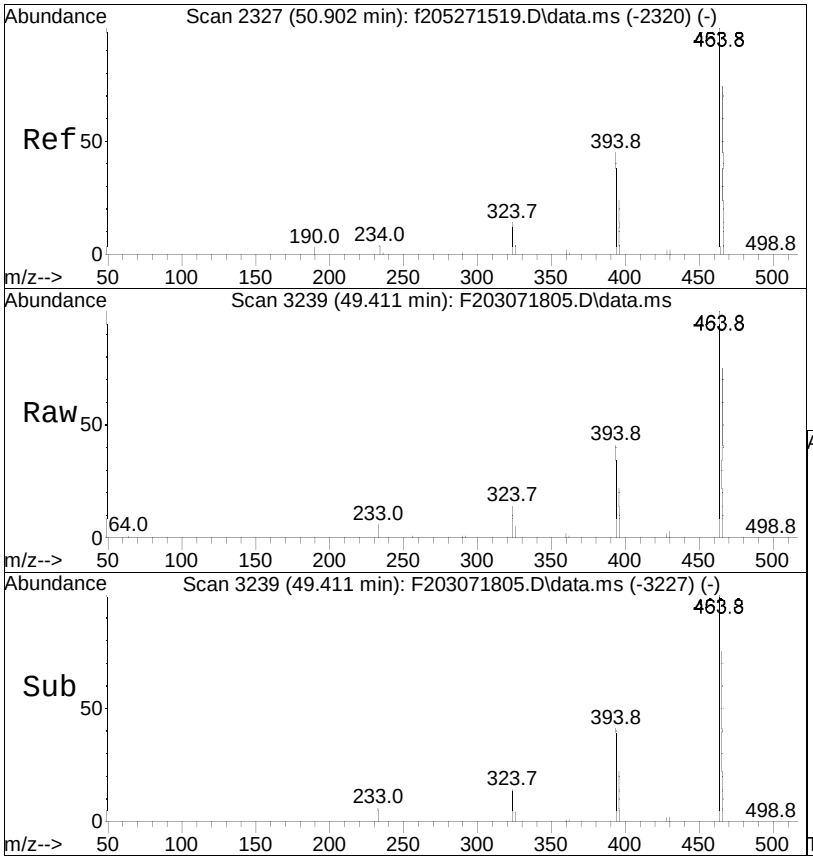


#201
Cl9-BZ#208-RTW
Concen: 83.31 ng/mL
RT: 48.733 min Scan# 3198
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:464 Resp: 66172

Ion	Ratio	Lower	Upper
464	100		
466	74.7	60.3	90.5

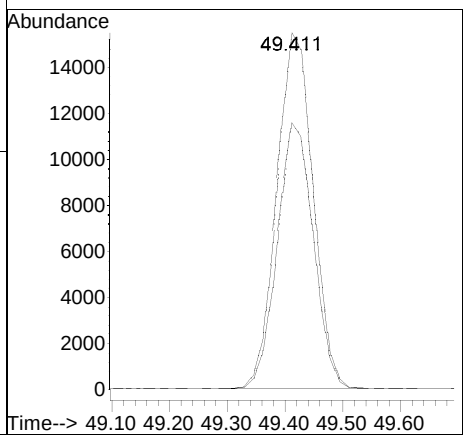


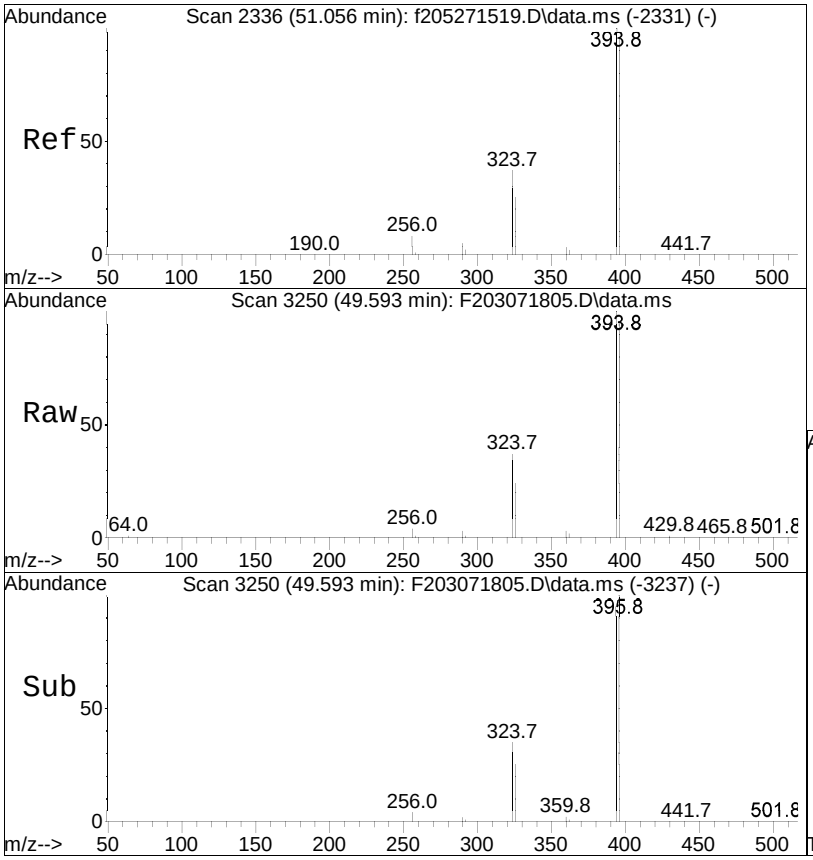


#202
Cl9-BZ#207
Concen: 86.93 ng/mL
RT: 49.411 min Scan# 3239
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:464 Resp: 67391

Ion	Ratio	Lower	Upper
464	100		
466	74.2	61.9	92.9

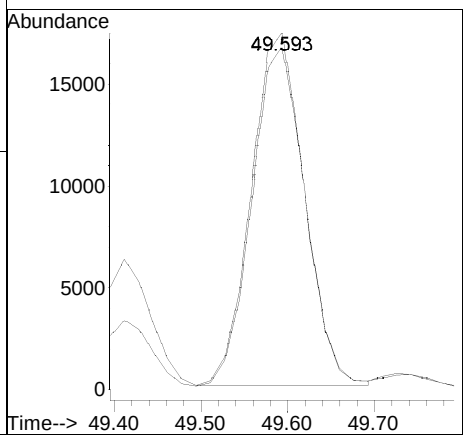


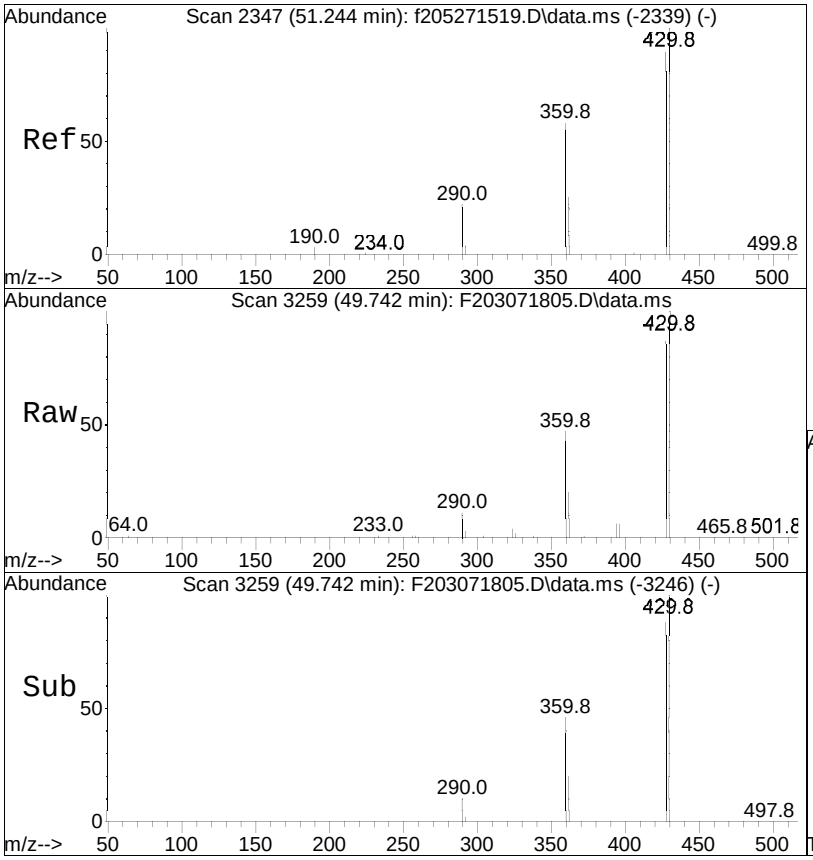


#203
Cl7-BZ#189-RTW
Concen: 87.51 ng/mL
RT: 49.593 min Scan# 3250
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:394 Resp: 73347

Ion	Ratio	Lower	Upper
394	100		
396	96.7	76.4	114.6

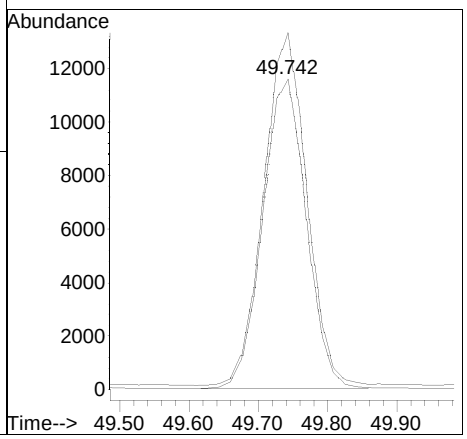


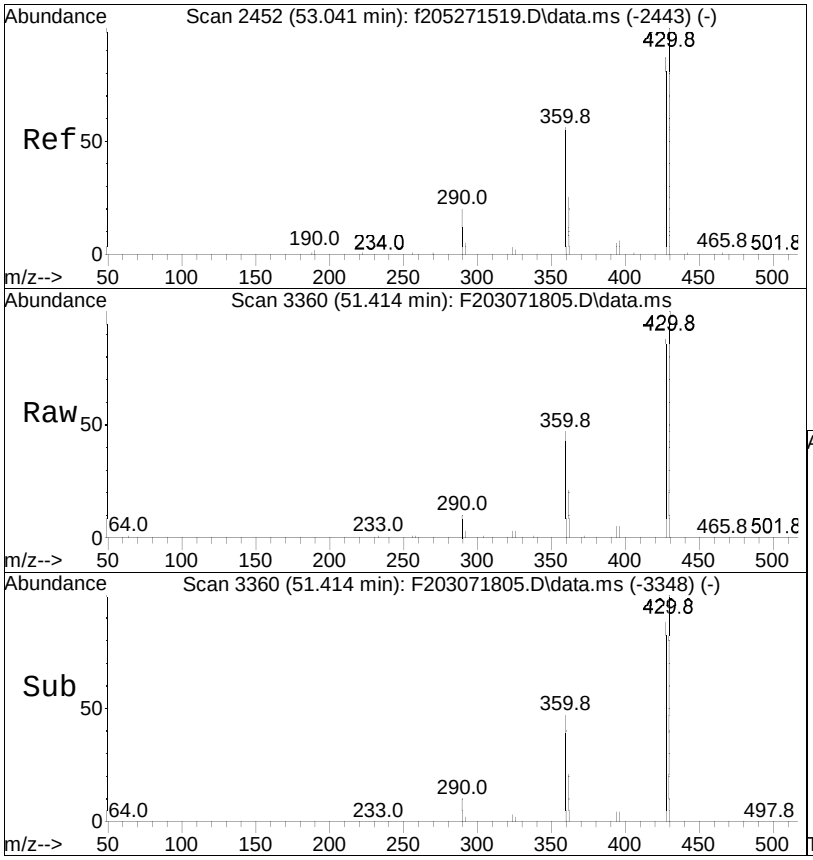


#204
Cl8-BZ#195
Concen: 85.82 ng/mL
RT: 49.742 min Scan# 3259
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 50141

Ion	Ratio	Lower	Upper
428	100		
430	112.3	93.8	140.8

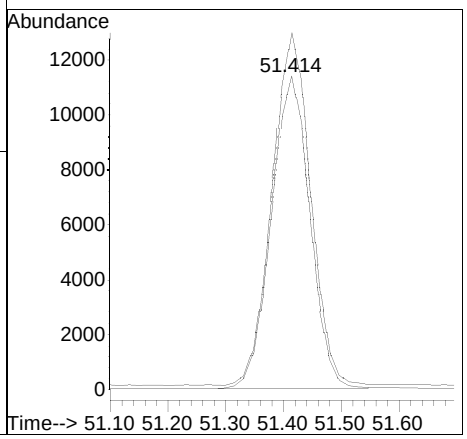


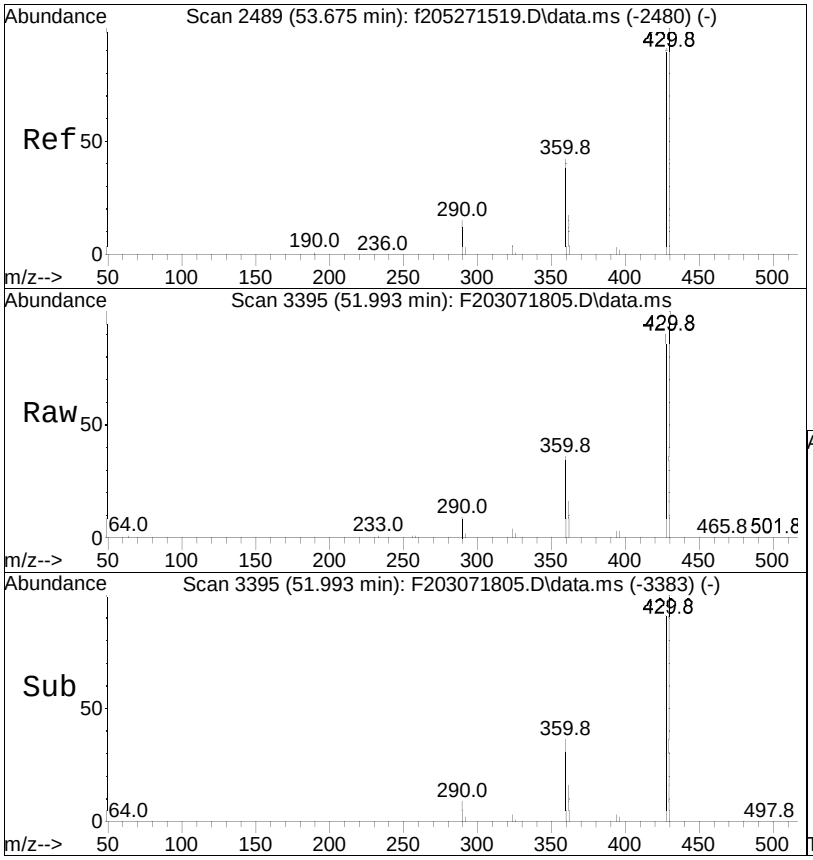


#205
Cl8-BZ#194
Concen: 84.05 ng/mL
RT: 51.414 min Scan# 3360
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 52570

Ion	Ratio	Lower	Upper
428	100		
430	111.9	92.2	138.2

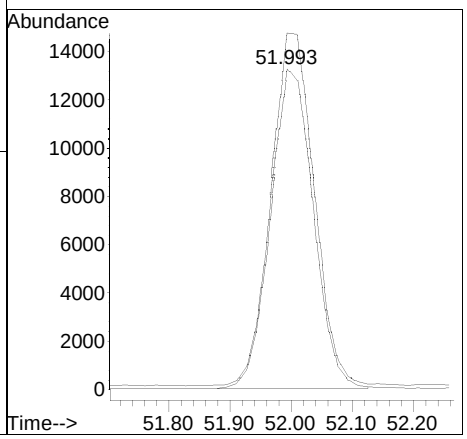


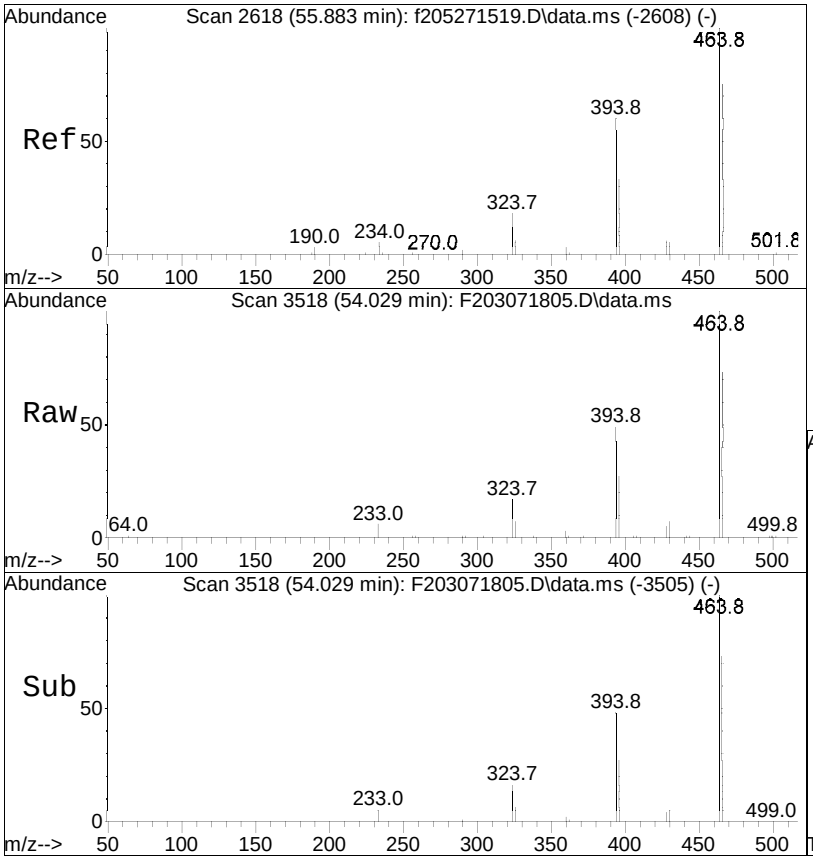


#206
Cl8-BZ#205-RTW
Concen: 83.73 ng/mL
RT: 51.993 min Scan# 3395
Delta R.T. 0.000 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:428 Resp: 64185

Ion	Ratio	Lower	Upper
428	100		
430	111.6	91.3	136.9

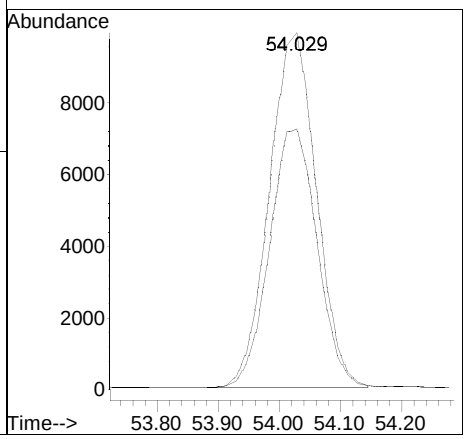


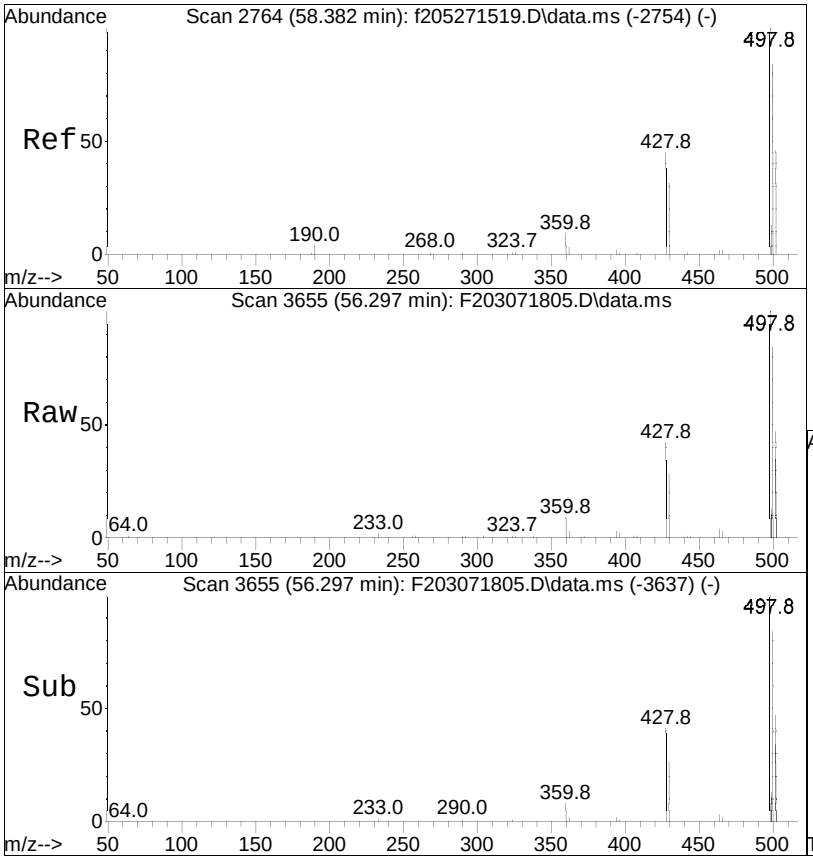


#207
Cl9-BZ#206-Cal/RTW
Concen: 82.78 ng/mL
RT: 54.029 min Scan# 3518
Delta R.T. 0.017 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:464 Resp: 52908

Ion	Ratio	Lower	Upper
464	100		
466	73.9	60.2	90.2

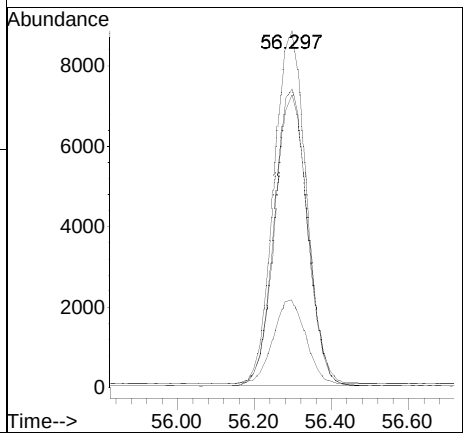




#210
Cl10-BZ#209-Cal/RTW
Concen: 81.64 ng/mL
RT: 56.297 min Scan# 3655
Delta R.T. 0.001 min
Lab File: F203071805.D
Acq: 7 Mar 2018 3:13 pm

Tgt Ion:498 Resp: 51751

Ion	Ratio	Lower	Upper
498	100		
500	84.3	66.9	100.3
499	23.8	10.8	16.2#
502	81.9	38.5	57.7#



LCS Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Cl2-BZ#15-C13	23.863	234	385904	200.000	ng/mL	0.00
122) Cl7-BZ#180-C13	44.876	406	202474	200.000	ng/mL	0.00
System Monitoring Compounds						
2) Cl3-BZ#19-C13 (surr)	20.944	268	53459	78.778	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 78.78%			
93) Cl5-BZ#101-C13 (surr)	33.192	338	87530	88.247	ng/mL	0.02
Spiked Amount 100.000	Range 50 - 125		Recovery = 88.25%			
151) Cl6-BZ#153-C13 (surr)	38.719	372	93322	100.280	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 100.28%			
177) Cl8-BZ#202-C13 (surr)	42.923	442	85181	89.329	ng/mL	0.00
Spiked Amount 100.000	Range 50 - 125		Recovery = 89.33%			
Target Compounds						Qvalue
3) Cl1-BZ#1-Cal/RTW	14.543	188	138780	78.034	ng/mL	99
4) Monochlorobiphenyls	0.000		0	N.D.	d	
5) Cl1- conf Ion	0.000		0	N.D.	d	
6) Cl1-BZ#2	16.626	188	142704	76.261	ng/mL	100
7) Cl1-BZ#3-RTW	17.084	188	141738	77.150	ng/mL	98
8) Cl2-BZ#4/#10-RTW	17.510	222	167720	156.111	ng/mL	99
9) Cl2-BZ#9	19.071	222	105423	76.300	ng/mL	100
10) Cl2-BZ#7	19.159	222	105581	78.422	ng/mL	98
11) Cl2-BZ#6	19.593	222	112639	75.984	ng/mL	98
12) Cl2-BZ#5	20.036	222	102010	75.743	ng/mL	99
13) Cl2-BZ#8	20.180	222	117307	76.604	ng/mL	100
14) Dichlorobiphenyls	0.000		0	N.D.	d	
15) Cl2-Conf Ion	0.000		0	N.D.	d	
16) Cl3-BZ#19-RTW	20.960	256	57056	75.431	ng/mL	99
17) Cl2-BZ#14	21.105	222	112740	76.280	ng/mL	97
18) Cl3-BZ#30	21.515	256	92132	76.313	ng/mL	99
19) Cl3-BZ#18	22.327	256	62345	74.193	ng/mL	100
20) Cl2-BZ#11	22.456	222	123024	77.559	ng/mL	99
21) Cl3-BZ#17	22.537	256	59482	76.021	ng/mL	99
22) Cl2-BZ#12	22.850	222	107783	76.814	ng/mL	98
23) Cl3-BZ#27	22.898	256	82965	76.555	ng/mL	98
24) Cl2-BZ#13	23.148	222	123800	76.576	ng/mL	99
25) Cl3-BZ#24	23.172	256	85770	76.985	ng/mL	98
26) Cl3-BZ#16	23.510	256	51228	74.932	ng/mL	96
27) Cl3-BZ#32	23.711	256	90761	75.864	ng/mL	98
28) Cl2-BZ#15-RTW	23.880	222	122321	74.668	ng/mL	97

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) Cl3-BZ#34	24.105	256	85157	76.164	ng/mL	99
30) Cl3-BZ#23	24.290	256	85276	77.722	ng/mL	100
31) Cl4-BZ#54-RTW	24.298	292	78859	77.098	ng/mL	98
32) Cl3-BZ#29-Cal	24.515	256	83997	75.833	ng/mL	99
33) Trichlorobiphenyls	0.000		0	N.D.	d	
34) Cl3- Conf Ion	0.000		0	N.D.	d	
35) Cl4-BZ#50-Cal	25.021	292	64769	75.790	ng/mL	98
36) Tetrachlorobiphenyls	0.000		0	N.D.	d	
37) Cl4-Conf Ion	0.000		0	N.D.	d	
38) Cl3-BZ#26	25.046	256	94631	76.168	ng/mL	99
39) Cl3-BZ#25	25.255	256	91706	75.822	ng/mL	98
40) Cl4-BZ#53	25.744	292	71716	76.073	ng/mL	99
41) Cl3-BZ#-31	25.826	256	125534	75.152	ng/mL	98
42) Cl3-BZ#28	26.025	256	117059	71.143	ng/mL	100
43) Cl3-BZ#33	26.108	256	107173M4	91.375	ng/mL	
44) Cl3-BZ#21/#20	26.157	256	229472M4	154.480	ng/mL	
45) Cl4-BZ#51	26.157	292	82355	79.136	ng/mL	100
46) Cl4-BZ#45	26.720	292	62794	77.268	ng/mL	99
47) Cl3-BZ#22	26.952	256	112330	77.618	ng/mL	98
48) Cl4-BZ#73/#46	27.084	292	170902	157.357	ng/mL	100
49) Cl4-BZ#69	27.382	292	96827	74.607	ng/mL	100
50) Cl4-BZ#43	27.465	292	69161	80.691	ng/mL	97
51) Cl3-BZ#36	27.498	256	129847	80.641	ng/mL	98
52) Cl4-BZ#52	27.614	292	79899	75.712	ng/mL	99
53) Cl4-BZ#48	27.779	292	74267	79.203	ng/mL	99
54) Cl4-BZ#49	27.928	292	76329	75.675	ng/mL	99
55) Cl5-BZ#104-RTW	28.144	326	80743	77.529	ng/mL	98
56) Cl4-BZ#47	28.226	292	81400M4	74.836	ng/mL	
57) Cl4-BZ#65/#75/#62	28.326	292	304238	238.075	ng/mL	99
58) Cl3-BZ#39	28.359	256	117515	79.185	ng/mL	100
59) Cl3-BZ#38	28.491	256	117011	81.754	ng/mL	98
60) Cl4-BZ#44	28.872	292	67201	76.535	ng/mL	100
61) Cl4-BZ#59	29.104	292	97881	76.016	ng/mL	99
62) Cl4-BZ#42	29.203	292	65841	78.933	ng/mL	96
63) Cl4-BZ#71	29.435	292	105156	77.763	ng/mL	100
64) Cl3-BZ#35	29.550	256	120134	80.263	ng/mL	100
65) Cl4-BZ#41	29.666	292	65432	79.683	ng/mL	99
66) Cl4-BZ#72	29.782	292	116534	82.348	ng/mL	100
67) Cl5-BZ#96	29.799	326	89701	79.653	ng/mL	95
68) Cl5-BZ#103	29.931	326	71307	81.907	ng/mL	96
69) Cl4-BZ#68/#64	30.097	292	212718	162.327	ng/mL	99

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) Cl4-BZ#40	30.212	292	50254	78.749	ng/mL	97
71) Cl3-BZ#37-RTW	30.428	256	160244	80.528	ng/mL	98
72) Cl5-BZ#100	30.428	326	76929	82.002	ng/mL	99
73) Cl5-BZ#94	30.527	326	58637	84.663	ng/mL	100
74) Cl4-BZ#57	30.626	292	111640	79.275	ng/mL	98
75) Cl4-BZ#67/#58	30.957	292	232004	163.692	ng/mL	100
76) Cl5-BZ#102	31.007	326	82465	82.698	ng/mL	99
77) Cl4-BZ#61	31.305	292	111700	80.020	ng/mL	98
78) Cl5-BZ#98	31.321	326	74432	81.476	ng/mL	98
79) Cl4-BZ#76	31.470	292	125978	85.403	ng/mL	99
80) Cl5-BZ#93	31.454	326	60716	82.390	ng/mL	99
81) Cl4-BZ#63	31.553	292	103682M4	78.345	ng/mL	
82) Cl5-BZ#121/#95/#88	31.619	326	245078	250.584	ng/mL	99
83) Cl4-BZ#74	31.834	292	118195	80.744	ng/mL	98
84) Cl6-BZ#155-RTW	31.967	360	87444	80.654	ng/mL	100
85) Cl4-BZ#70	32.000	292	122723	81.399	ng/mL	98
86) Cl4-BZ#66	32.298	292	112561	82.469	ng/mL	98
87) Cl5-BZ#91	32.165	326	69839	81.010	ng/mL	99
88) Cl4-BZ#80	32.563	292	117767	82.404	ng/mL	99
89) Cl4-BZ#55	32.745	292	120443	82.535	ng/mL	99
90) Cl5-BZ#92	32.794	326	69685	82.860	ng/mL	96
91) Cl5-BZ#89/#84	33.076	326	131215	162.812	ng/mL	95
92) Cl5-BZ#101/#90	33.208	326	153106M4	164.903	ng/mL	
94) Cl4-BZ#56	33.208	292	120480	83.452	ng/mL	99
95) Cl5-BZ#113	33.307	326	97459	89.296	ng/mL	99
96) Cl5-BZ#99	33.572	326	86903	82.887	ng/mL	99
97) Cl6-BZ#150	33.622	360	96020	82.600	ng/mL	98
98) Cl4-BZ#60	33.638	292	128378	83.218	ng/mL	99
99) Cl6-BZ#152	33.986	360	102142	81.958	ng/mL	100
100) Cl5-BZ#119	34.069	326	112999	88.980	ng/mL	97
101) Cl5-BZ#83/#125/#112	34.218	326	273938M4	259.215	ng/mL	
102) Cl5-BZ#86/#109	34.383	326	169909M4	161.711	ng/mL	
103) Cl5-BZ#97	34.499	326	68372	87.289	ng/mL	97
104) Cl5-BZ#116	34.962	326	89650	82.938	ng/mL	98
105) Cl5-BZ#87/#111	35.260	326	187920M4	177.839	ng/mL	
106) Pentachlorobiphenyls	0.000		0	N.D.	d	
107) Cl5-Conf Ion	0.000		0	N.D.	d	
108) Cl6-BZ#145	34.433	360	106411	82.705	ng/mL	99
109) Cl6-BZ#148	34.631	360	73801	83.957	ng/mL	99
110) Cl4-BZ#79	34.747	292	120964	85.123	ng/mL	99
111) Cl6-BZ#154-Cal	35.161	360	85449	84.110	ng/mL	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Hexachlorobiphenyls	0.000		0	N.D.	d	
113) Cl6-Conf Ion	0.000		0	N.D.	d	
114) Cl4-BZ#78	35.227	292	150891M4	85.783	ng/mL	
115) Cl6-BZ#136	35.310	360	95201	84.529	ng/mL	98
116) Cl5-BZ#117	35.360	326	105365M4	78.785	ng/mL	
117) Cl5-BZ#115	35.442	326	126655M4	95.567	ng/mL	
118) Cl5-BZ#85	35.525	326	65293	78.877	ng/mL	100
119) Cl5-BZ#120	35.674	326	112744	87.026	ng/mL	100
120) Cl5-BZ#110	35.807	326	105552	84.410	ng/mL	100
121) Cl4-BZ#81	36.187	292	119617	83.849	ng/mL	99
123) Cl6-BZ#151	36.204	360	73509	84.925	ng/mL	98
124) Cl6-BZ#135	36.336	360	80859	88.563	ng/mL	99
125) Cl5-BZ#82	36.518	326	70661	90.477	ng/mL	99
126) Cl6-BZ#144	36.535	360	77472	87.037	ng/mL	99
127) Cl6-BZ#147/#149	36.849	360	166328	175.020	ng/mL	98
128) Cl4-BZ#77-RTW	36.949	292	113912M4	87.712	ng/mL	
129) Cl6-BZ#143/#139	37.081	360	164478	180.089	ng/mL	99
130) Cl5-BZ#124	37.230	326	111187	90.548	ng/mL	99
131) Cl5-BZ#108	37.528	326	122476	98.191	ng/mL	100
132) Cl5-BZ#107/#123	37.611	326	235596M4	177.156	ng/mL	
133) Cl6-BZ#140	37.263	360	78563	89.006	ng/mL	99
134) Cl7-BZ#188-Cal/RTW	37.627	394	92814	89.416	ng/mL	99
135) Heptachlorobiphenyls	0.000		0	N.D.	d	
136) Cl7-Conf Ion	0.000		0	N.D.	d	
137) Cl6-BZ#134	37.710	360	66590	88.517	ng/mL	95
138) Cl5-BZ#106	37.743	326	100853	83.403	ng/mL	99
139) Cl6-BZ#133	37.826	360	104812M4	102.364	ng/mL	
140) Cl6-BZ#142	37.859	360	46870M3	68.115	ng/mL	
141) Cl5-BZ#118	37.991	326	106893	91.074	ng/mL	99
142) Cl6-BZ#131	37.991	360	71575	90.286	ng/mL	100
143) Cl7-BZ#184	38.124	394	89831	87.569	ng/mL	98
144) Cl6-BZ#165	38.173	360	102071	91.515	ng/mL	97
145) Cl6-BZ#146	38.289	360	84522	86.566	ng/mL	98
146) Cl6-BZ#161	38.455	360	113017	90.982	ng/mL	99
147) Cl5-BZ#122	38.438	326	99185	91.728	ng/mL	100
148) Cl6-BZ#168	38.686	360	97402	81.602	ng/mL	99
149) Cl5-BZ#114	38.719	326	109801	92.472	ng/mL	100
150) Cl6-BZ#153	38.736	360	106321M4	100.045	ng/mL	
152) Cl6-BZ#132	39.017	360	74670	87.549	ng/mL	99
153) Cl7-BZ#179	39.266	394	91187	86.098	ng/mL	99
154) Cl6-BZ#141	39.580	360	75465	88.444	ng/mL	100

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
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ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
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Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
155) Cl7-BZ#176	39.762	394	87441	86.929	ng/mL	99
156) Cl5-BZ#105	39.828	326	124997	86.021	ng/mL#	81
157) Cl6-BZ#137	40.010	360	78854	90.162	ng/mL	99
158) Cl5-BZ#127	40.159	326	141932	89.045	ng/mL#	74
159) Cl7-BZ#186	40.093	394	99582	88.959	ng/mL	100
160) Cl6-BZ#130/#164	40.341	360	188171	184.441	ng/mL	98
161) Cl7-BZ#178	40.639	394	68426	89.203	ng/mL	98
162) Cl6-BZ#138	40.706	360	98407	94.890	ng/mL	97
163) Cl6-BZ#163/#160	40.805	360	220647M4	188.139	ng/mL	
164) Cl6-BZ#129/#158	41.003	360	171291M4	175.209	ng/mL	
165) Cl7-BZ#182/#175	41.037	394	161840	184.317	ng/mL	100
166) Cl7-BZ#187	41.219	394	79836	88.775	ng/mL	97
167) Cl7-BZ#183	41.599	394	76968	89.051	ng/mL	98
168) Cl6-BZ#166	41.963	360	112574	88.365	ng/mL	98
169) Cl6-BZ#159	42.212	360	115138	90.377	ng/mL	99
170) Cl5-BZ#126-RTW	42.427	326	144612	92.822	ng/mL	89
171) Cl7-BZ#185	42.460	394	71806	89.315	ng/mL	99
172) Cl6-BZ#162	42.559	360	109788	92.990	ng/mL	97
173) Cl7-BZ#174	42.708	394	72957	91.401	ng/mL	99
174) Cl6-BZ#128	42.708	360	80845	92.589	ng/mL	99
175) Cl6-BZ#167	43.006	360	142401	90.897	ng/mL	93
176) Cl8-BZ#202-RTW	42.956	428	82749	91.610	ng/mL	99
178) Cl7-BZ#181	43.089	394	83401	92.936	ng/mL	97
179) Cl7-BZ#177	43.420	394	70903	91.126	ng/mL	99
180) Cl8-BZ#204/#200-Cal	43.519	428	160392	180.820	ng/mL	100
181) Octachlorobiphenyls	0.000		0	N.D.	d	
182) Cl8-Conf Ion	0.000		0	N.D.	d	
183) Cl7-BZ#171	43.734	394	70059	91.933	ng/mL	98
184) Cl7-BZ#173	43.949	394	67407	89.774	ng/mL	100
185) Cl7-BZ#172	44.396	394	72985	90.407	ng/mL	97
186) Cl7-BZ#192	44.595	394	101355	91.665	ng/mL	99
187) Cl6-BZ#156	44.611	360	112727	92.342	ng/mL	100
188) Cl6-BZ#157	44.860	360	114702	90.961	ng/mL	98
189) Cl7-BZ#180	44.893	394	89347	90.974	ng/mL	97
190) Cl7-BZ#193	44.992	394	89124	88.178	ng/mL	100
191) Cl8-BZ#197	44.032	428	81841	90.392	ng/mL	99
192) Cl7-BZ#191	45.323	394	94909	90.429	ng/mL	97
193) Cl8-BZ#199	45.141	428	78904	87.702	ng/mL	99
194) Cl8-BZ#198	46.680	428	67162	87.960	ng/mL	98
195) Cl8-BZ#201	46.780	428	59067	89.633	ng/mL	99
196) Cl7-BZ#170	46.895	394	68144	89.616	ng/mL	97

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QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
197) Cl7-BZ#190	47.227	394	102260	92.394	ng/mL	96
198) Cl8-BZ#196	47.227	428	71659	100.273	ng/mL	99
199) Cl8-BZ#203	47.309	428	63091	81.713	ng/mL	100
200) Cl6-BZ#169-RTW	47.591	360	123919	91.901	ng/mL	98
201) Cl9-BZ#208-RTW	48.749	464	81248	85.091	ng/mL	98
202) Cl9-BZ#207	49.411	464	82145	88.147	ng/mL	96
203) Cl7-BZ#189-RTW	49.593	394	93193	92.499	ng/mL	99
204) Cl8-BZ#195	49.742	428	62021	88.310	ng/mL	95
205) Cl8-BZ#194	51.414	428	65393	86.973	ng/mL	98
206) Cl8-BZ#205-RTW	52.010	428	79710	86.506	ng/mL	98
207) Cl9-BZ#206-Cal/RTW	54.029	464	65789	85.630	ng/mL	99
208) Nonachlorobiphenyls	0.000		0	N.D.	d	
209) Cl9-Conf Ion	0.000		0	N.D.	d	
210) Cl10-BZ#209-Cal/RTW	56.296	498	64528M4	84.682	ng/mL	
211) Decachlorobiphenyl	0.000		0	N.D.	d	
212) Cl10-Conf Ion	0.000		0	N.D.	d	

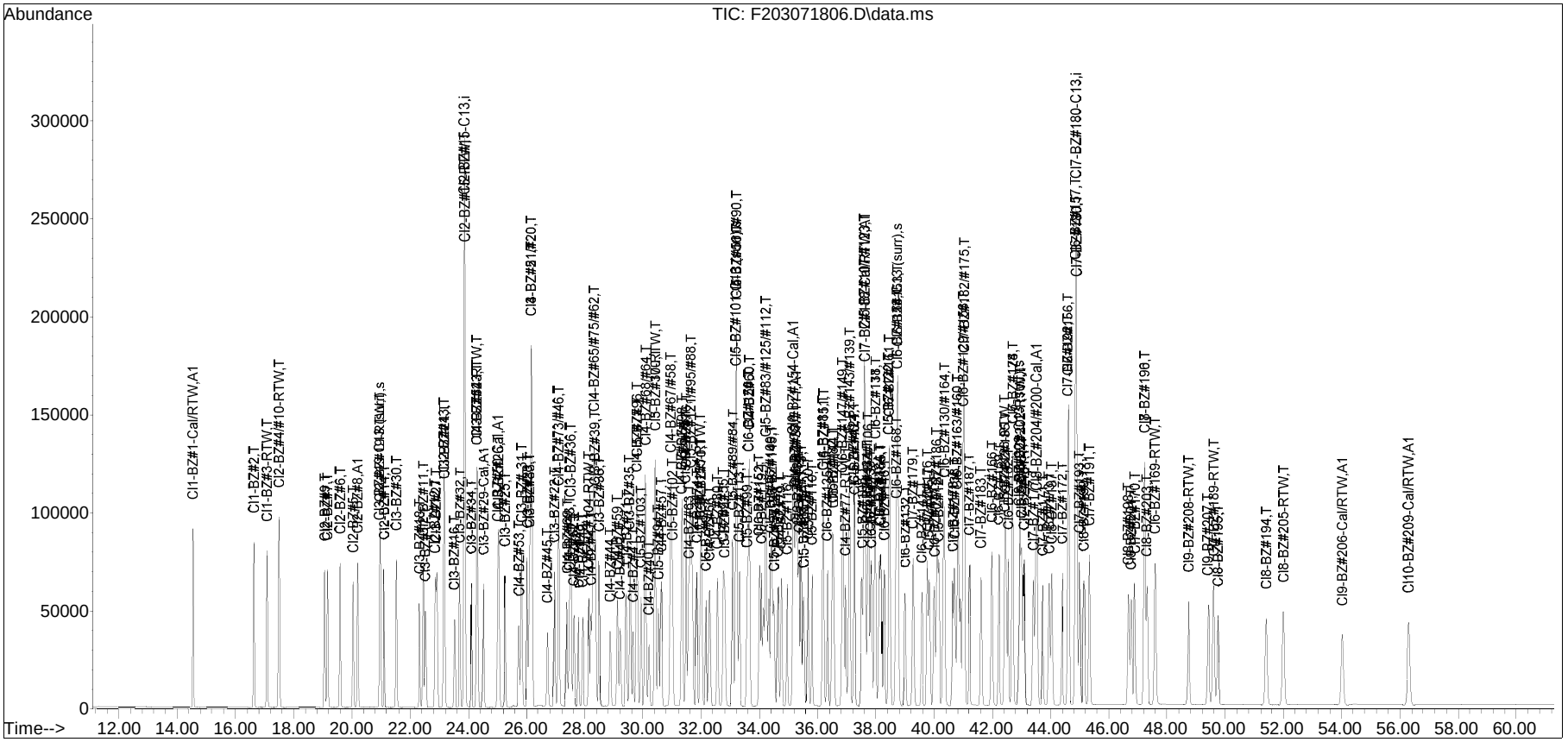
(#) = qualifier out of range (m) = manual integration (+) = signals summed

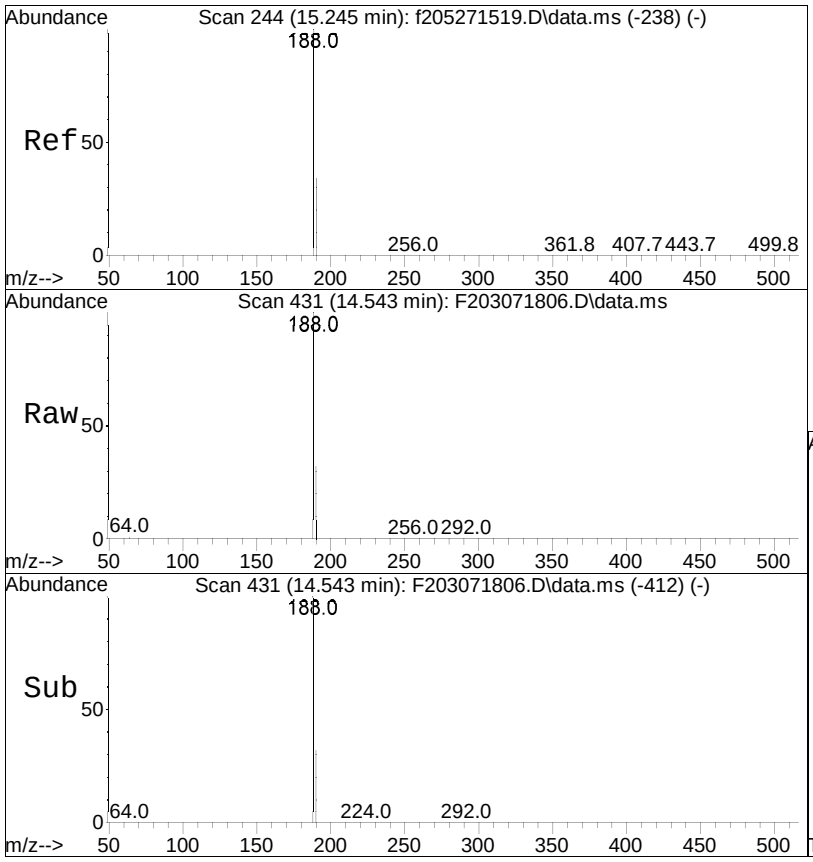
Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA2\2018\Mar\Mar07\
Data File : F203071806.D
Acq On : 7 Mar 2018 4:27 pm
Operator : BNA2:MJS
Sample : WG1094741-3,HN
Misc : WG1095518,WG1094741,ICAL14481
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 12:25:23 2018
Quant Method : O:\Organics\DATA\BNA2\2018\Mar\Mar07\209CONG0224BNA2.M
Quant Title : Method 680 PCB's by GC/MS
QLast Update : Thu Mar 08 11:02:39 2018
Response via : Initial Calibration

Sub List : Default - All compounds listed

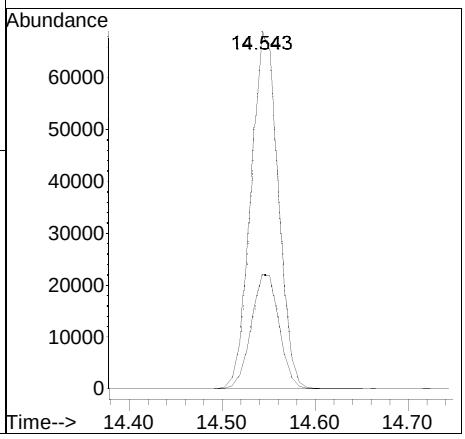


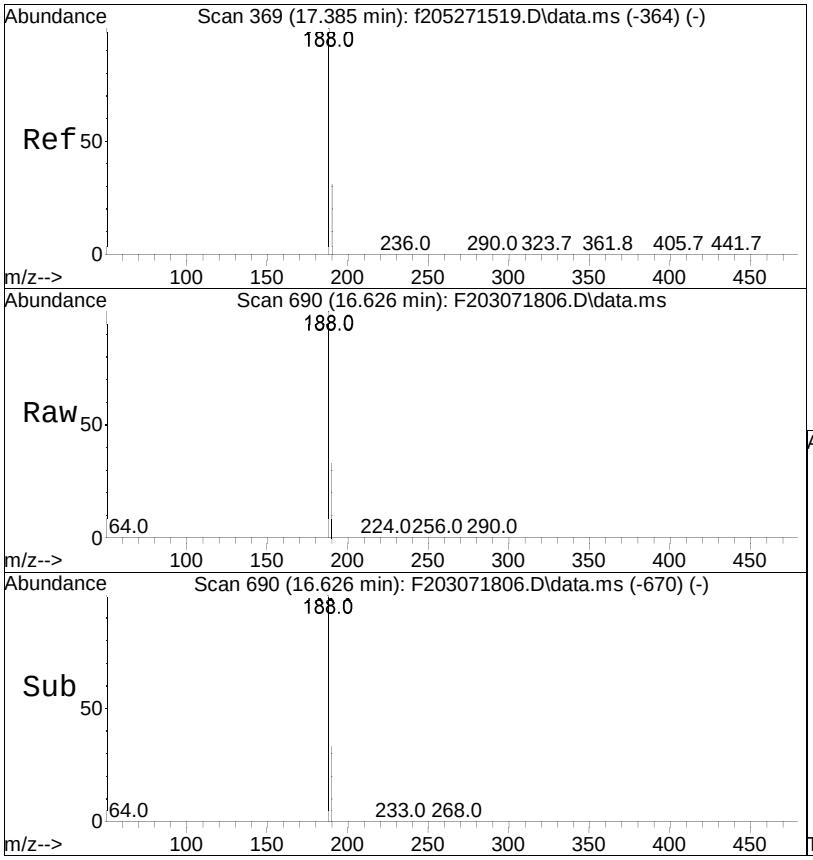


#3
Cl1-BZ#1-Cal/RTW
Concen: 78.03 ng/mL
RT: 14.543 min Scan# 431
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:188 Resp: 138780

Ion	Ratio	Lower	Upper
188	100		
190	32.0	26.2	39.4

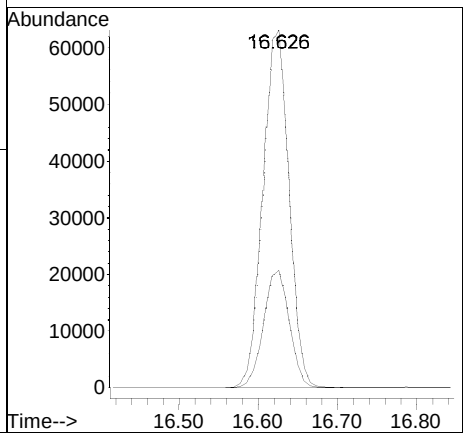


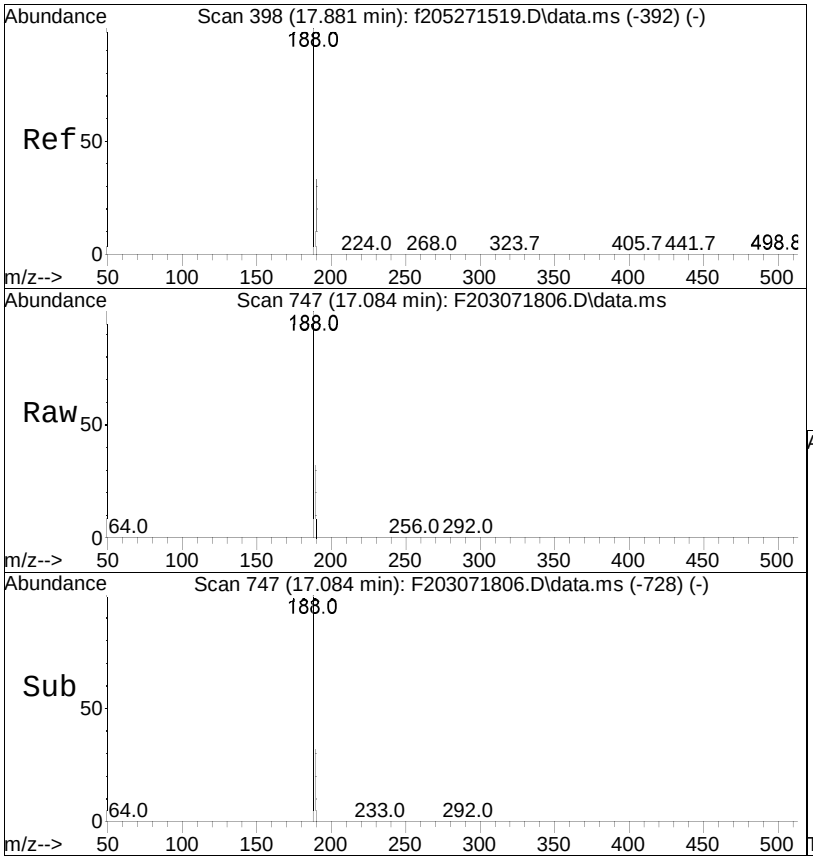


#6
Cl1-BZ#2
Concen: 76.26 ng/mL
RT: 16.626 min Scan# 690
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:188 Resp: 142704

Ion	Ratio	Lower	Upper
188	100		
190	32.7	26.1	39.1

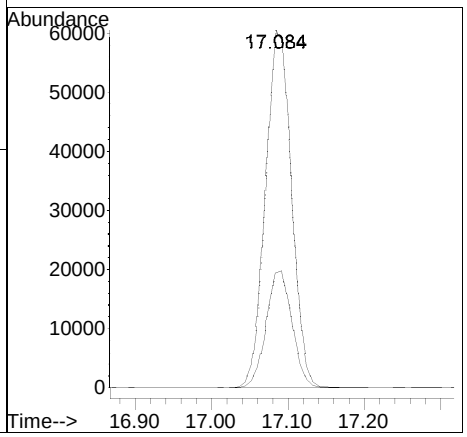


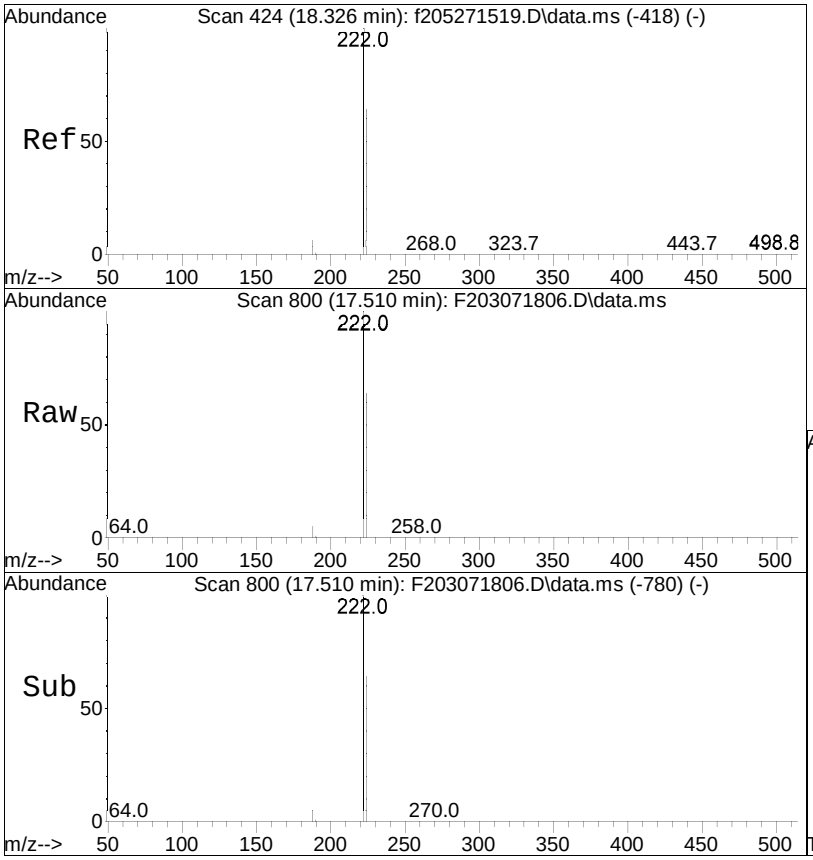


#7
Cl1-BZ#3-RTW
Concen: 77.15 ng/mL
RT: 17.084 min Scan# 747
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:188 Resp: 141738

Ion	Ratio	Lower	Upper
188	100		
190	32.0	26.7	40.1

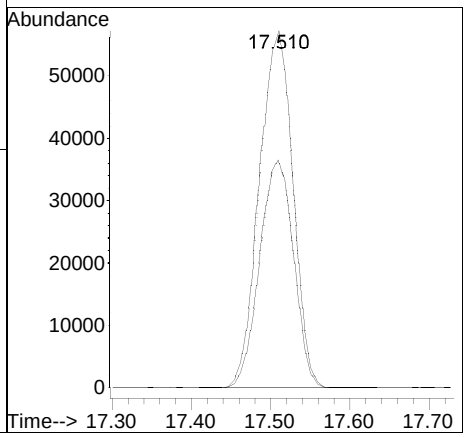


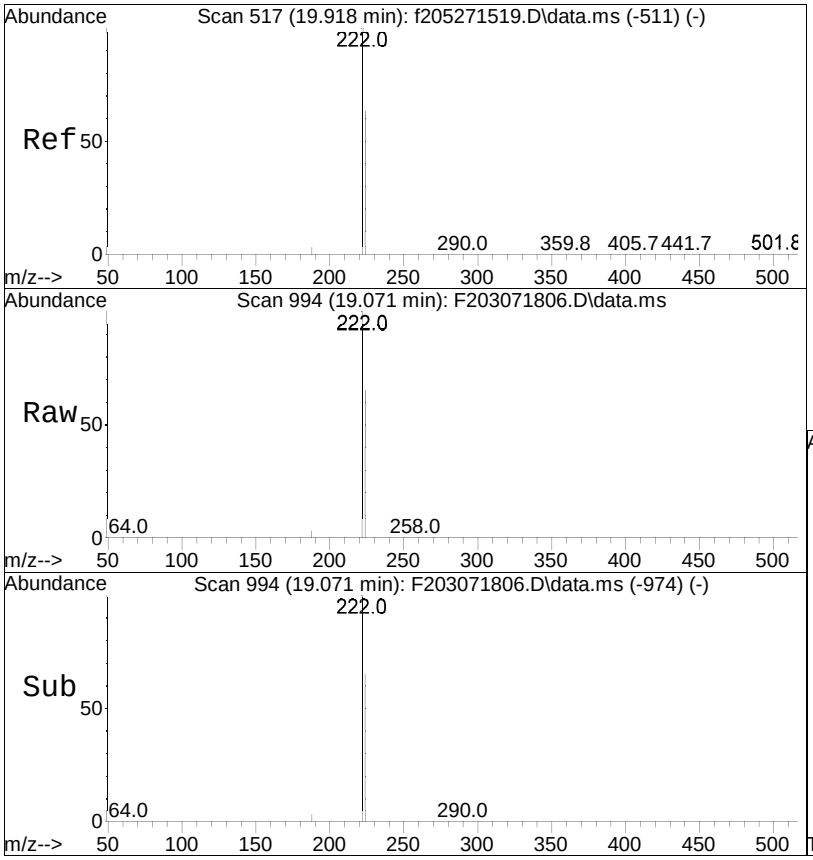


#8
Cl2-BZ#4/#10-RTW
Concen: 156.11 ng/mL
RT: 17.510 min Scan# 800
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 167720

Ion	Ratio	Lower	Upper
222	100		
224	64.4	52.4	78.6

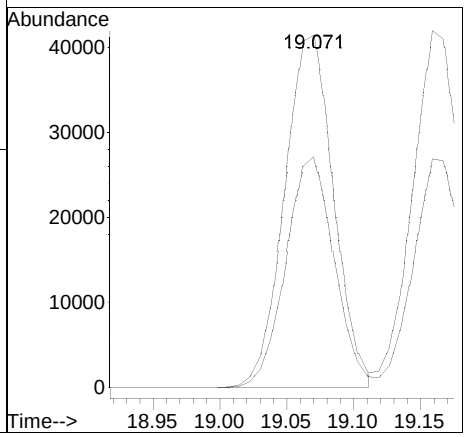


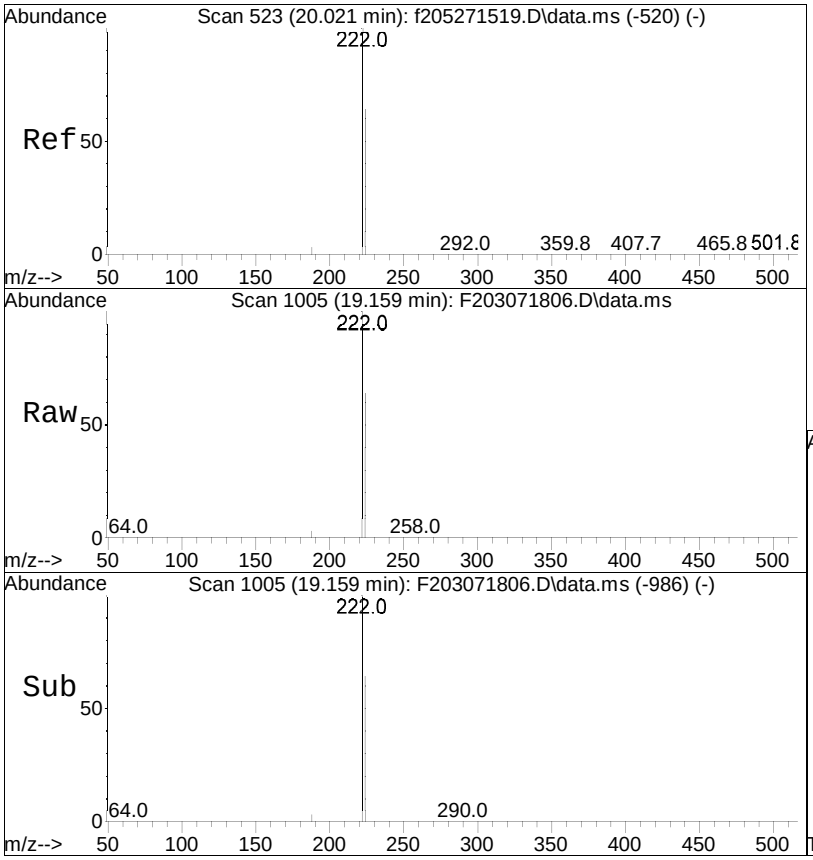


#9
Cl2-BZ#9
Concen: 76.30 ng/mL
RT: 19.071 min Scan# 994
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 105423

Ion	Ratio	Lower	Upper
222	100		
224	65.0	52.1	78.1

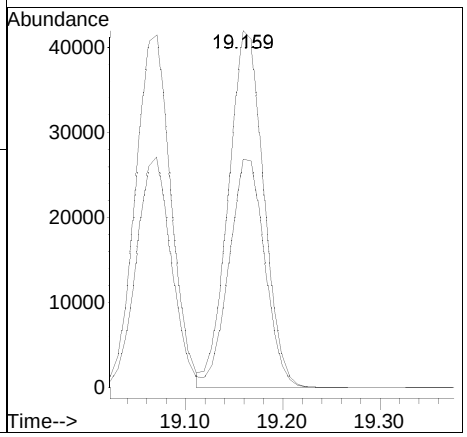


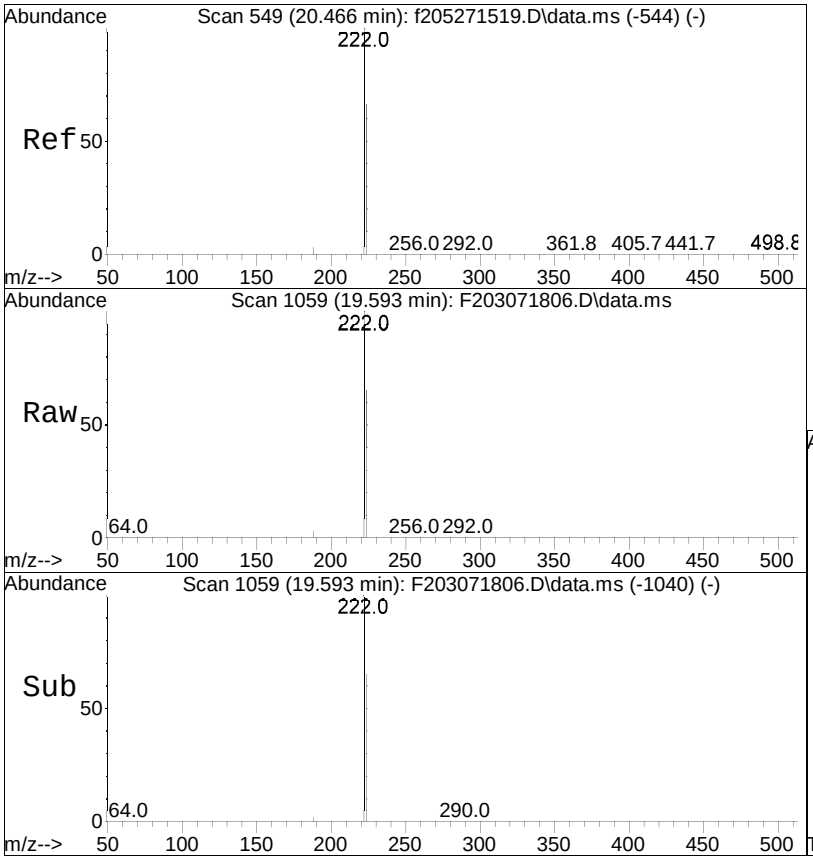


#10
Cl2-BZ#7
Concen: 78.42 ng/mL
RT: 19.159 min Scan# 1005
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 105581

Ion	Ratio	Lower	Upper
222	100		
224	64.2	52.3	78.5

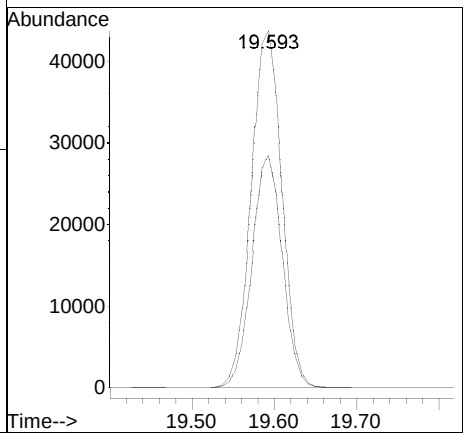


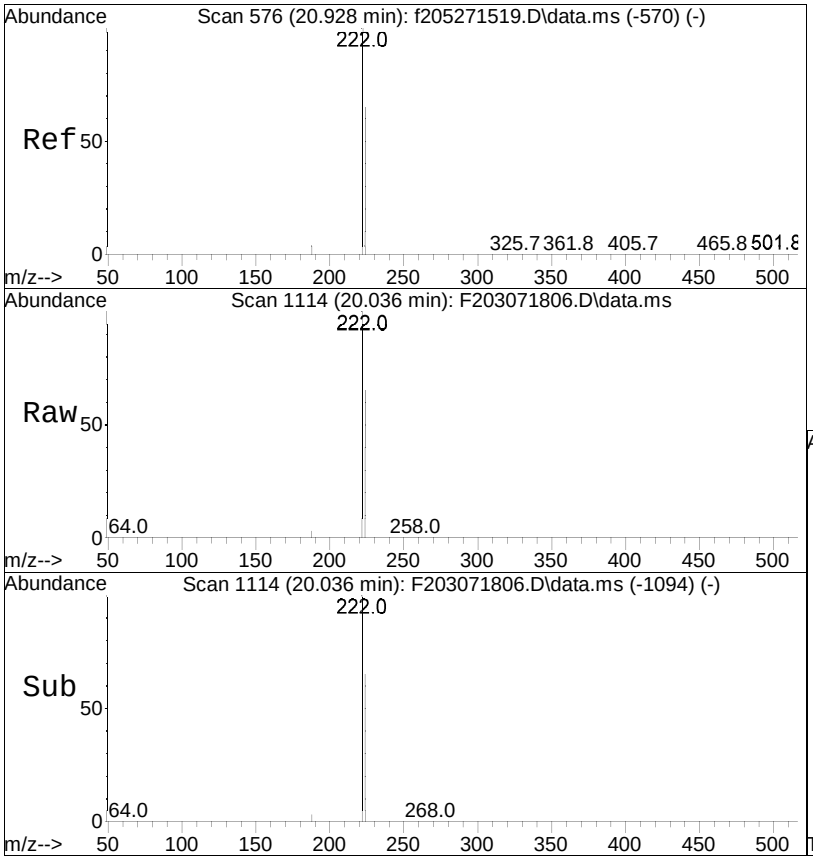


#11
Cl2-BZ#6
Concen: 75.98 ng/mL
RT: 19.593 min Scan# 1059
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 112639

Ion	Ratio	Lower	Upper
222	100		
224	65.4	51.1	76.7

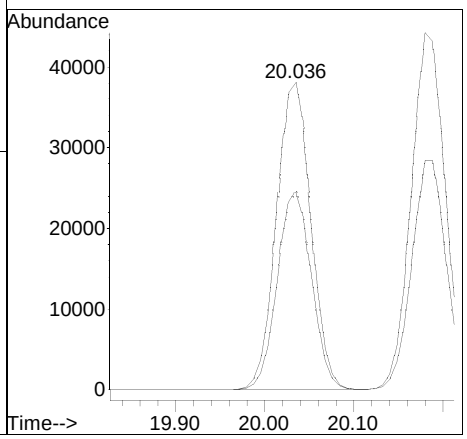


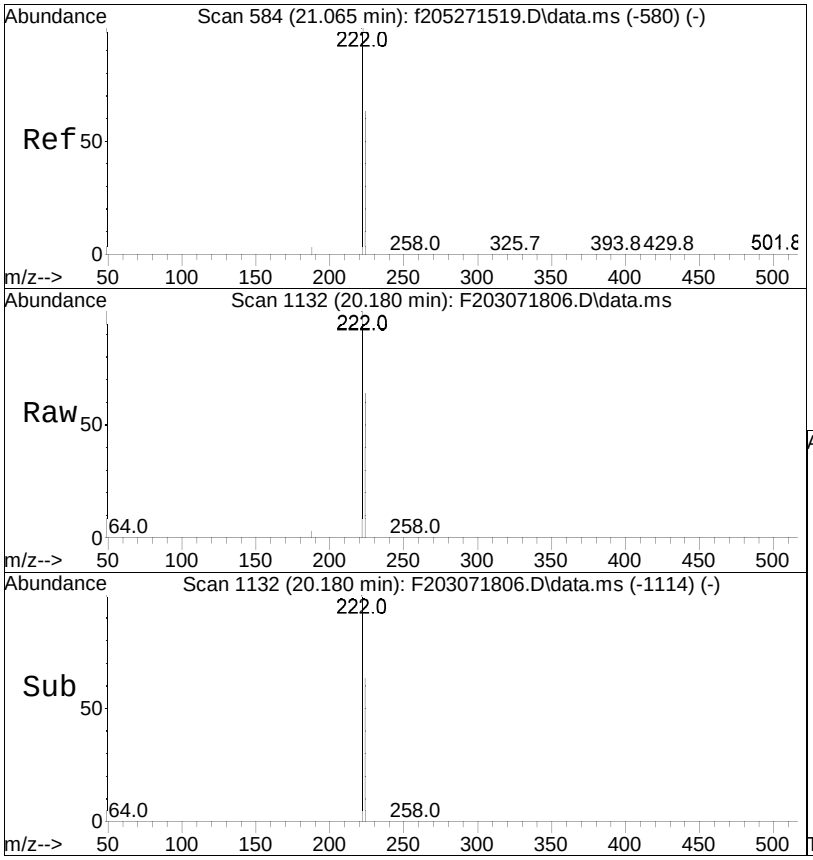


#12
Cl2-BZ#5
Concen: 75.74 ng/mL
RT: 20.036 min Scan# 1114
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 102010

Ion	Ratio	Lower	Upper
222	100		
224	64.2	51.8	77.6

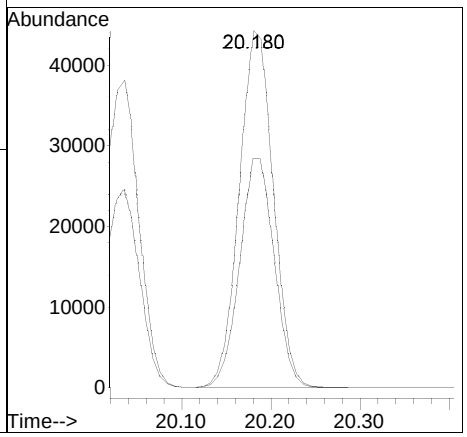


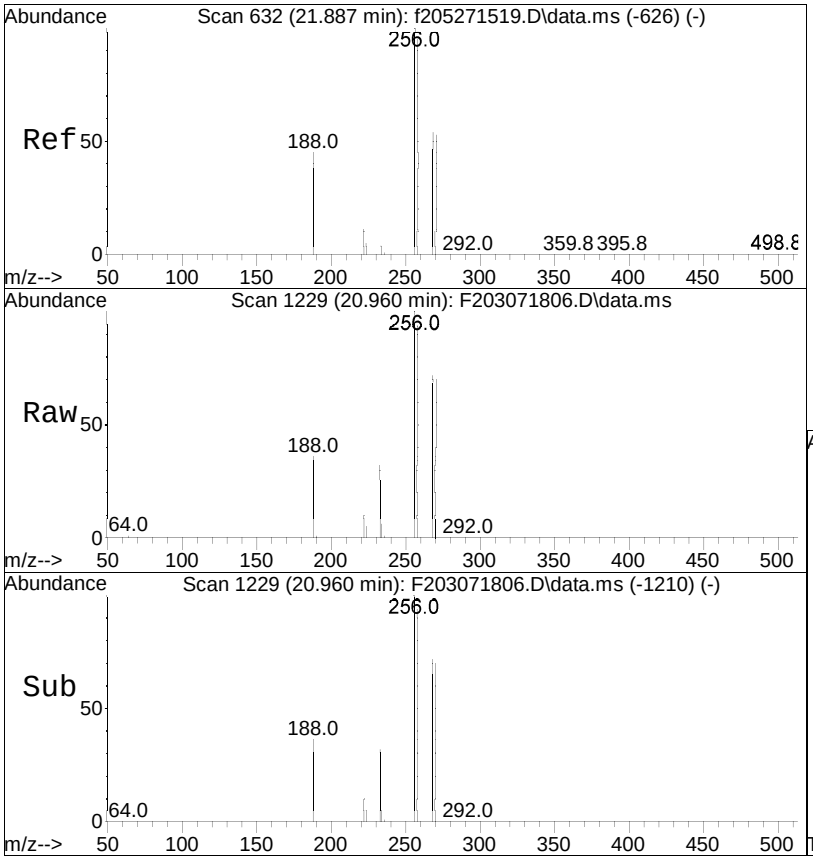


#13
Cl2-BZ#8
Concen: 76.60 ng/mL
RT: 20.180 min Scan# 1132
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 117307

Ion	Ratio	Lower	Upper
222	100		
224	65.2	52.2	78.4

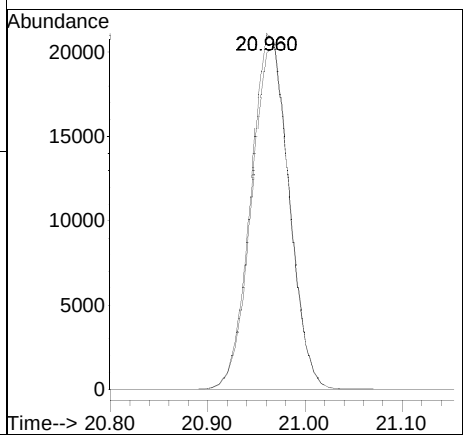


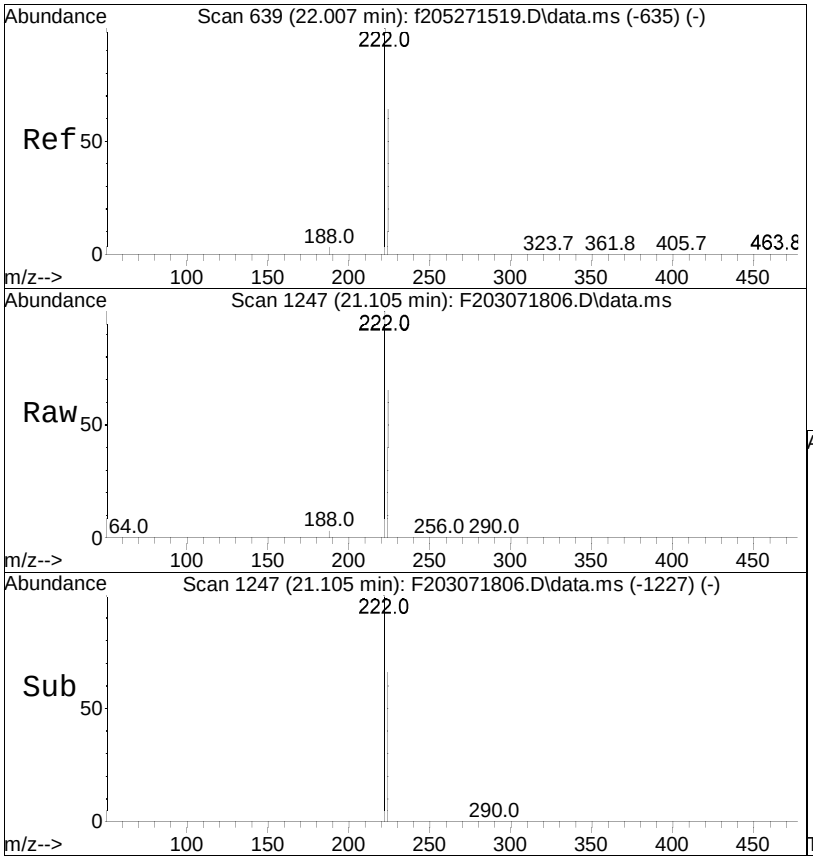


#16
Cl3-BZ#19-RTW
Concen: 75.43 ng/mL
RT: 20.960 min Scan# 1229
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 57056

Ion	Ratio	Lower	Upper
256	100		
258	94.3	76.5	114.7

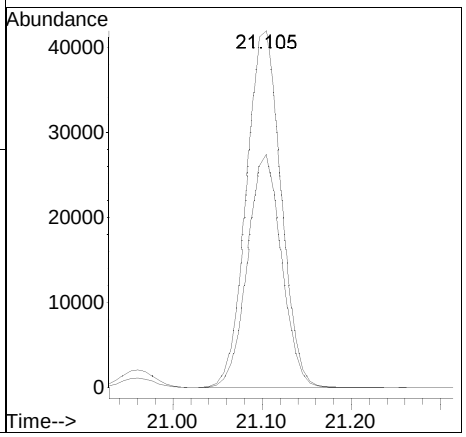


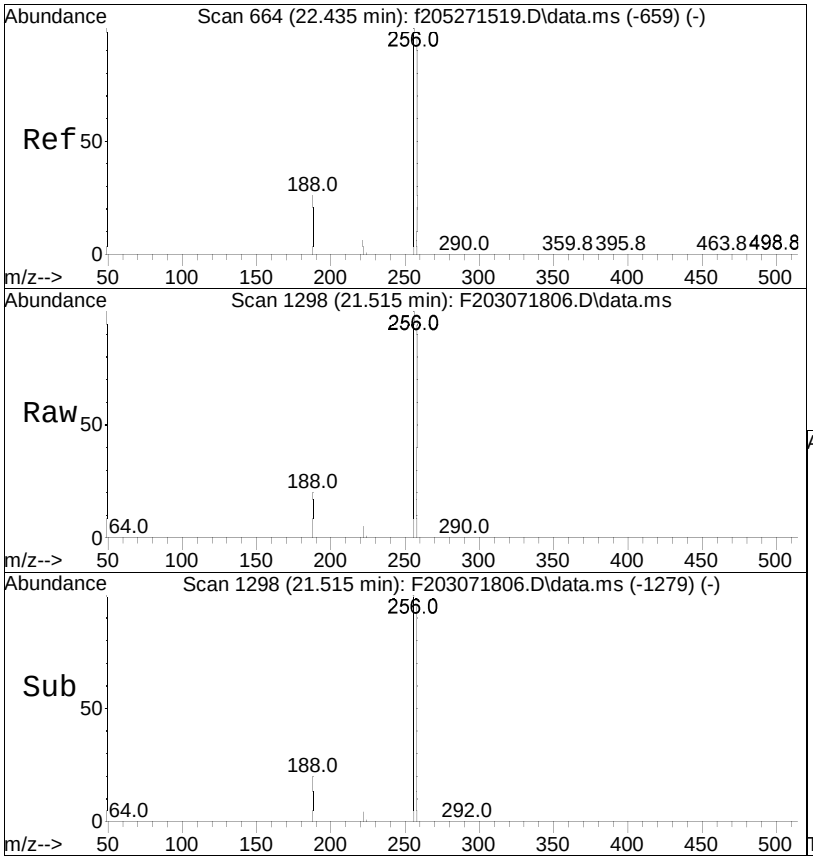


#17
Cl2-BZ#14
Concen: 76.28 ng/mL
RT: 21.105 min Scan# 1247
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 112740

Ion	Ratio	Lower	Upper
222	100		
224	64.4	53.3	79.9

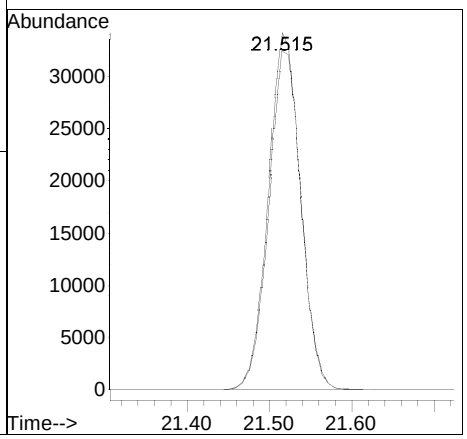


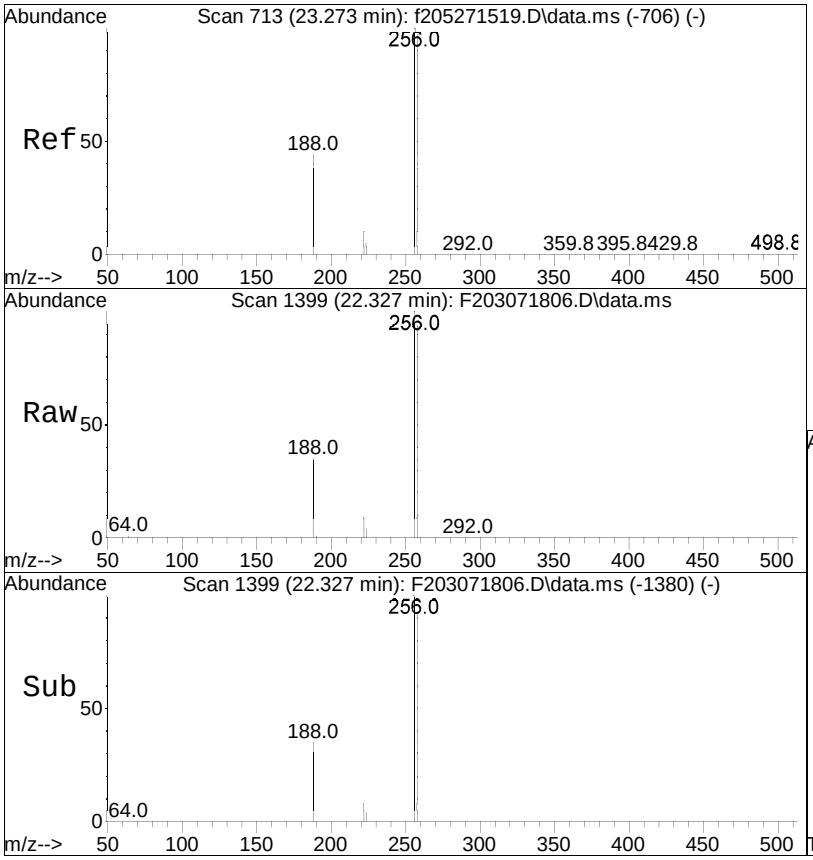


#18
Cl3-BZ#30
Concen: 76.31 ng/mL
RT: 21.515 min Scan# 1298
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 92132

Ion	Ratio	Lower	Upper
256	100		
258	96.0	76.4	114.6

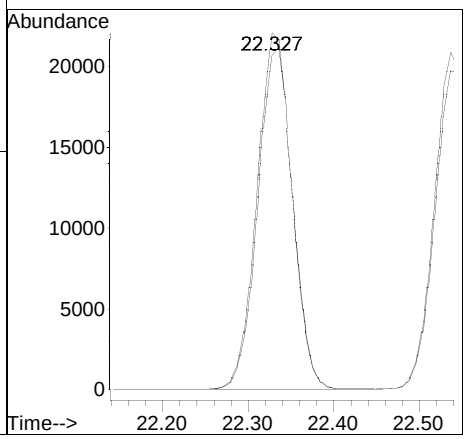


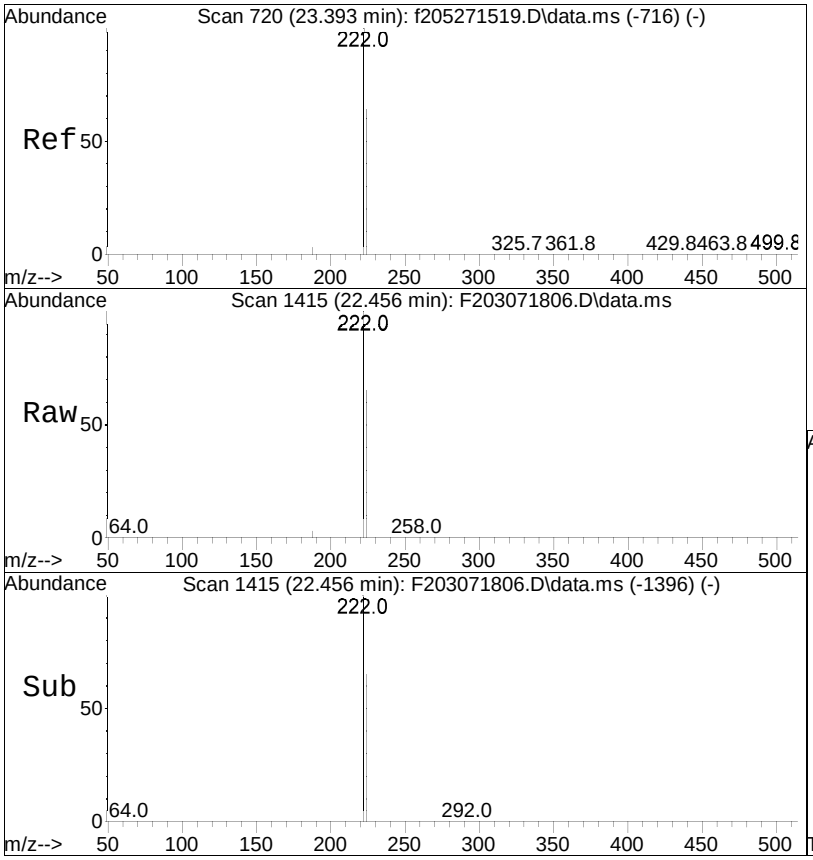


#19
Cl3-BZ#18
Concen: 74.19 ng/mL
RT: 22.327 min Scan# 1399
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 62345

Ion	Ratio	Lower	Upper
256	100		
258	93.5	74.7	112.1

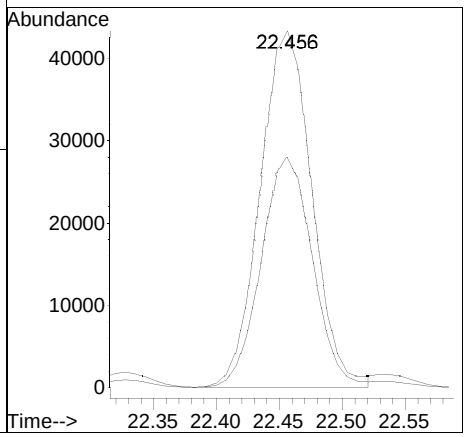


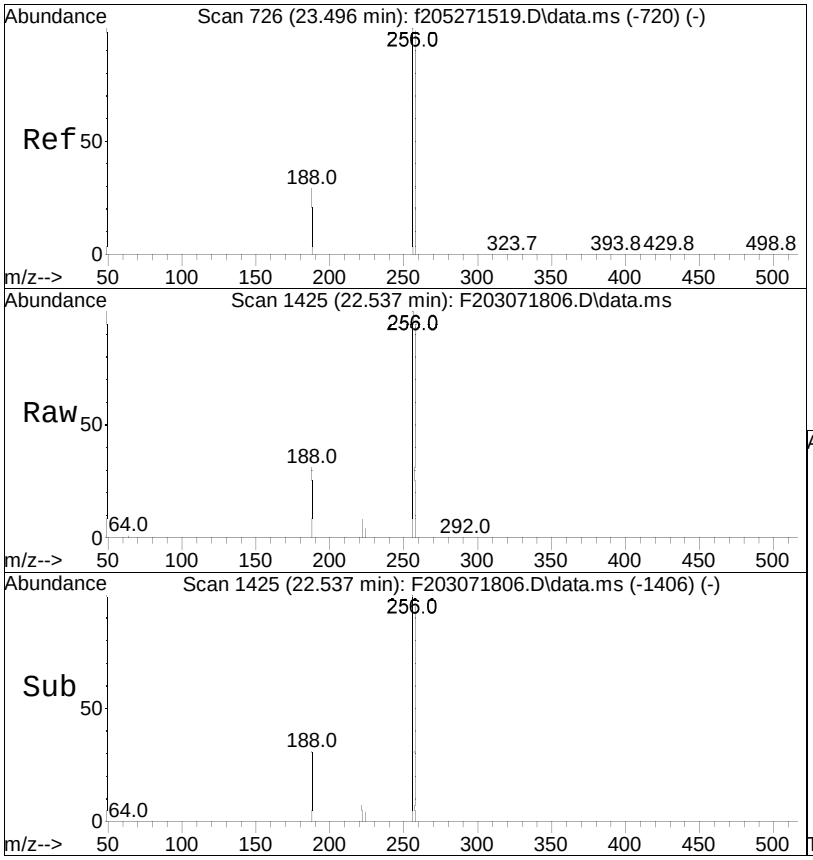


#20
Cl2-BZ#11
Concen: 77.56 ng/mL
RT: 22.456 min Scan# 1415
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 123024

Ion	Ratio	Lower	Upper
222	100		
224	64.2	50.9	76.3

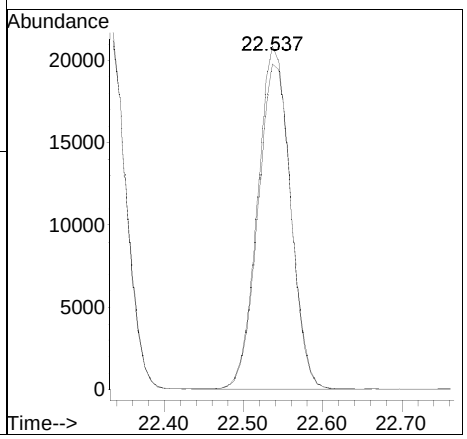


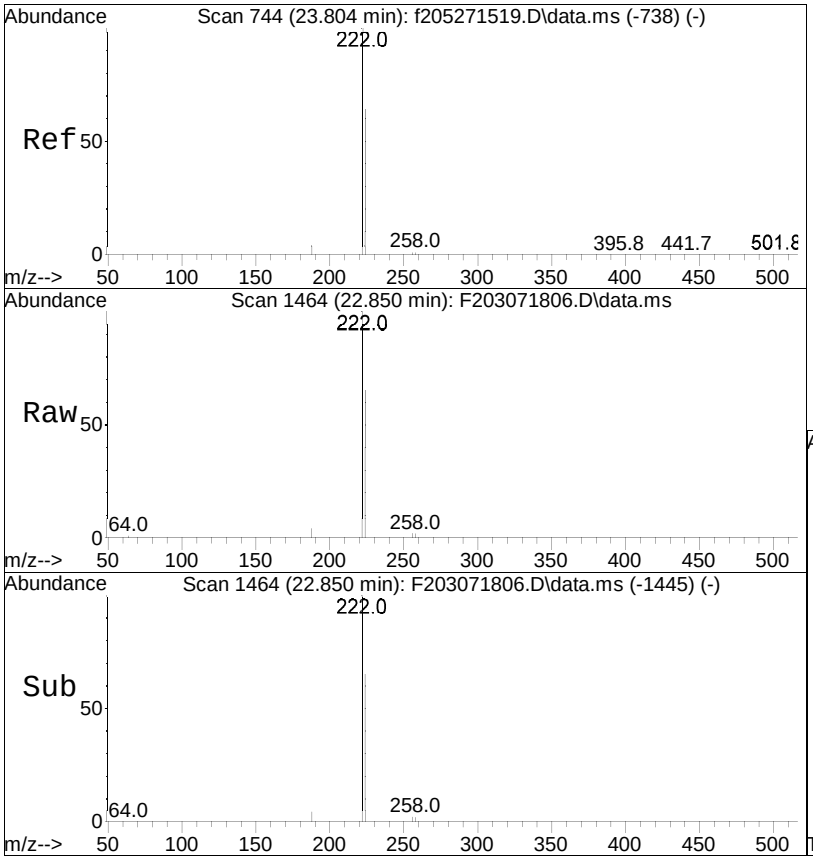


#21
Cl3-BZ#17
Concen: 76.02 ng/mL
RT: 22.537 min Scan# 1425
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 59482

Ion	Ratio	Lower	Upper
256	100		
258	94.8	76.3	114.5

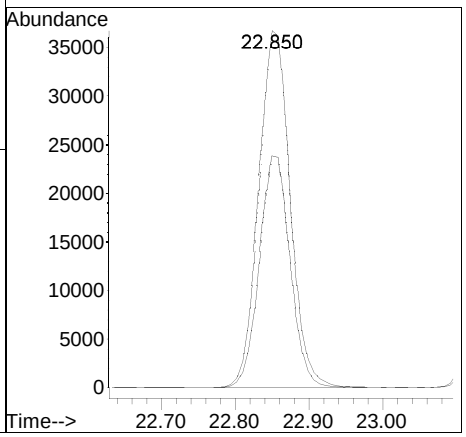


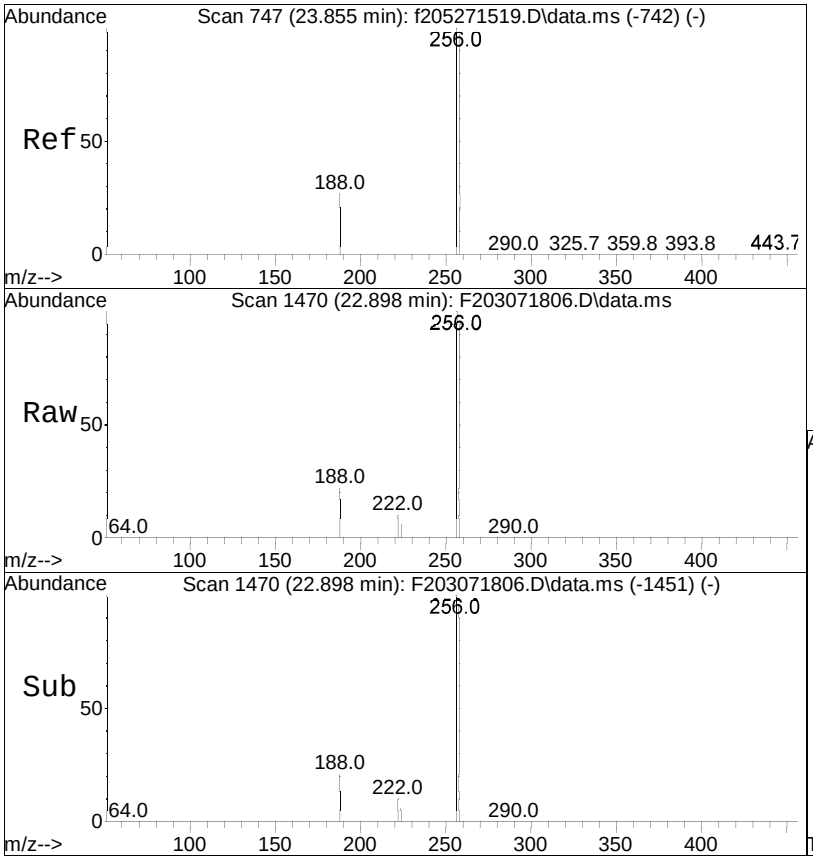


#22
Cl2-BZ#12
Concen: 76.81 ng/mL
RT: 22.850 min Scan# 1464
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 107783

Ion	Ratio	Lower	Upper
222	100		
224	63.6	52.2	78.4

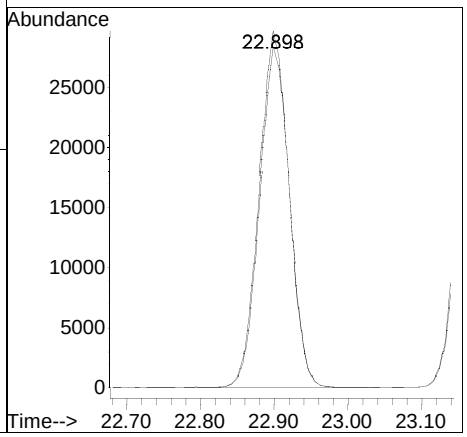


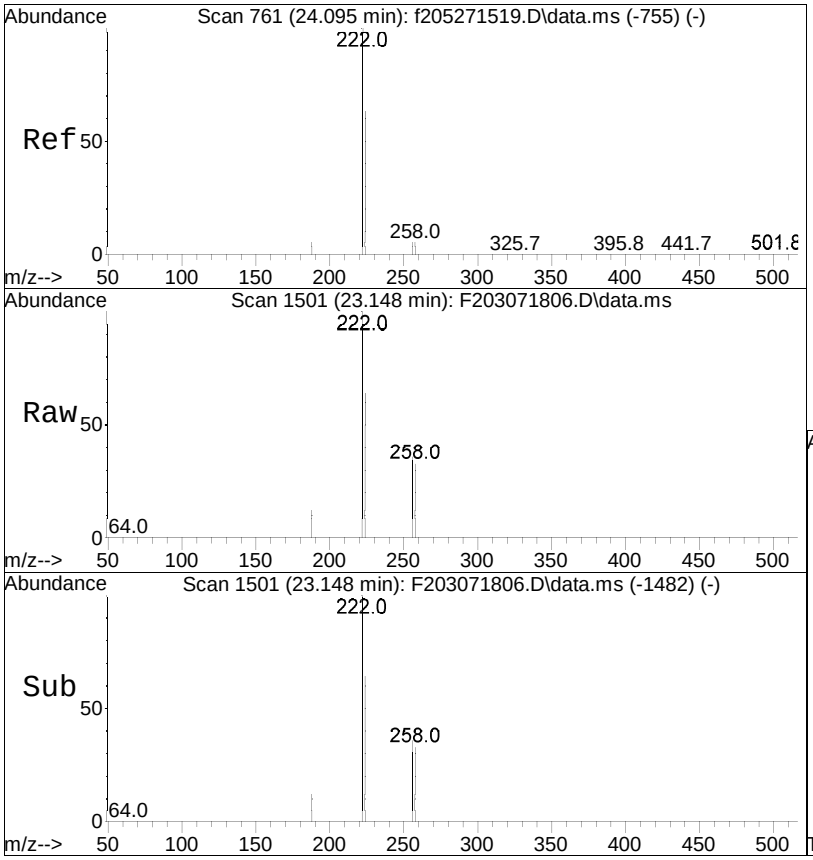


#23
Cl3-BZ#27
Concen: 76.55 ng/mL
RT: 22.898 min Scan# 1470
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 82965

Ion	Ratio	Lower	Upper
256	100		
258	95.9	75.5	113.3

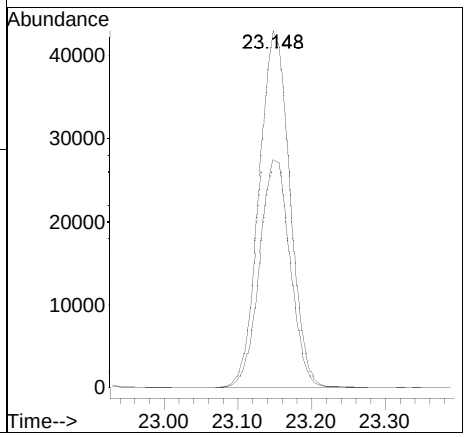


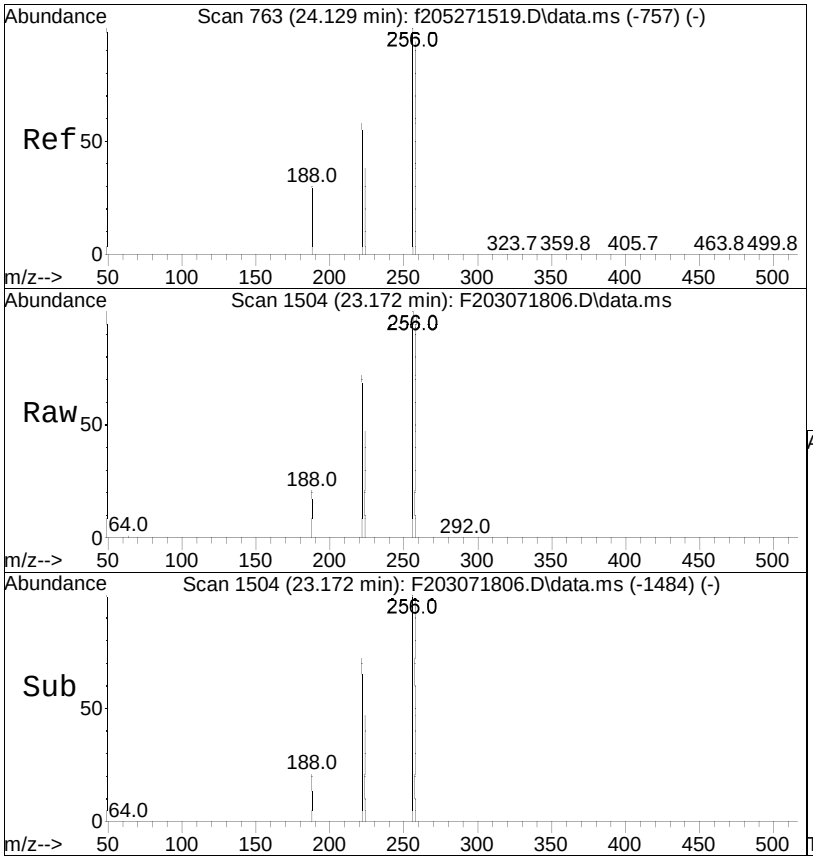


#24
Cl2-BZ#13
Concen: 76.58 ng/mL
RT: 23.148 min Scan# 1501
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 123800

Ion	Ratio	Lower	Upper
222	100		
224	63.8	51.4	77.2

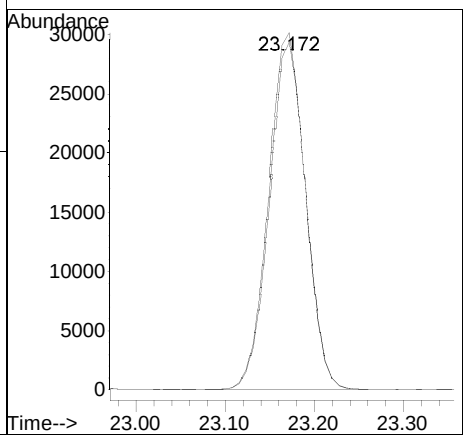


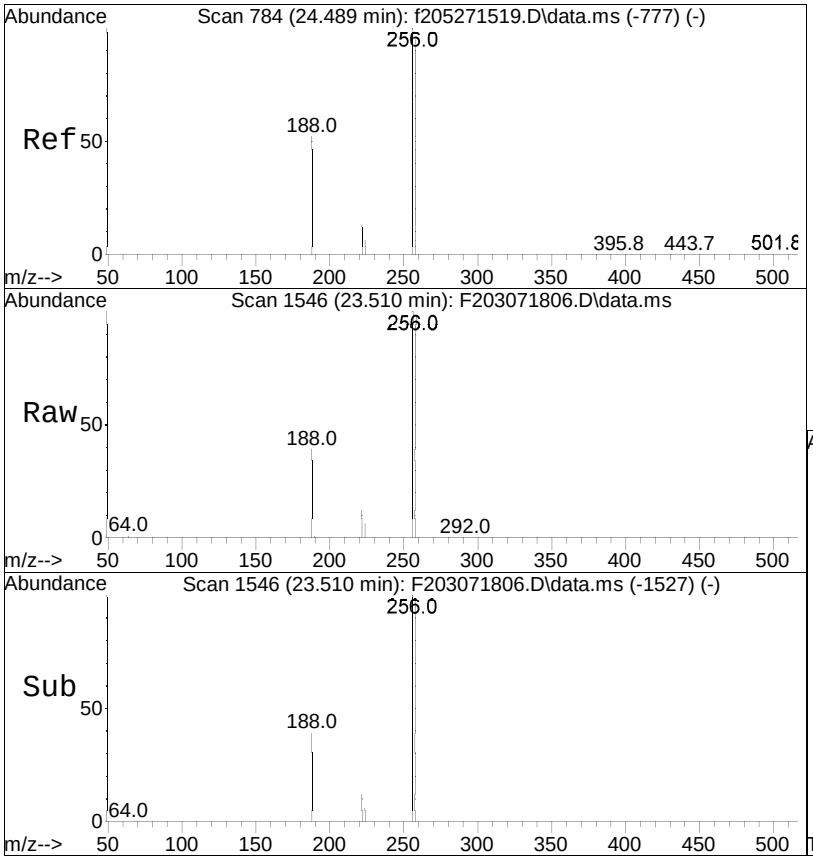


#25
Cl3-BZ#24
Concen: 76.99 ng/mL
RT: 23.172 min Scan# 1504
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 85770

Ion	Ratio	Lower	Upper
256	100		
258	96.5	75.8	113.6

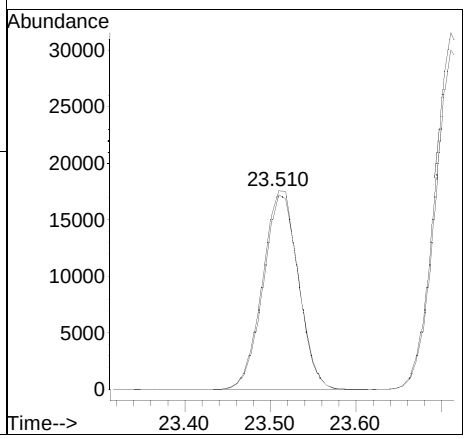


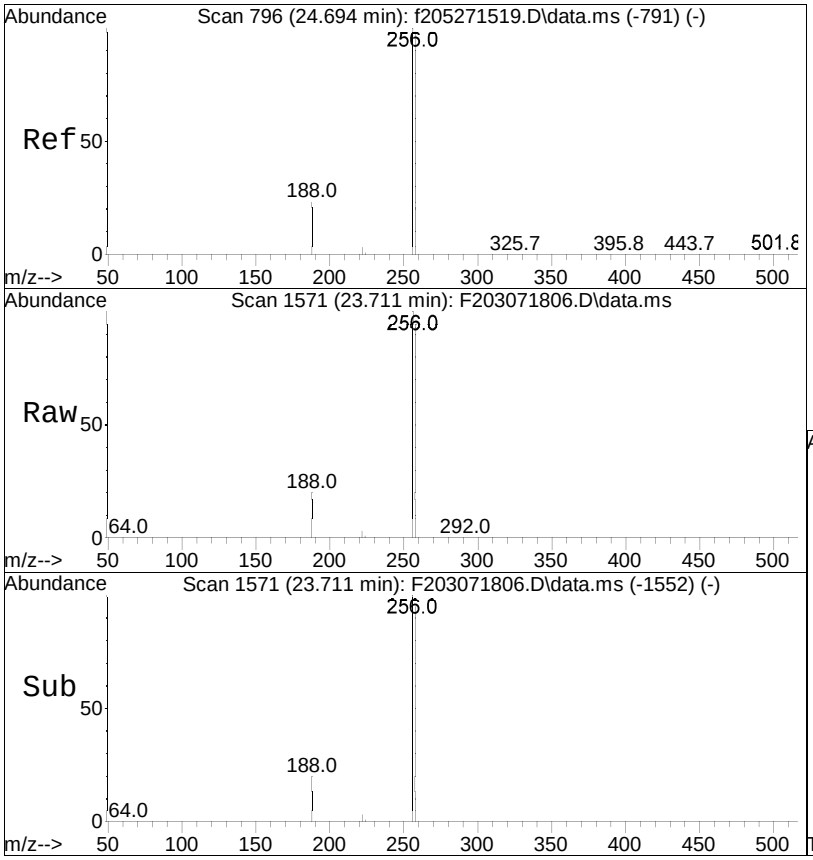


#26
Cl3-BZ#16
Concen: 74.93 ng/mL
RT: 23.510 min Scan# 1546
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 51228

Ion	Ratio	Lower	Upper
256	100		
258	96.4	74.2	111.4

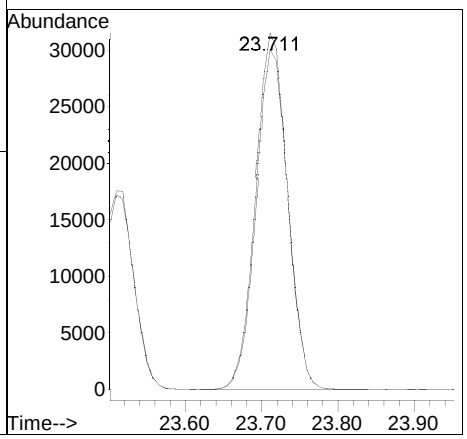


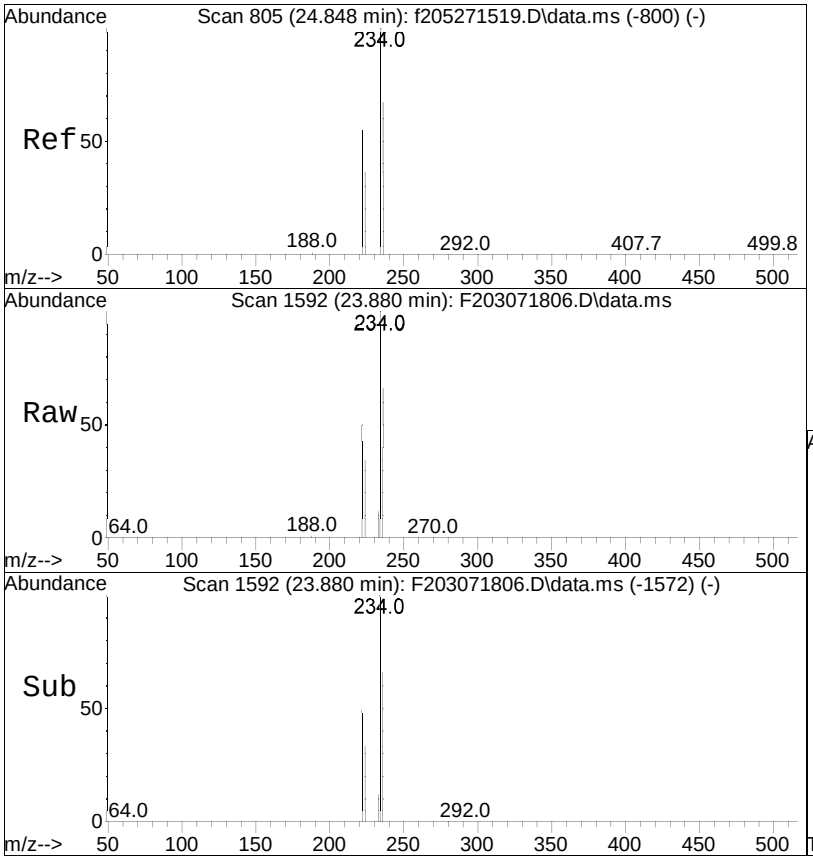


#27
Cl3-BZ#32
Concen: 75.86 ng/mL
RT: 23.711 min Scan# 1571
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 90761

Ion	Ratio	Lower	Upper
256	100		
258	95.5	75.0	112.4

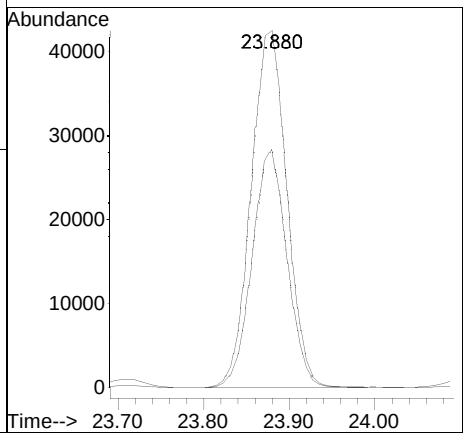


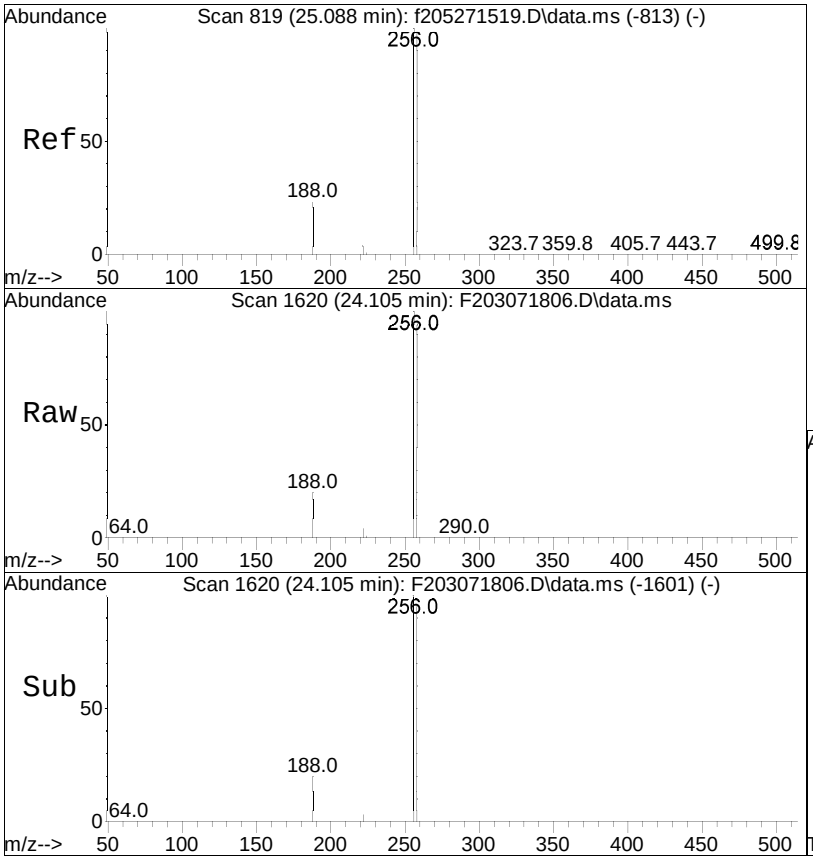


#28
Cl2-BZ#15-RTW
Concen: 74.67 ng/mL
RT: 23.880 min Scan# 1592
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:222 Resp: 122321

Ion	Ratio	Lower	Upper
222	100		
224	66.8	51.7	77.5

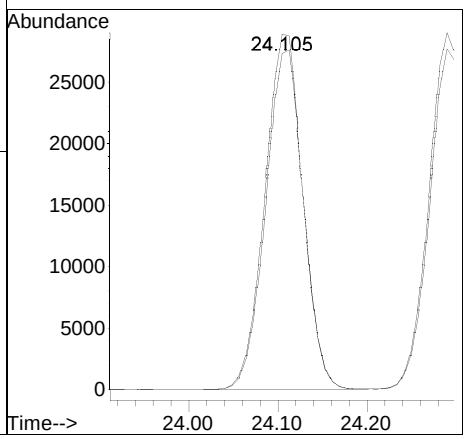


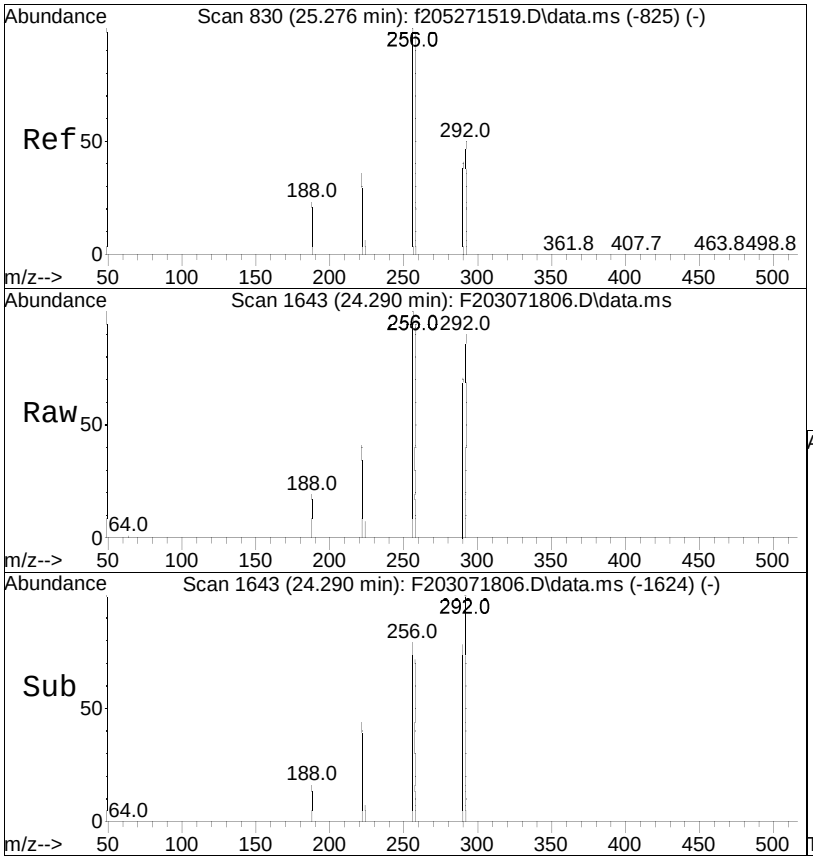


#29
Cl3-BZ#34
Concen: 76.16 ng/mL
RT: 24.105 min Scan# 1620
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 85157

Ion	Ratio	Lower	Upper
256	100		
258	95.2	77.1	115.7

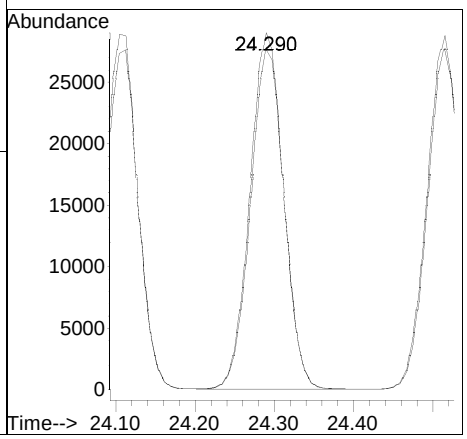


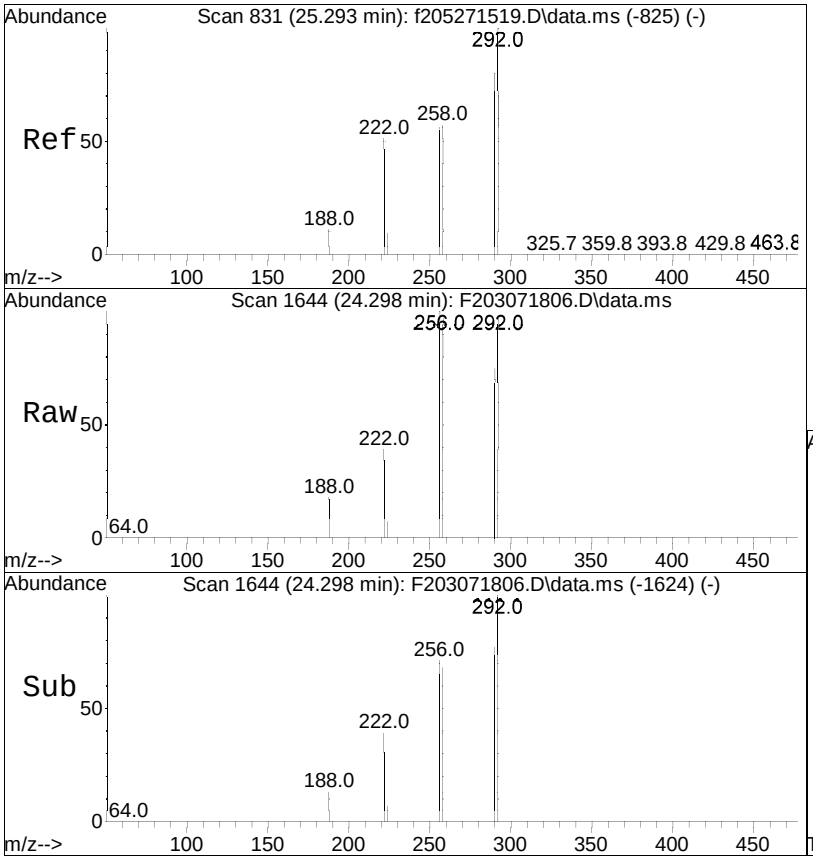


#30
Cl3-BZ#23
Concen: 77.72 ng/mL
RT: 24.290 min Scan# 1643
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 85276

Ion	Ratio	Lower	Upper
256	100		
258	95.5	76.7	115.1

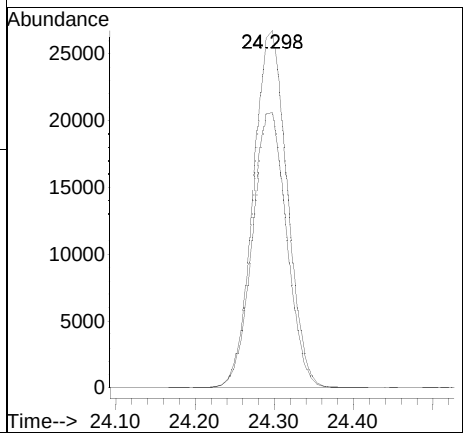


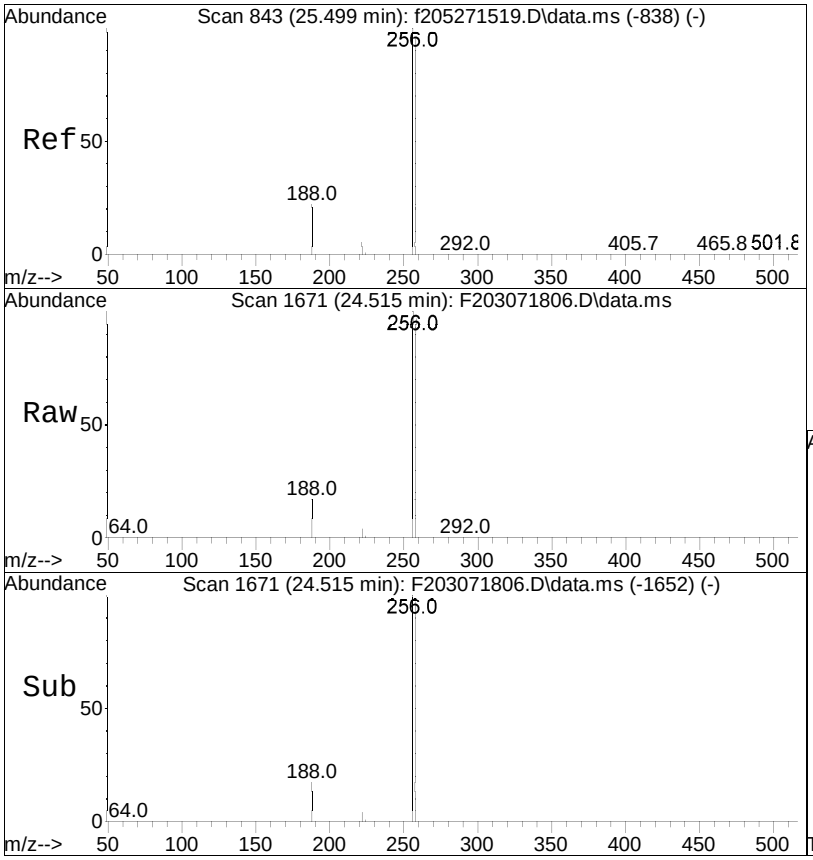


#31
Cl4-BZ#54-RTW
Concen: 77.10 ng/mL
RT: 24.298 min Scan# 1644
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 78859

Ion	Ratio	Lower	Upper
292	100		
290	78.0	63.5	95.3

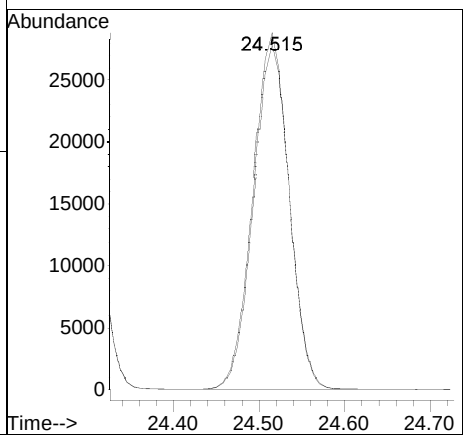


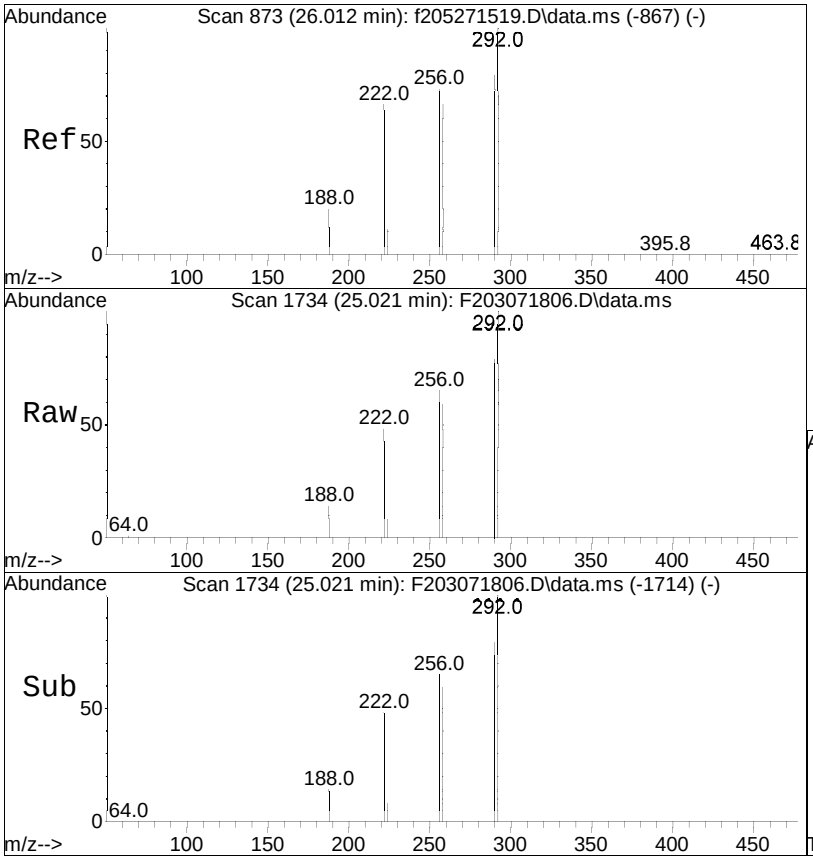


#32
Cl3-BZ#29-Cal
Concen: 75.83 ng/mL
RT: 24.515 min Scan# 1671
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 83997

Ion	Ratio	Lower	Upper
256	100		
258	96.6	76.6	115.0

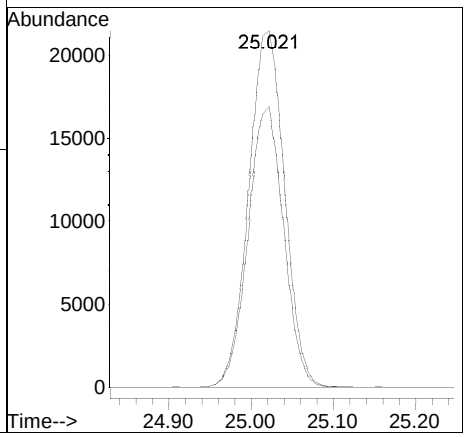


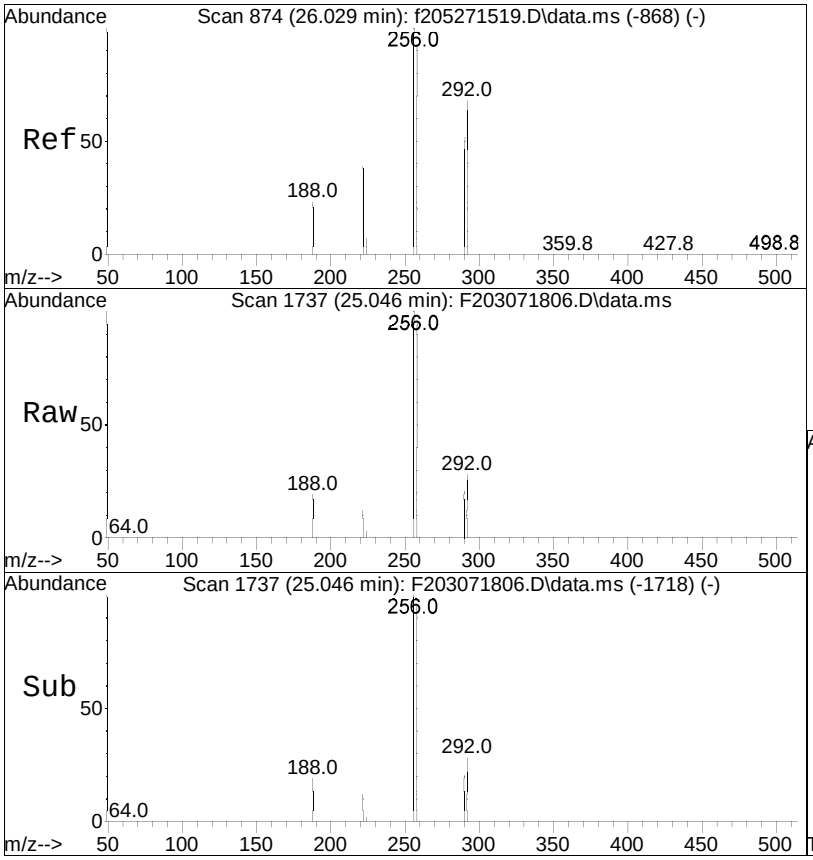


#35
Cl4-BZ#50-Cal
Concen: 75.79 ng/mL
RT: 25.021 min Scan# 1734
Delta R.T. 0.008 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 64769

Ion	Ratio	Lower	Upper
292	100		
290	78.1	63.6	95.4

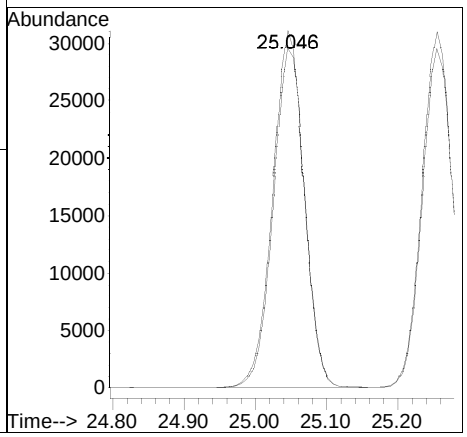


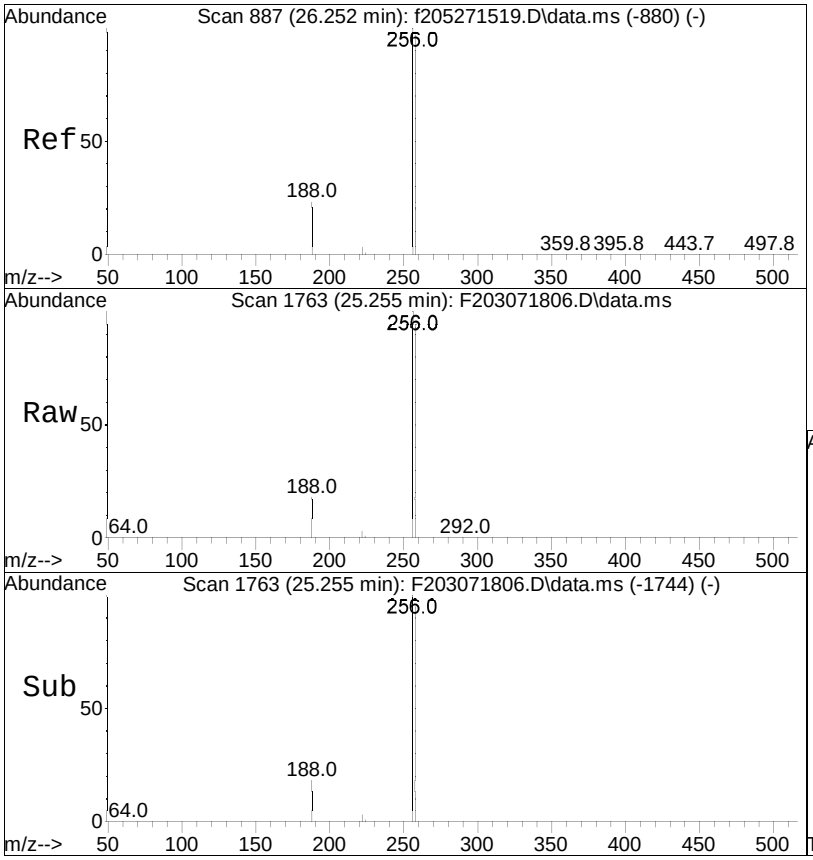


#38
Cl3-BZ#26
Concen: 76.17 ng/mL
RT: 25.046 min Scan# 1737
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 94631

Ion	Ratio	Lower	Upper
256	100		
258	95.1	76.6	115.0

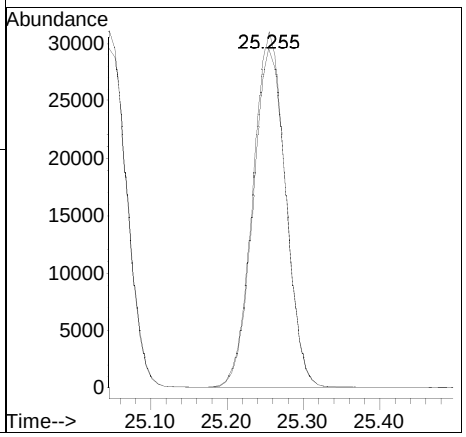


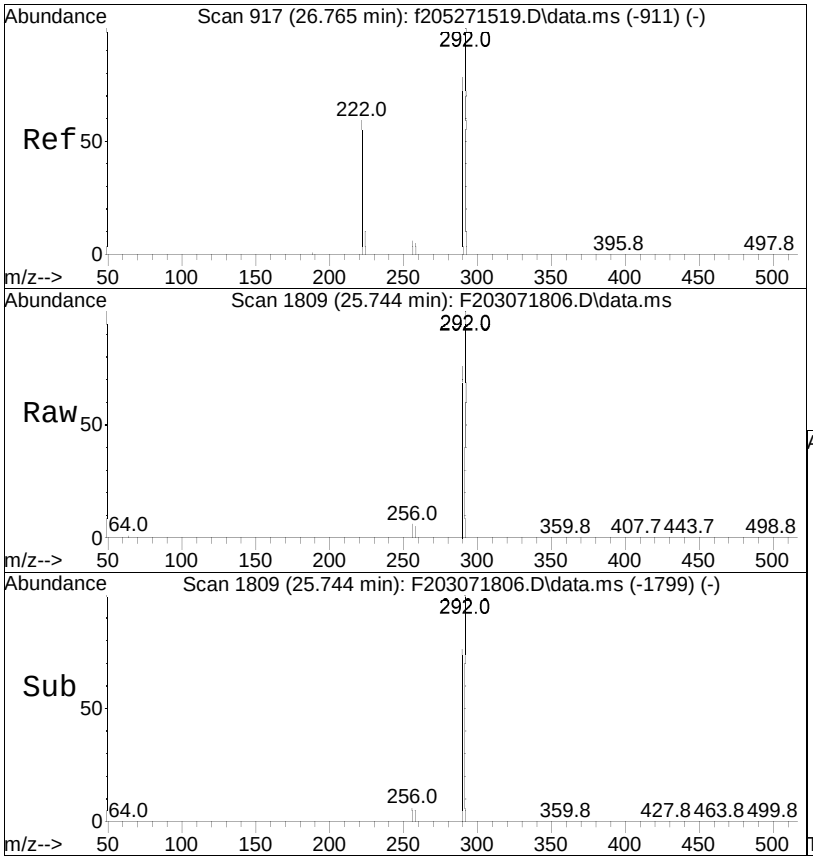


#39
Cl3-BZ#25
Concen: 75.82 ng/mL
RT: 25.255 min Scan# 1763
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 91706

Ion	Ratio	Lower	Upper
256	100		
258	95.2	77.5	116.3

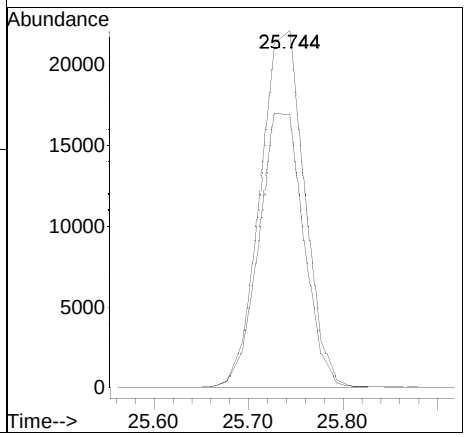


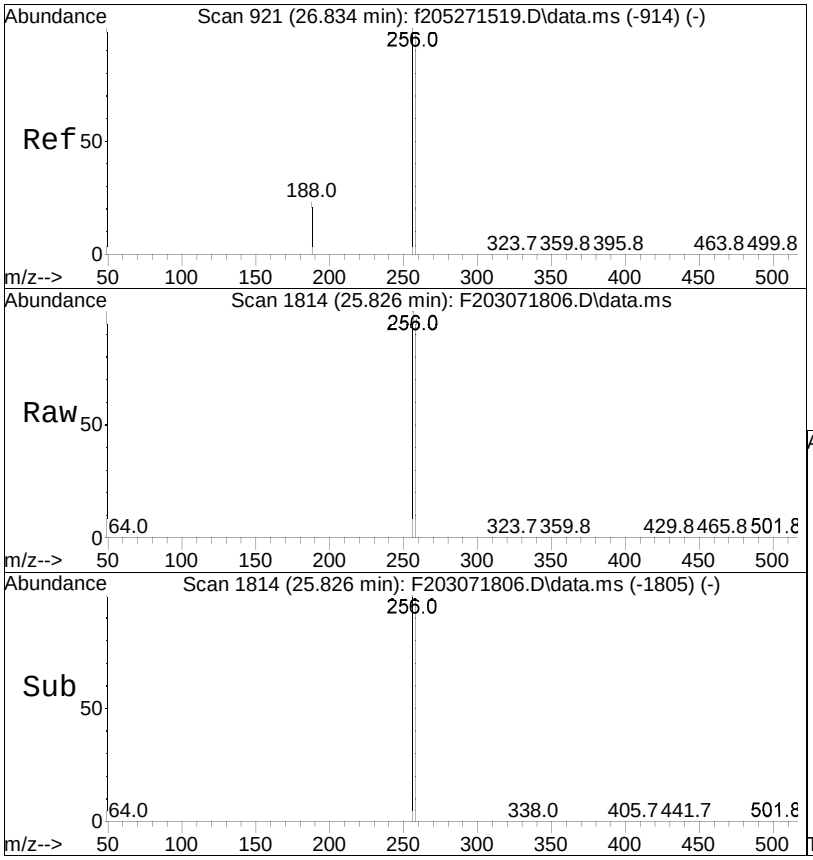


#40
Cl4-BZ#53
Concen: 76.07 ng/mL
RT: 25.744 min Scan# 1809
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 71716

Ion	Ratio	Lower	Upper
292	100		
290	77.5	62.4	93.6

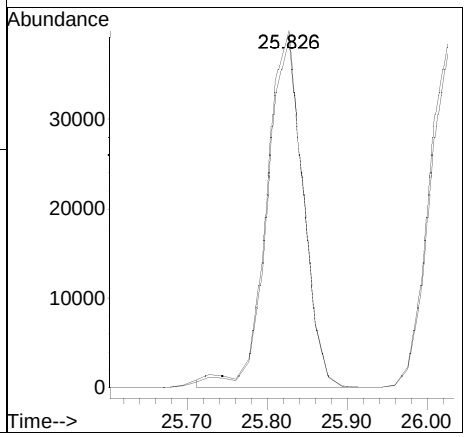


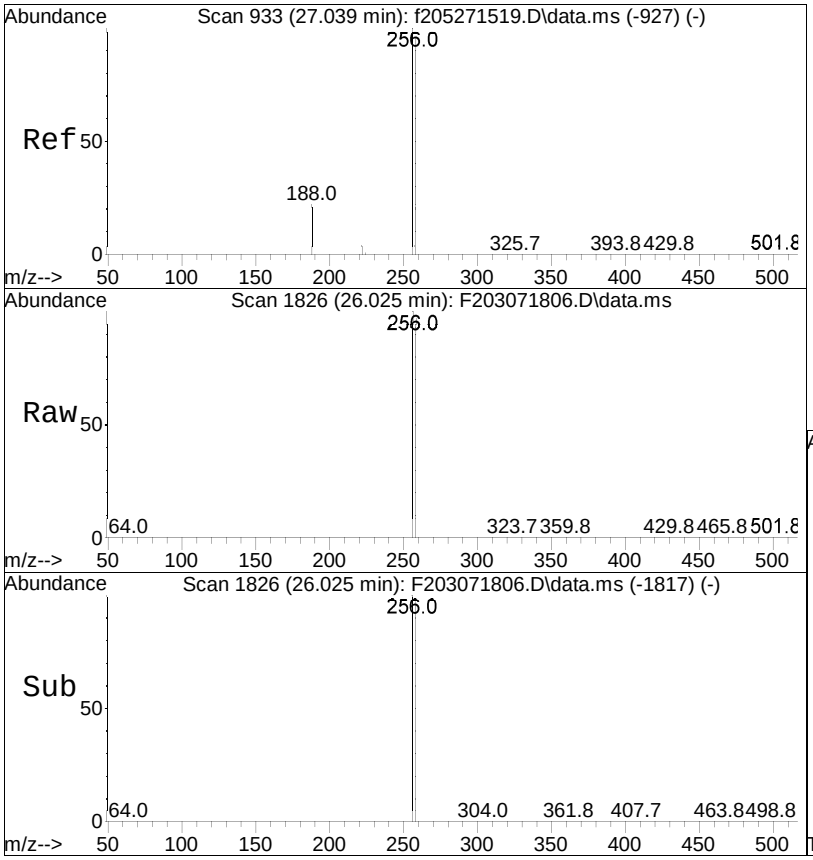


#41
Cl3-BZ#-31
Concen: 75.15 ng/mL
RT: 25.826 min Scan# 1814
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 125534

Ion	Ratio	Lower	Upper
256	100		
258	96.4	78.6	117.8

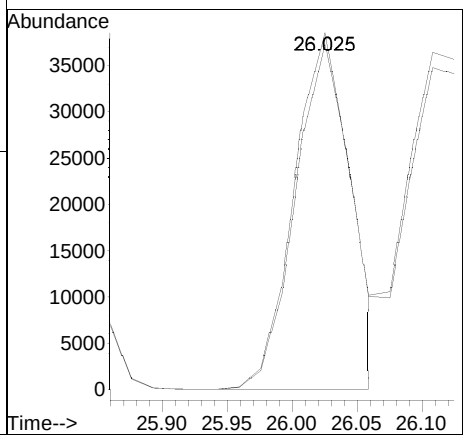


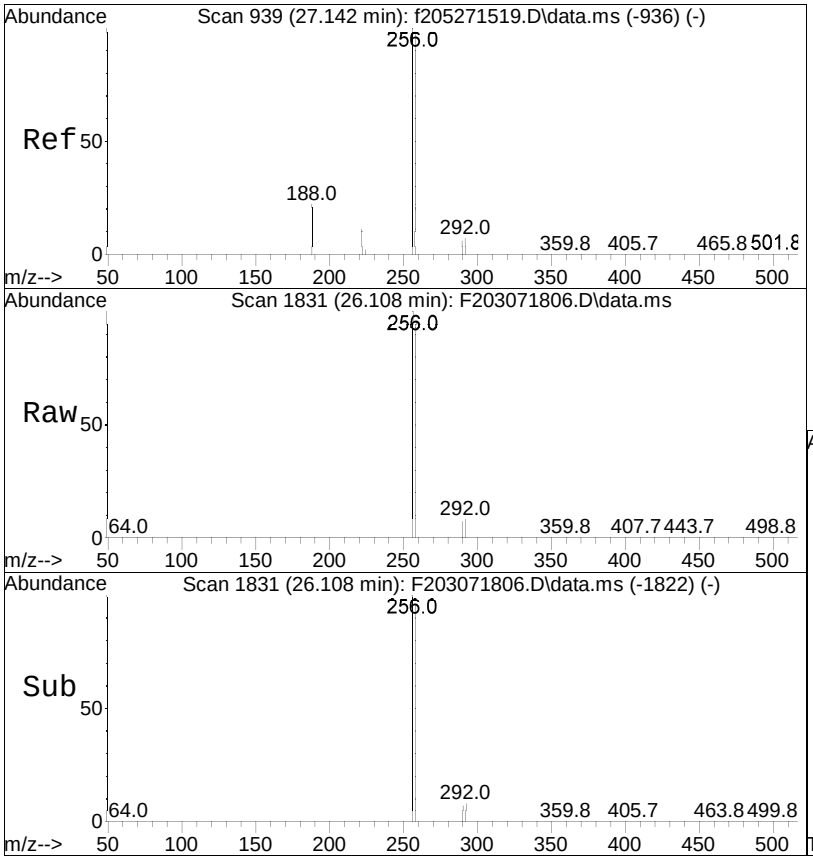


#42
Cl3-BZ#28
Concen: 71.14 ng/mL
RT: 26.025 min Scan# 1826
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 117059

Ion	Ratio	Lower	Upper
256	100		
258	96.9	77.5	116.3

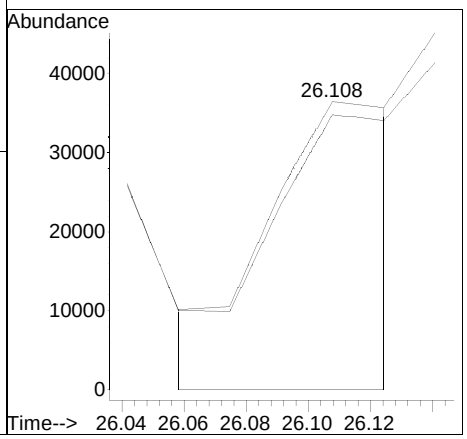


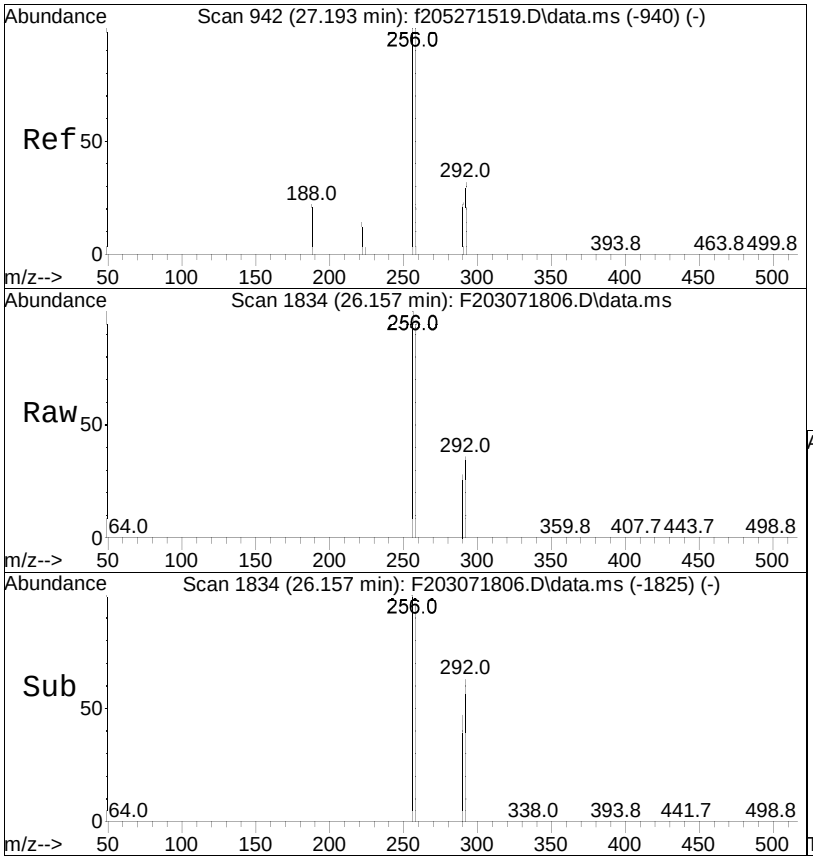


#43
Cl3-BZ#33
Concen: 91.37 ng/mL M4
RT: 26.108 min Scan# 1831
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 107173

Ion	Ratio	Lower	Upper
256	100		
258	95.6	76.2	114.4

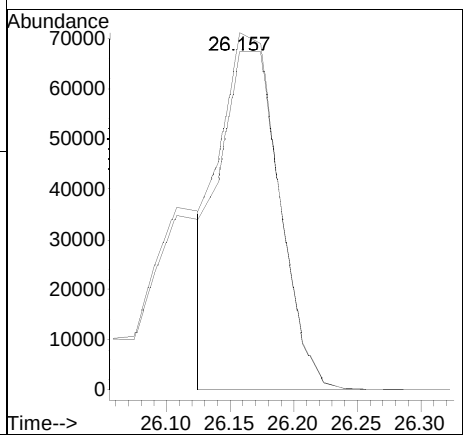


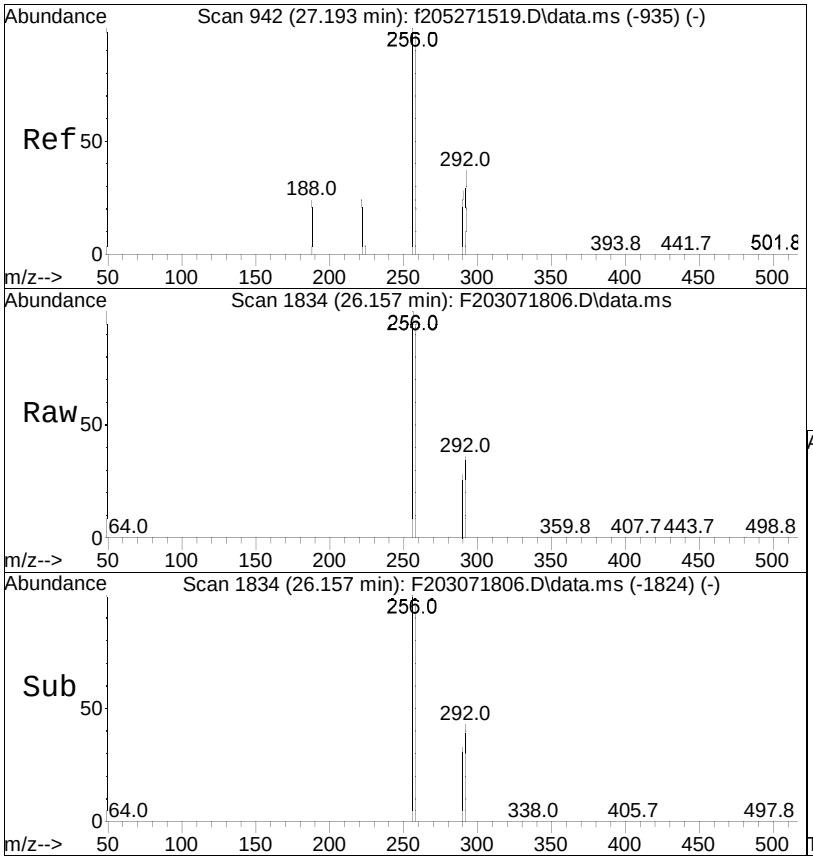


#44
Cl3-BZ#21/#20
Concen: 154.48 ng/mL M4
RT: 26.157 min Scan# 1834
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 229472

Ion	Ratio	Lower	Upper
256	100		
258	135.4	77.8	116.8#

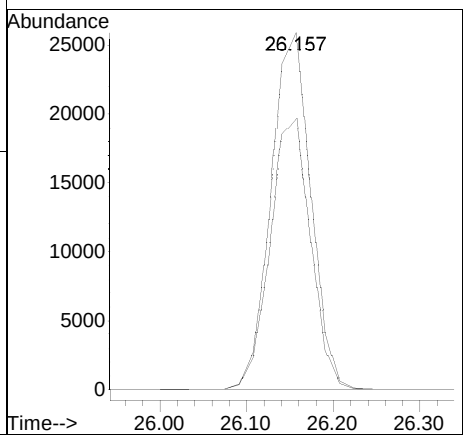


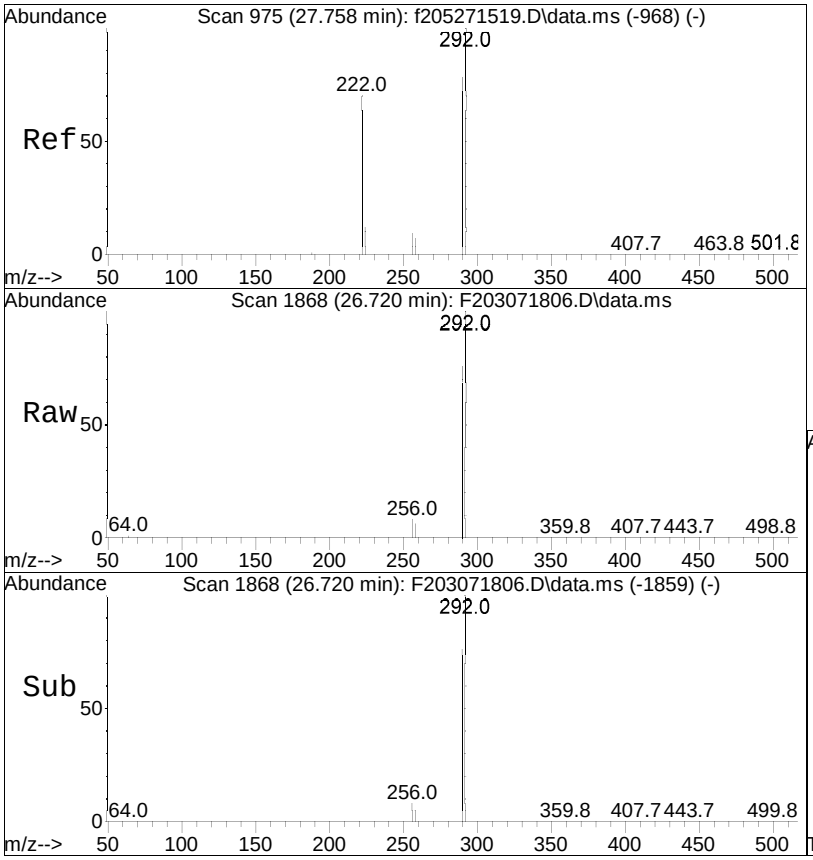


#45
Cl4-BZ#51
Concen: 79.14 ng/mL
RT: 26.157 min Scan# 1834
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 82355

Ion	Ratio	Lower	Upper
292	100		
290	77.1	61.4	92.2

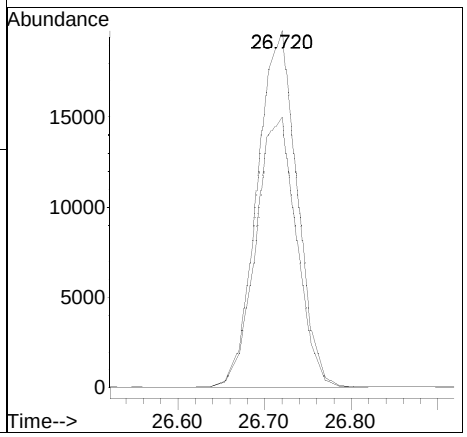


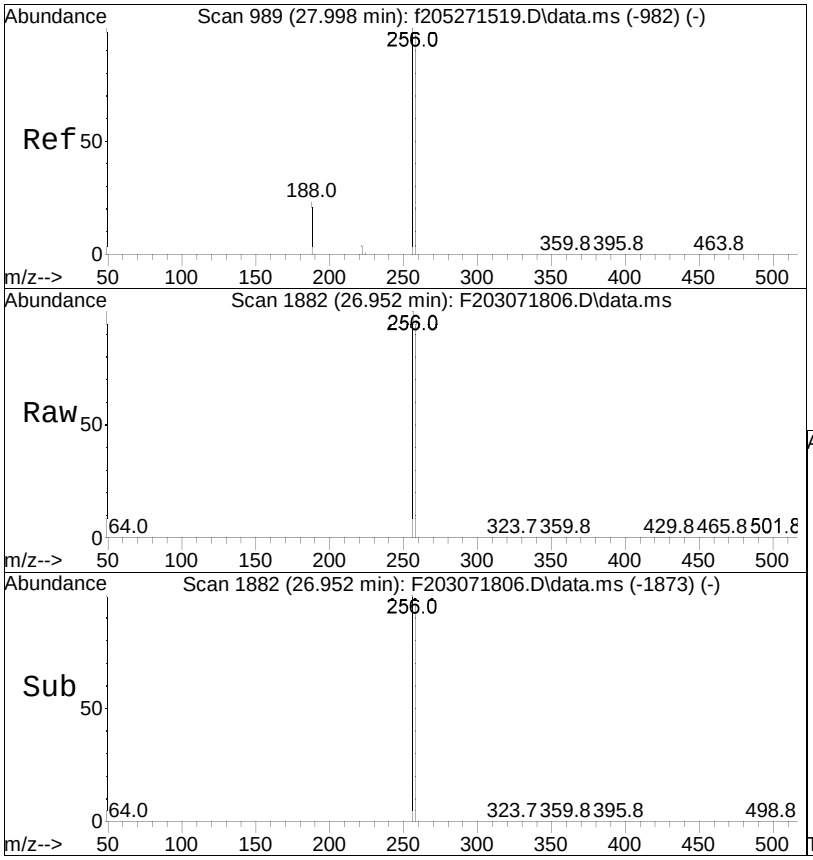


#46
Cl4-BZ#45
Concen: 77.27 ng/mL
RT: 26.720 min Scan# 1868
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 62794

Ion	Ratio	Lower	Upper
292	100		
290	77.2	62.6	93.8

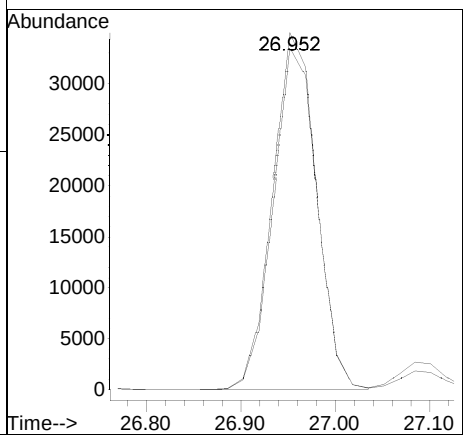


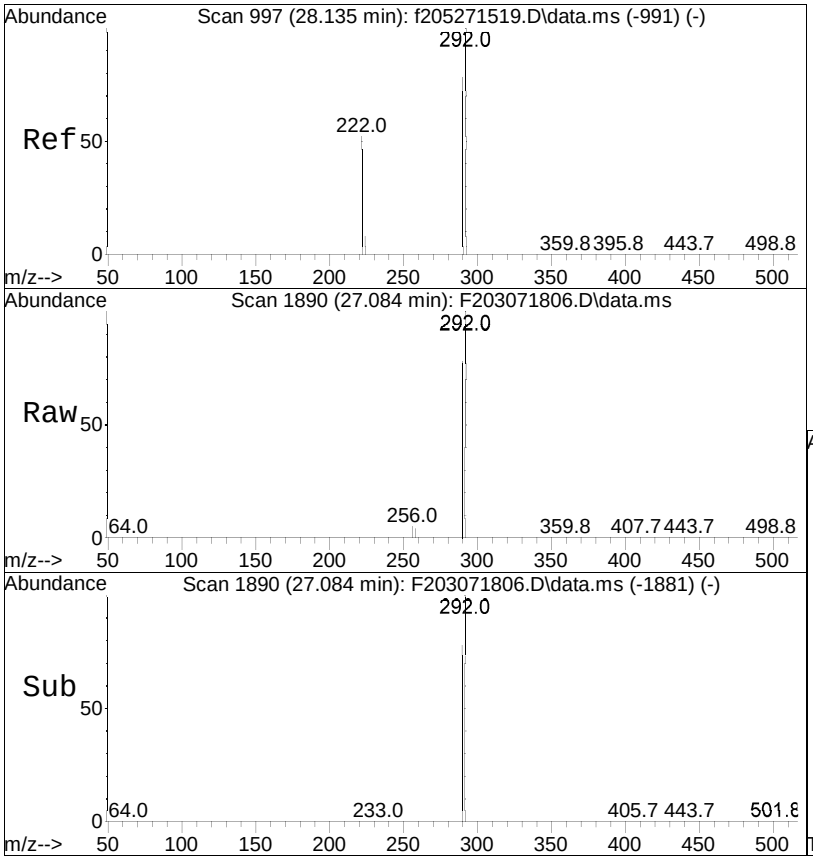


#47
Cl3-BZ#22
Concen: 77.62 ng/mL
RT: 26.952 min Scan# 1882
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 112330

Ion	Ratio	Lower	Upper
256	100		
258	95.7	75.4	113.0

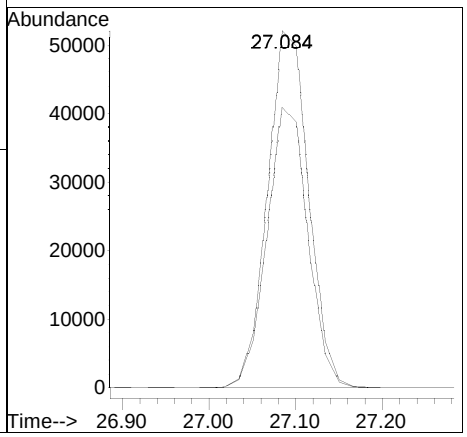


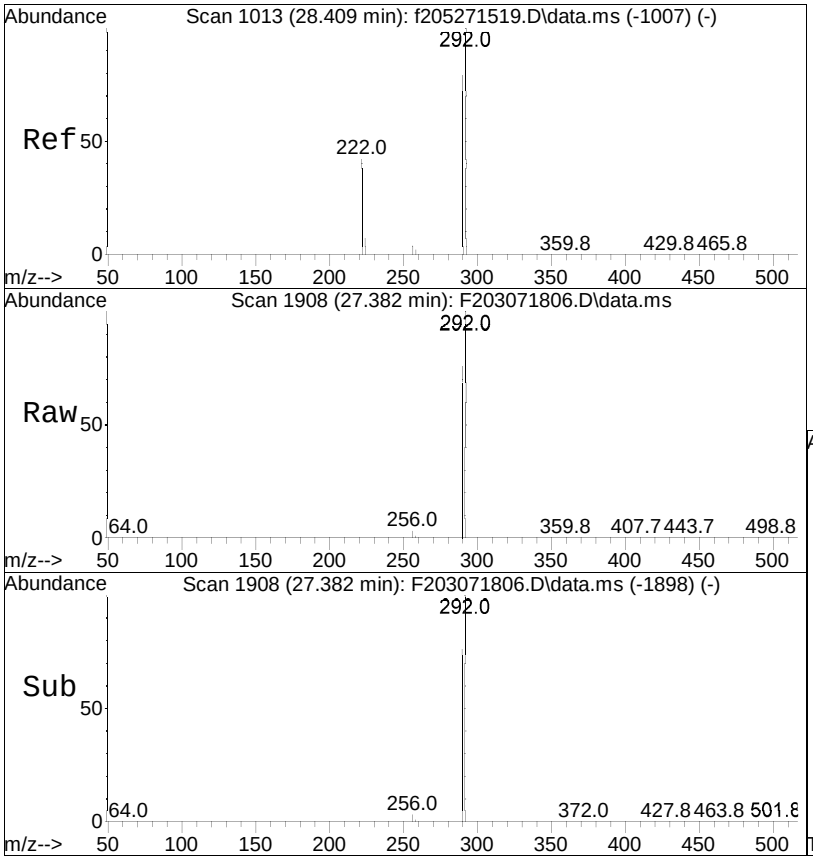


#48
Cl4-BZ#73/#46
Concen: 157.36 ng/mL
RT: 27.084 min Scan# 1890
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 170902

Ion	Ratio	Lower	Upper
292	100		
290	78.3	62.4	93.6

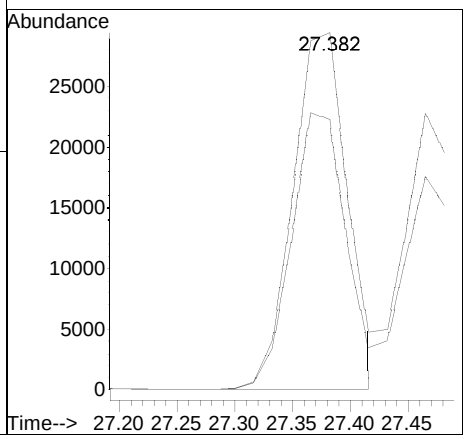


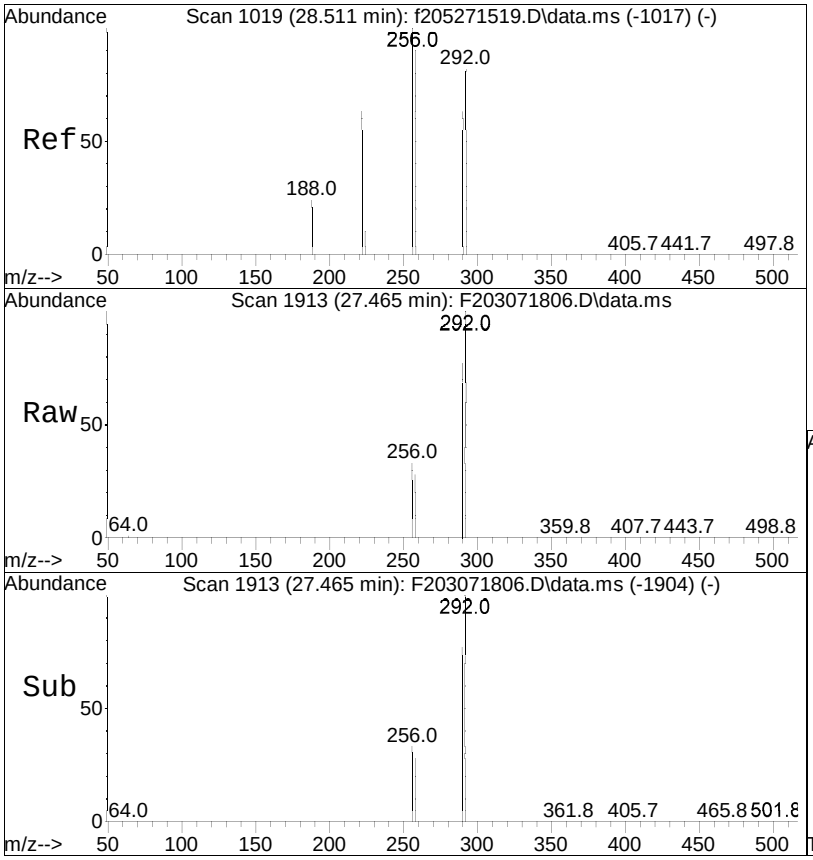


#49
Cl4-BZ#69
Concen: 74.61 ng/mL
RT: 27.382 min Scan# 1908
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 96827

Ion	Ratio	Lower	Upper
292	100		
290	77.7	62.0	93.0

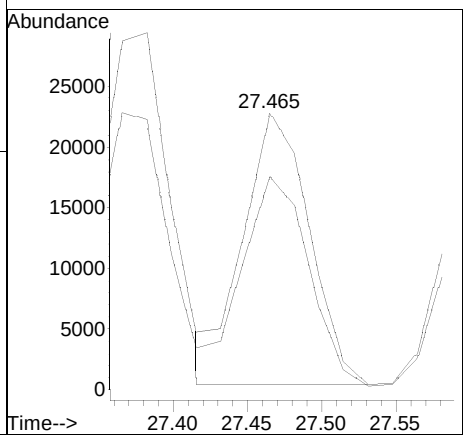


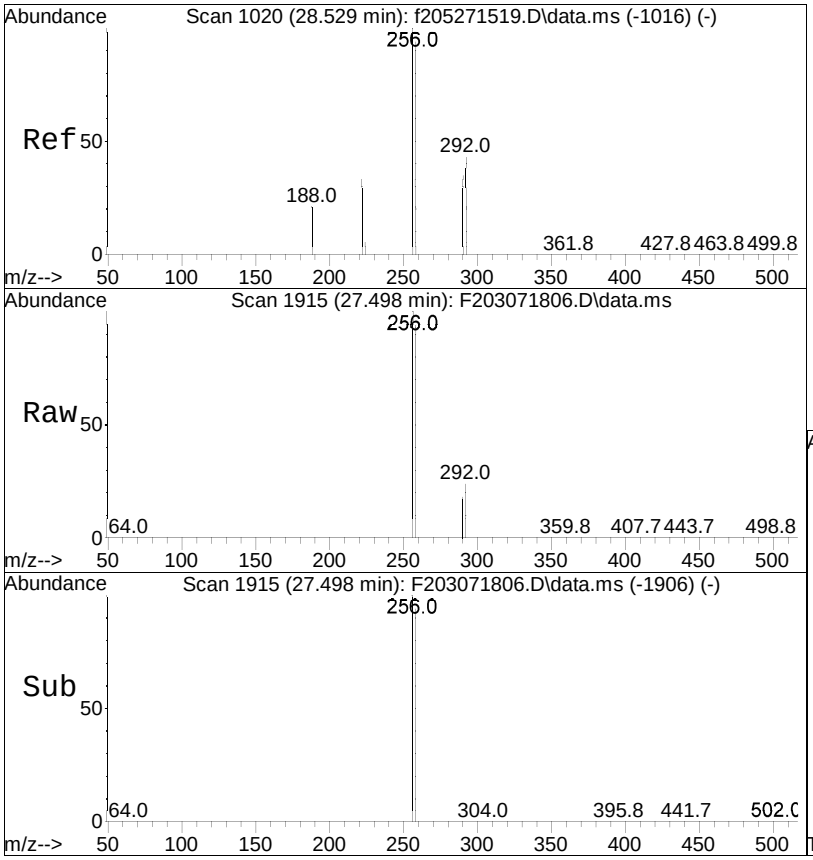


#50
Cl4-BZ#43
Concen: 80.69 ng/mL
RT: 27.465 min Scan# 1913
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 69161

Ion	Ratio	Lower	Upper
292	100		
290	78.2	60.5	90.7

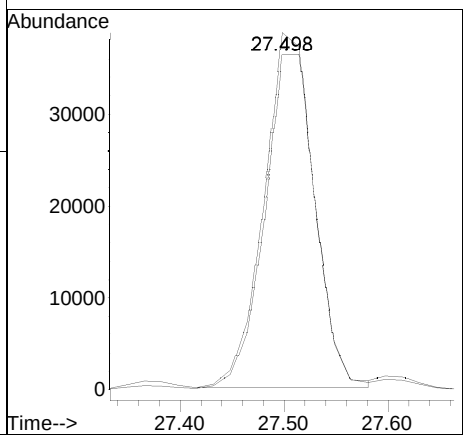


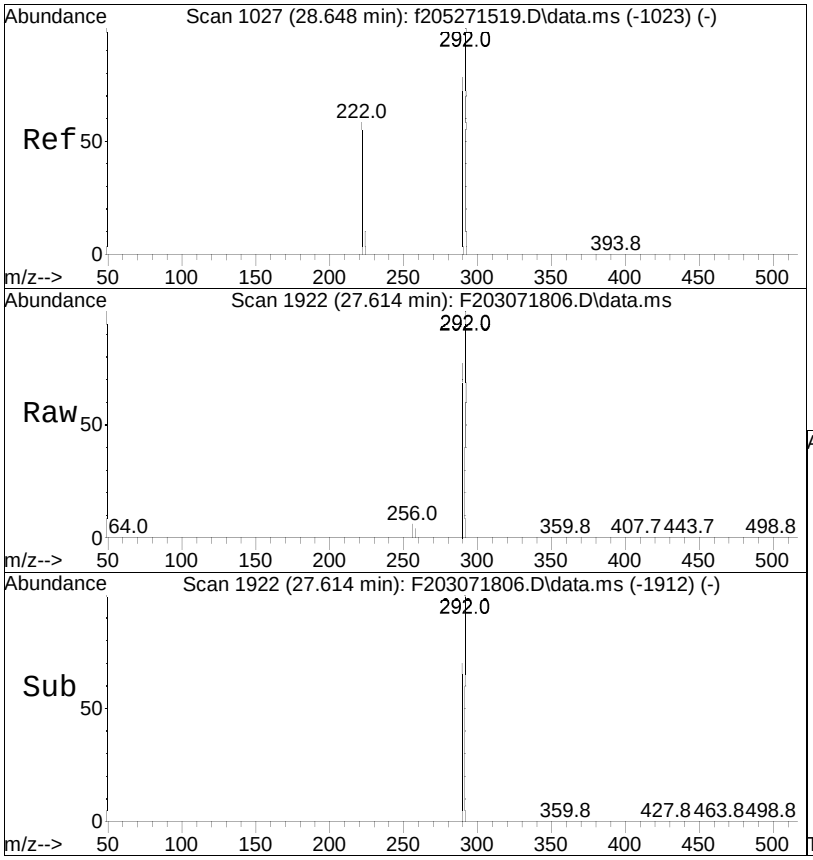


#51
Cl3-BZ#36
Concen: 80.64 ng/mL
RT: 27.498 min Scan# 1915
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 129847

Ion	Ratio	Lower	Upper
256	100		
258	95.2	77.4	116.0

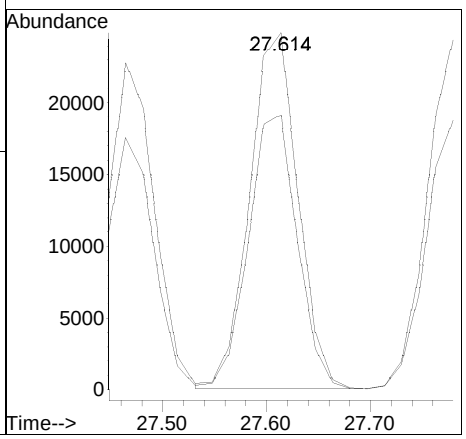


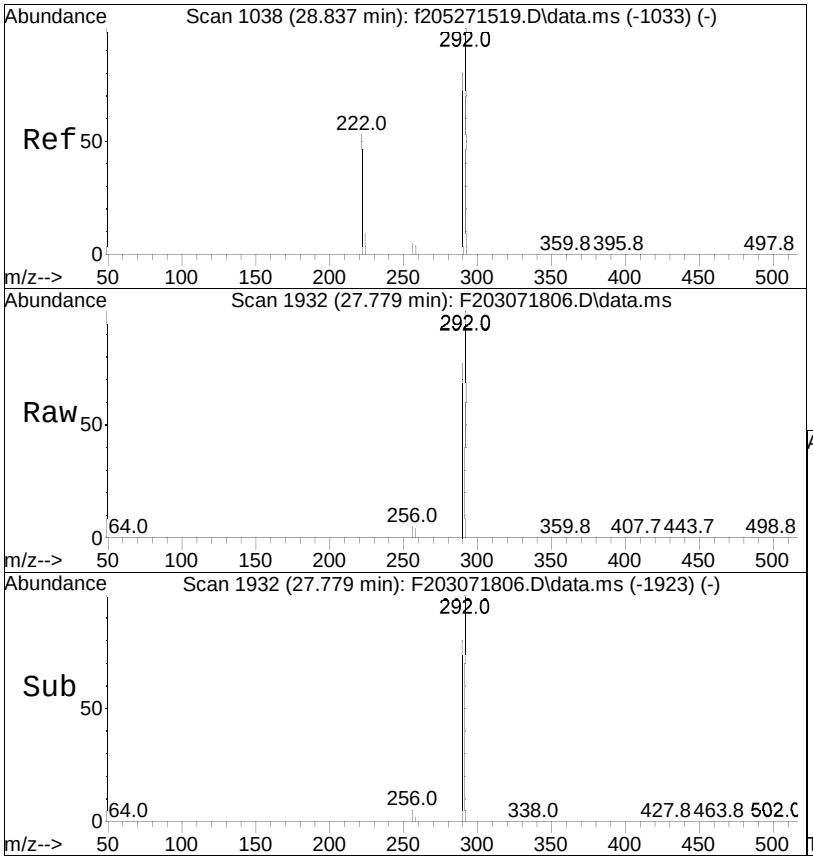


#52
Cl4-BZ#52
Concen: 75.71 ng/mL
RT: 27.614 min Scan# 1922
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 79899

Ion	Ratio	Lower	Upper
292	100		
290	77.0	60.8	91.2

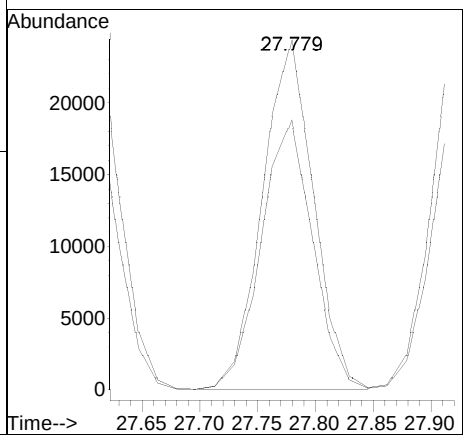


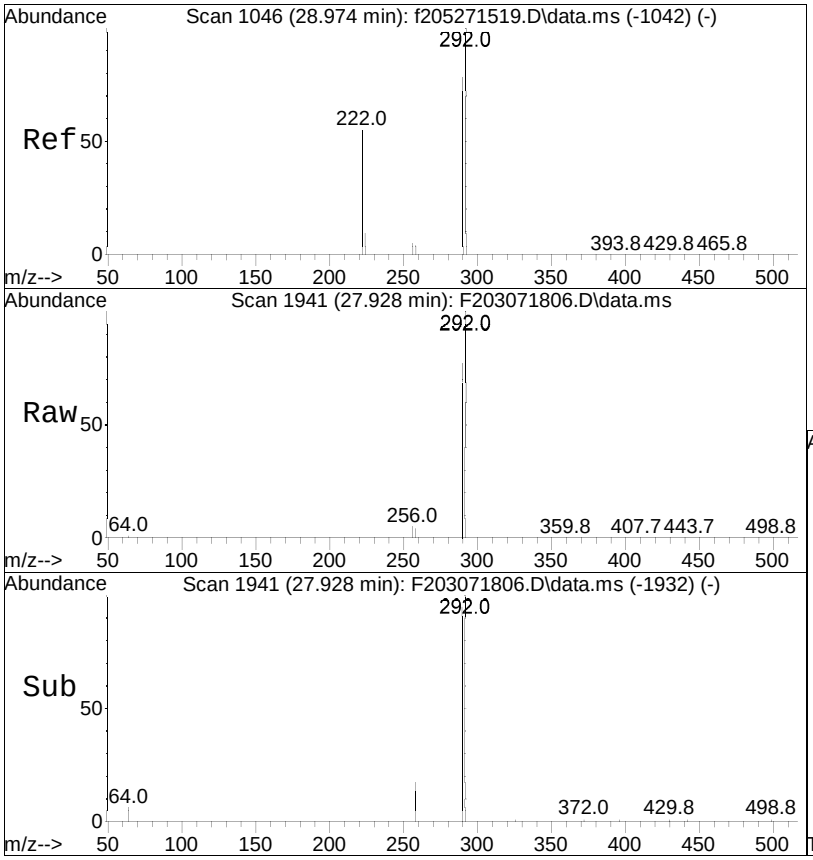


#53
Cl4-BZ#48
Concen: 79.20 ng/mL
RT: 27.779 min Scan# 1932
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 74267

Ion	Ratio	Lower	Upper
292	100		
290	76.9	61.0	91.6

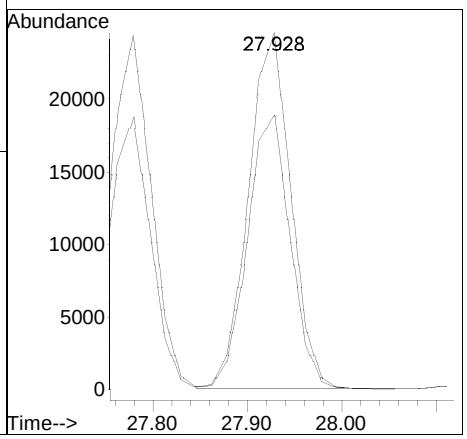


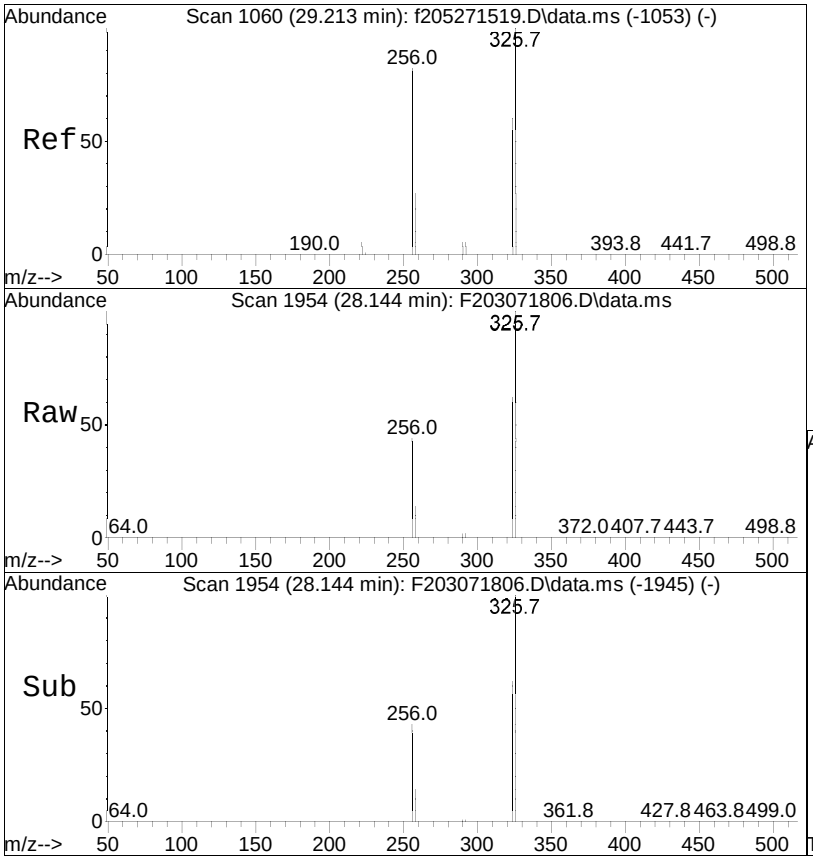


#54
Cl4-BZ#49
Concen: 75.68 ng/mL
RT: 27.928 min Scan# 1941
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 76329

Ion	Ratio	Lower	Upper
292	100		
290	77.0	62.1	93.1

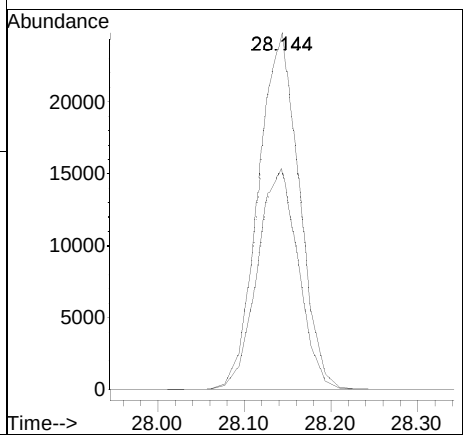


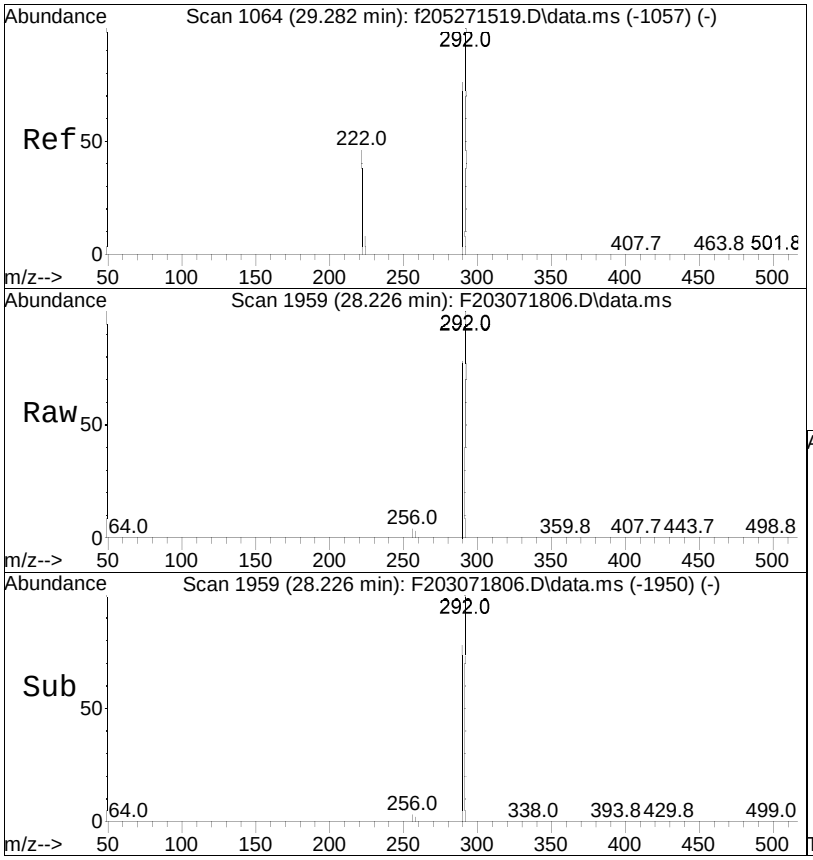


#55
Cl5-BZ#104-RTW
Concen: 77.53 ng/mL
RT: 28.144 min Scan# 1954
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 80743

Ion	Ratio	Lower	Upper
326	100		
324	62.1	48.4	72.6

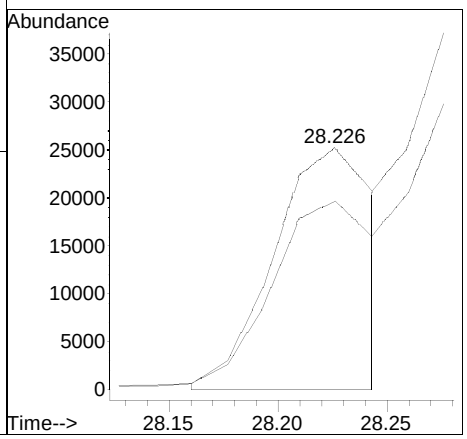


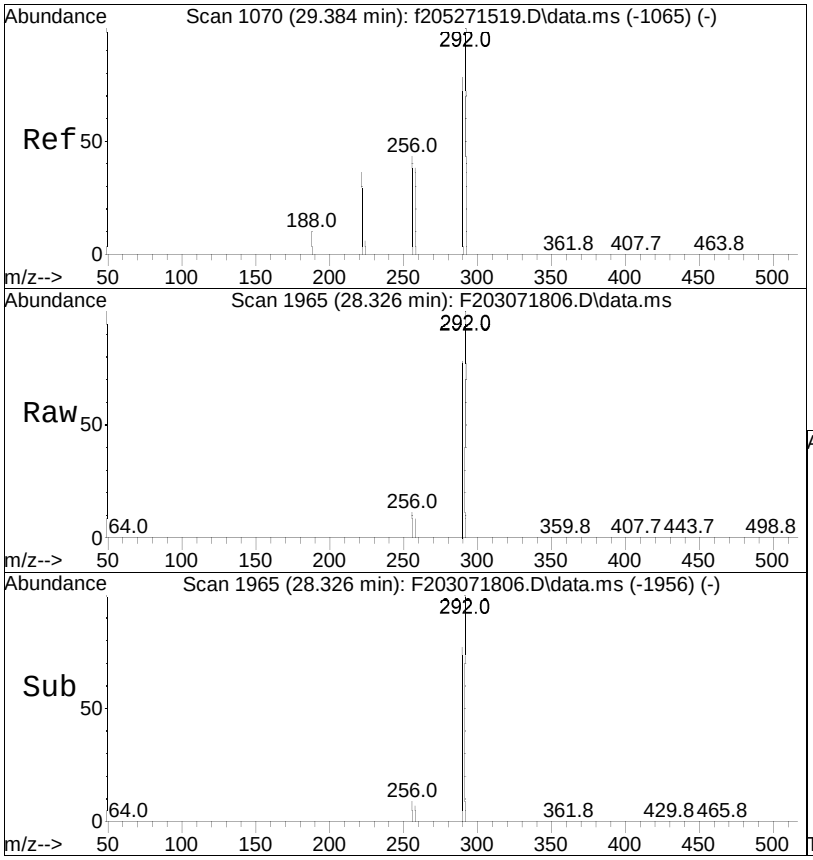


#56
Cl4-BZ#47
Concen: 74.84 ng/mL M4
RT: 28.226 min Scan# 1959
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 81400

Ion	Ratio	Lower	Upper
292	100		
290	0.0	63.0	94.4#

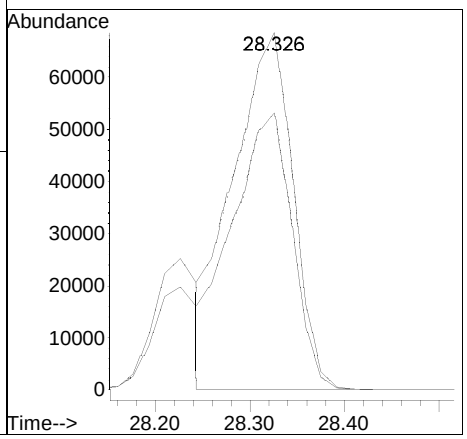


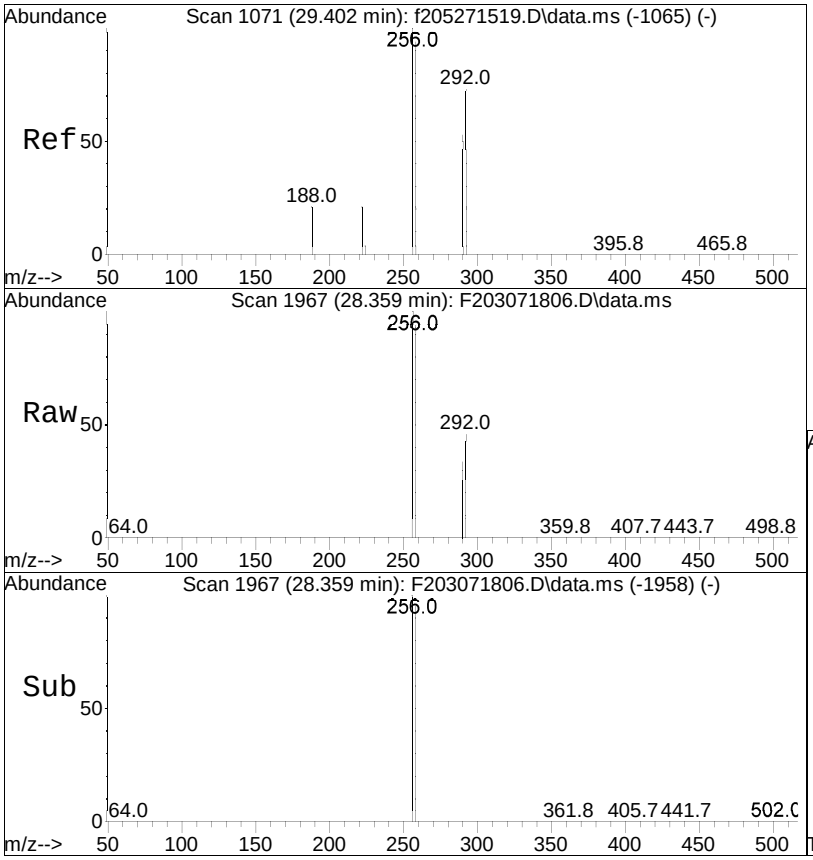


#57
Cl4-BZ#65/#75/#62
Concen: 238.08 ng/mL
RT: 28.326 min Scan# 1965
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 304238

Ion	Ratio	Lower	Upper
292	100		
290	77.9	63.0	94.6

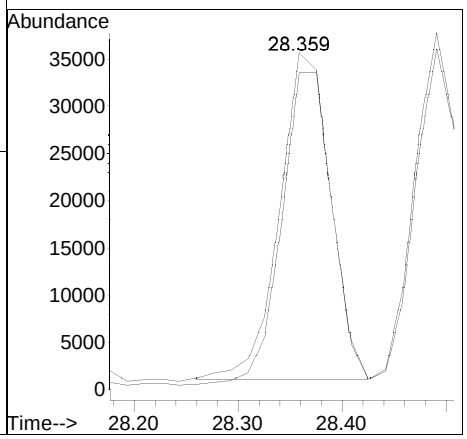


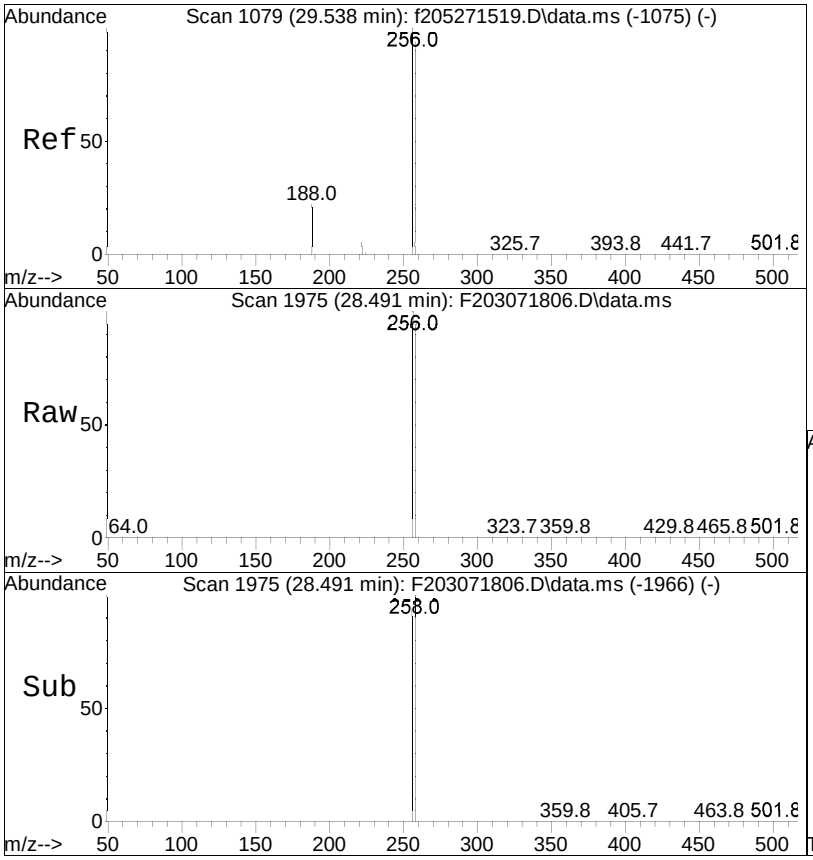


#58
Cl3-BZ#39
Concen: 79.18 ng/mL
RT: 28.359 min Scan# 1967
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 117515

Ion	Ratio	Lower	Upper
256	100		
258	95.4	76.2	114.2

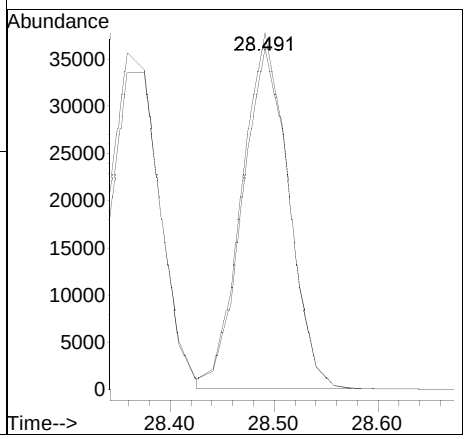


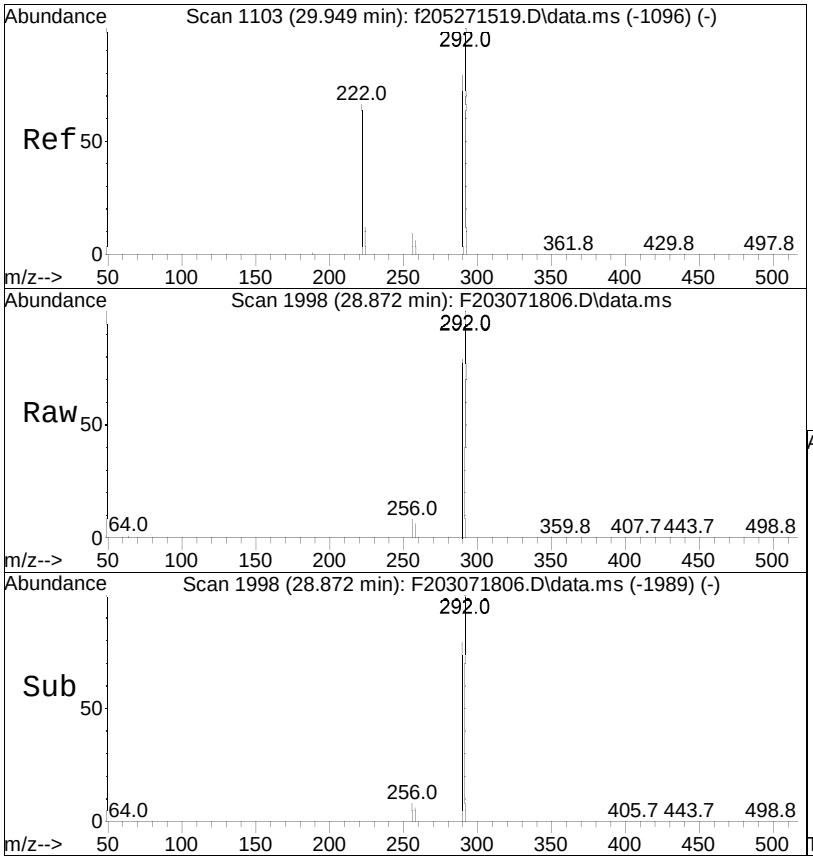


#59
Cl3-BZ#38
Concen: 81.75 ng/mL
RT: 28.491 min Scan# 1975
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 117011

Ion	Ratio	Lower	Upper
256	100		
258	95.8	74.9	112.3

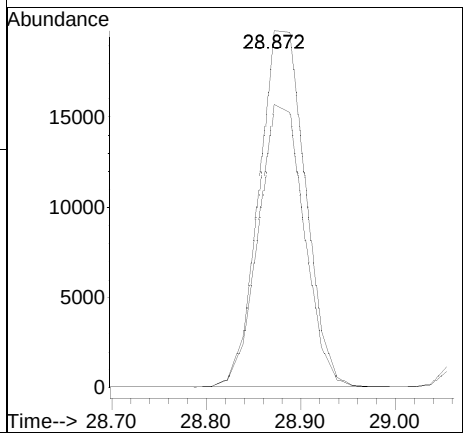


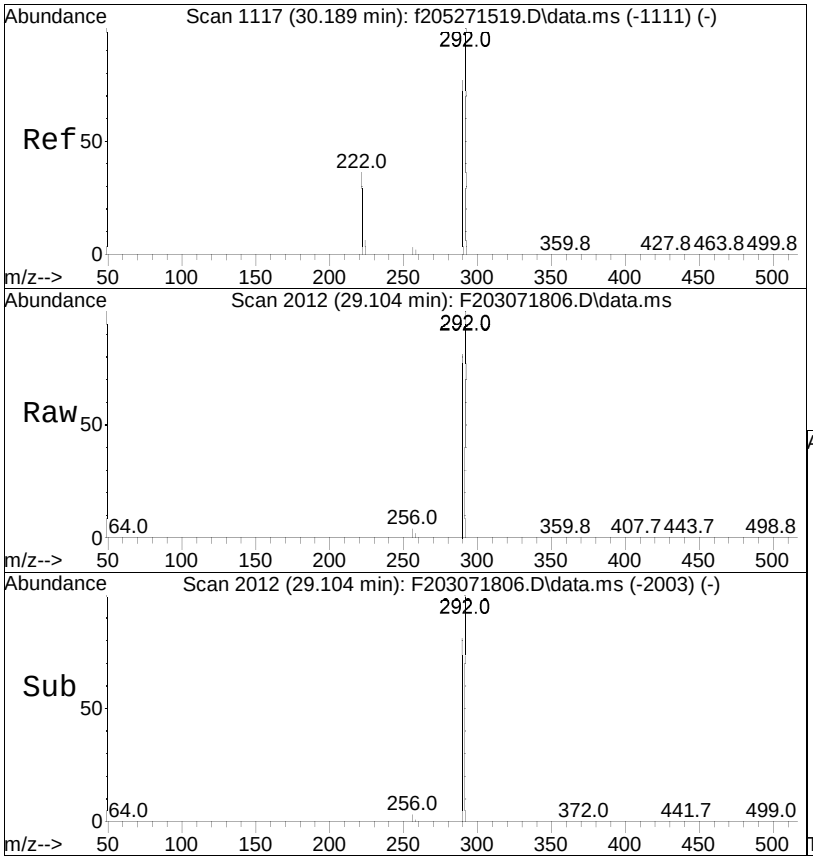


#60
Cl4-BZ#44
Concen: 76.54 ng/mL
RT: 28.872 min Scan# 1998
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 67201

Ion	Ratio	Lower	Upper
292	100		
290	79.3	63.1	94.7

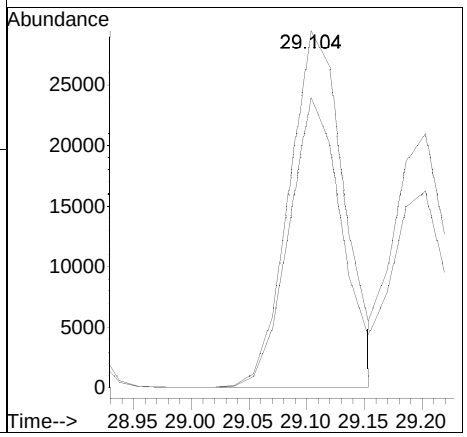


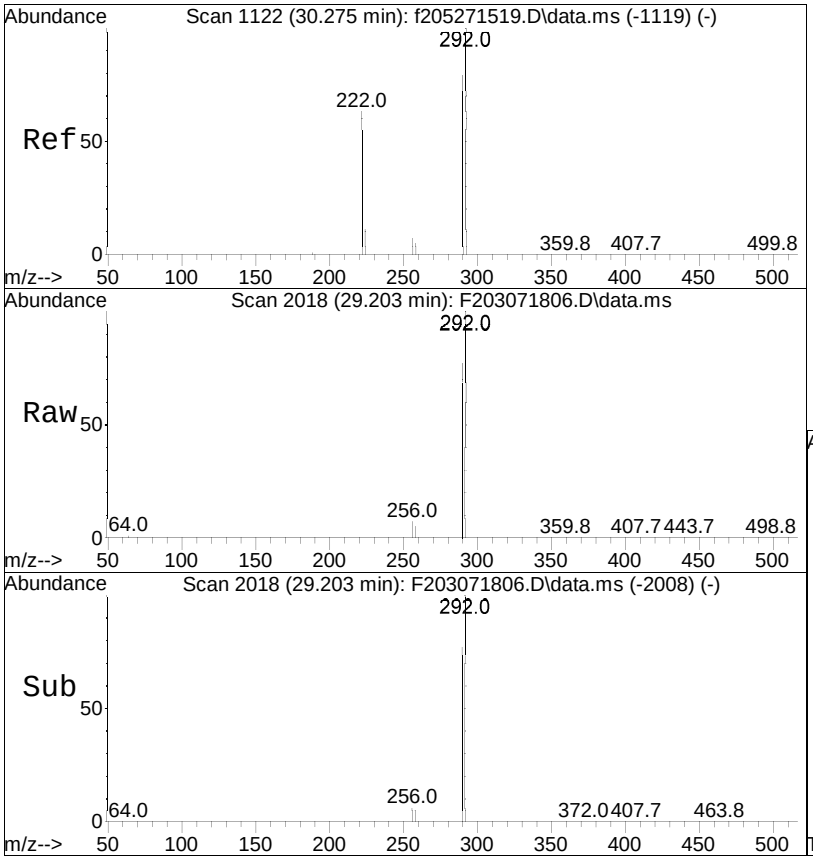


#61
Cl4-BZ#59
Concen: 76.02 ng/mL
RT: 29.104 min Scan# 2012
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 97881

Ion	Ratio	Lower	Upper
292	100		
290	78.7	64.0	96.0

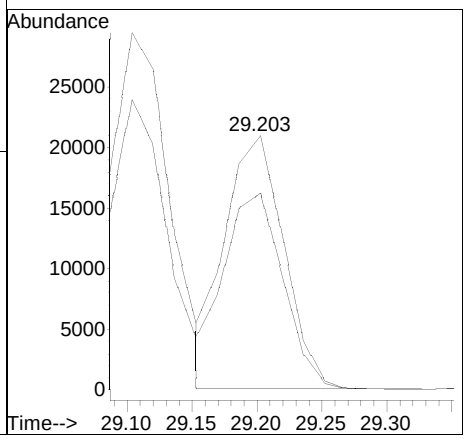


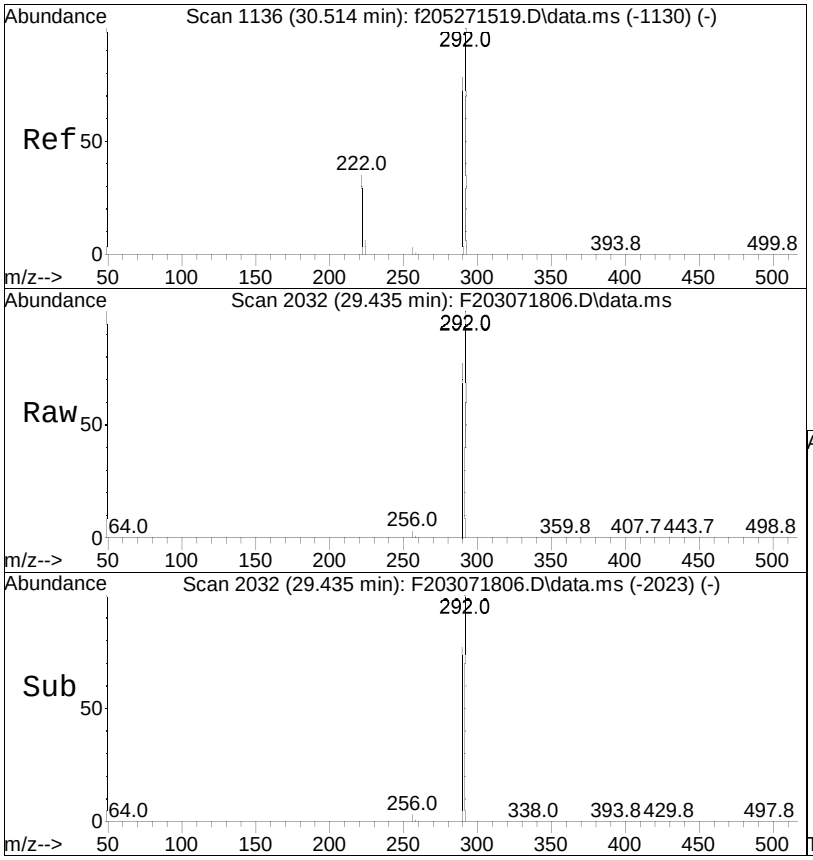


#62
Cl4-BZ#42
Concen: 78.93 ng/mL
RT: 29.203 min Scan# 2018
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 65841

Ion	Ratio	Lower	Upper
292	100		
290	77.3	64.3	96.5

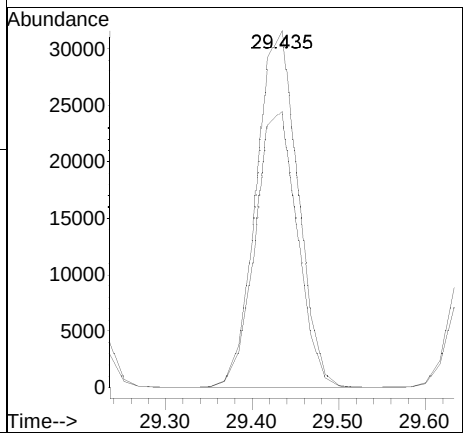


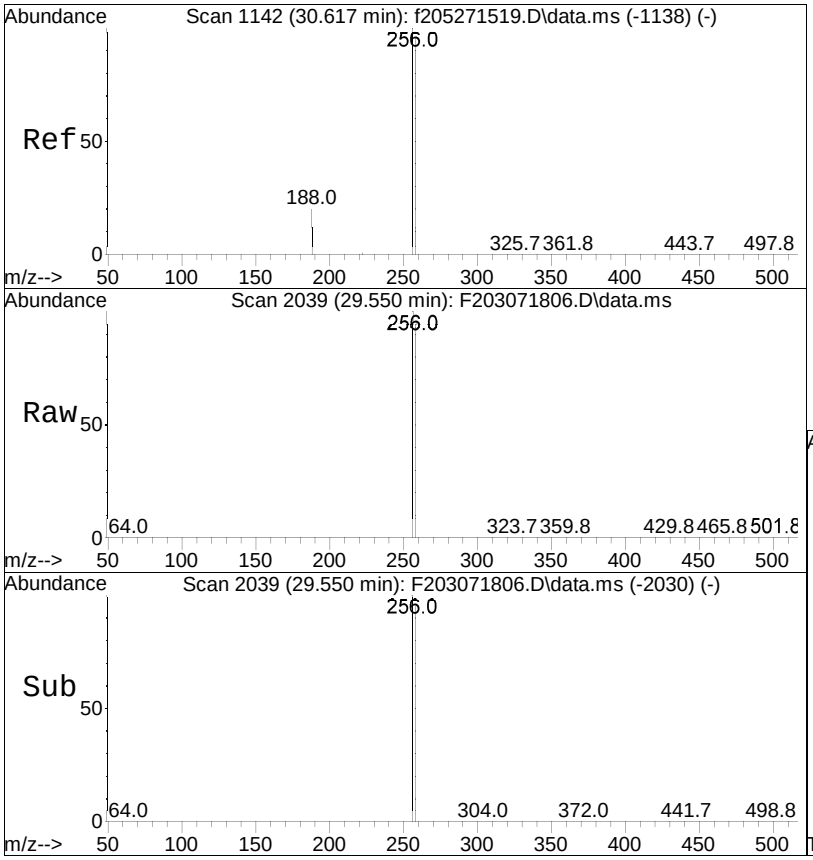


#63
Cl4-BZ#71
Concen: 77.76 ng/mL
RT: 29.435 min Scan# 2032
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 105156

Ion	Ratio	Lower	Upper
292	100		
290	78.1	62.8	94.2

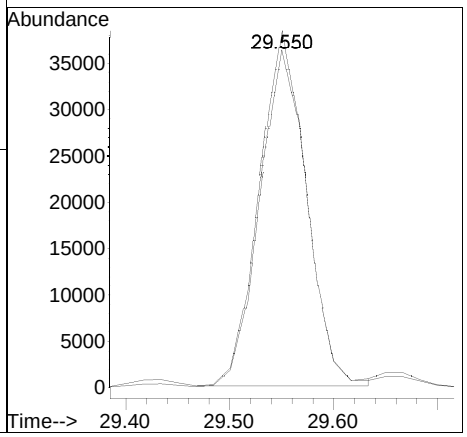


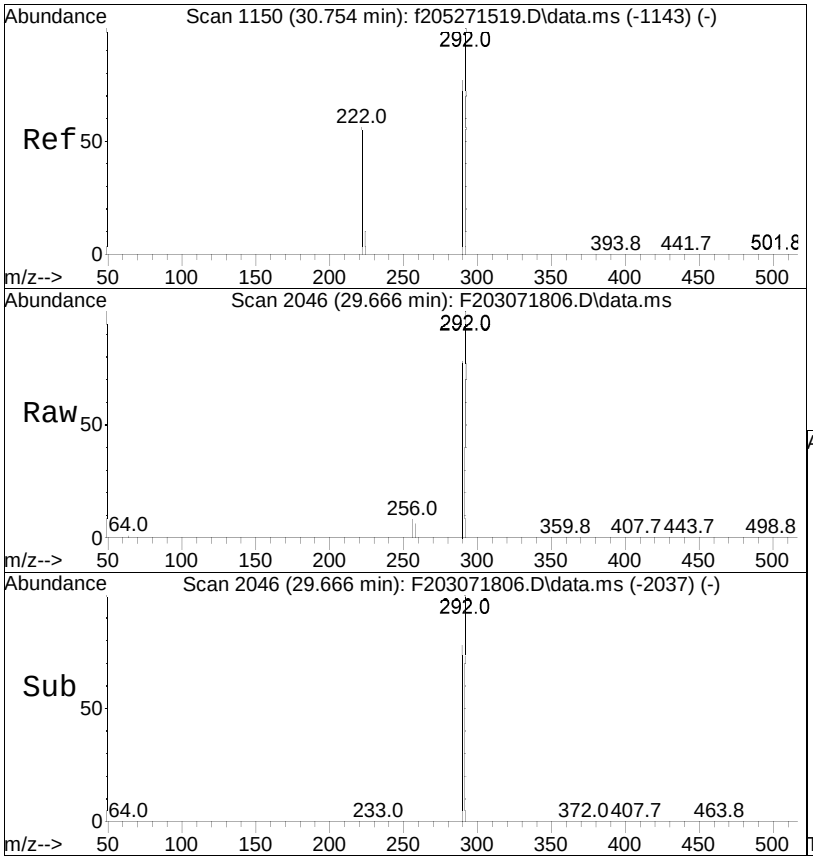


#64
Cl3-BZ#35
Concen: 80.26 ng/mL
RT: 29.550 min Scan# 2039
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 120134

Ion	Ratio	Lower	Upper
256	100		
258	96.1	77.2	115.8

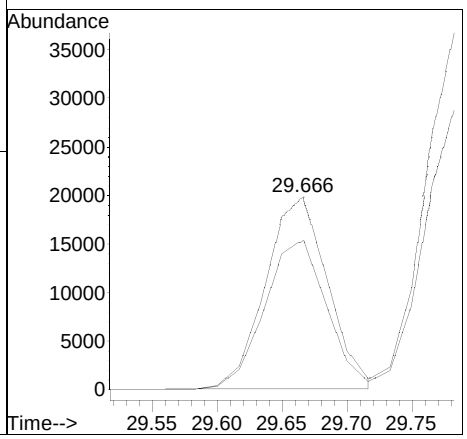


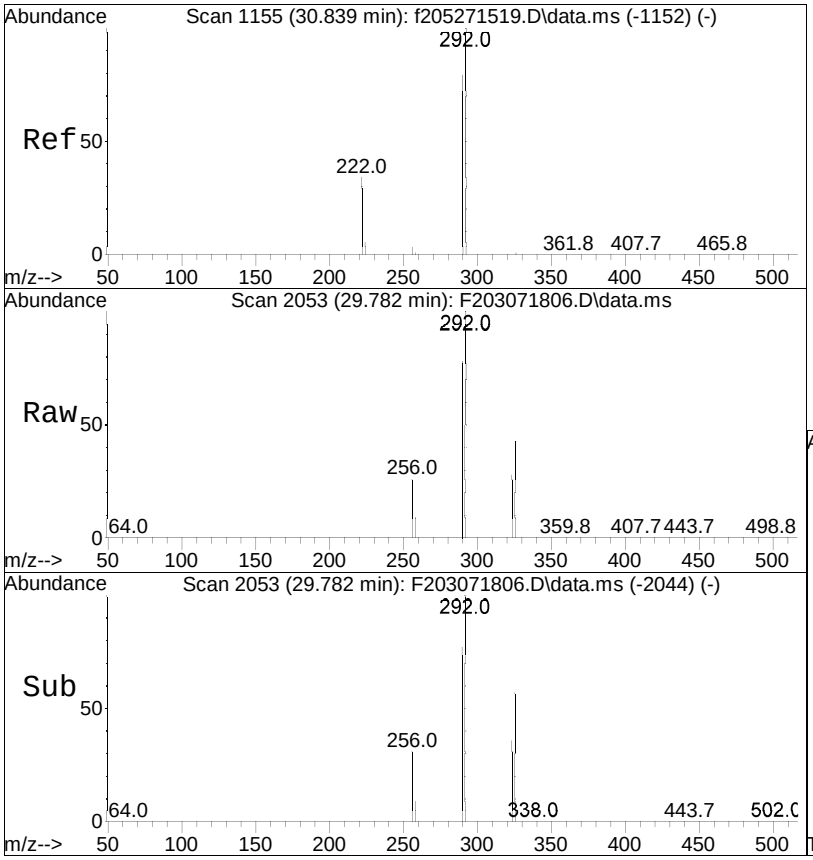


#65
Cl4-BZ#41
Concen: 79.68 ng/mL
RT: 29.666 min Scan# 2046
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 65432

Ion	Ratio	Lower	Upper
292	100		
290	78.3	63.0	94.4

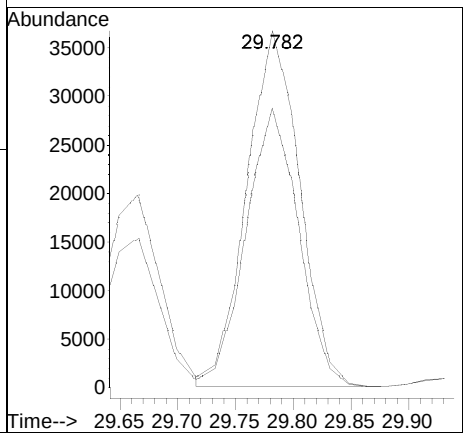


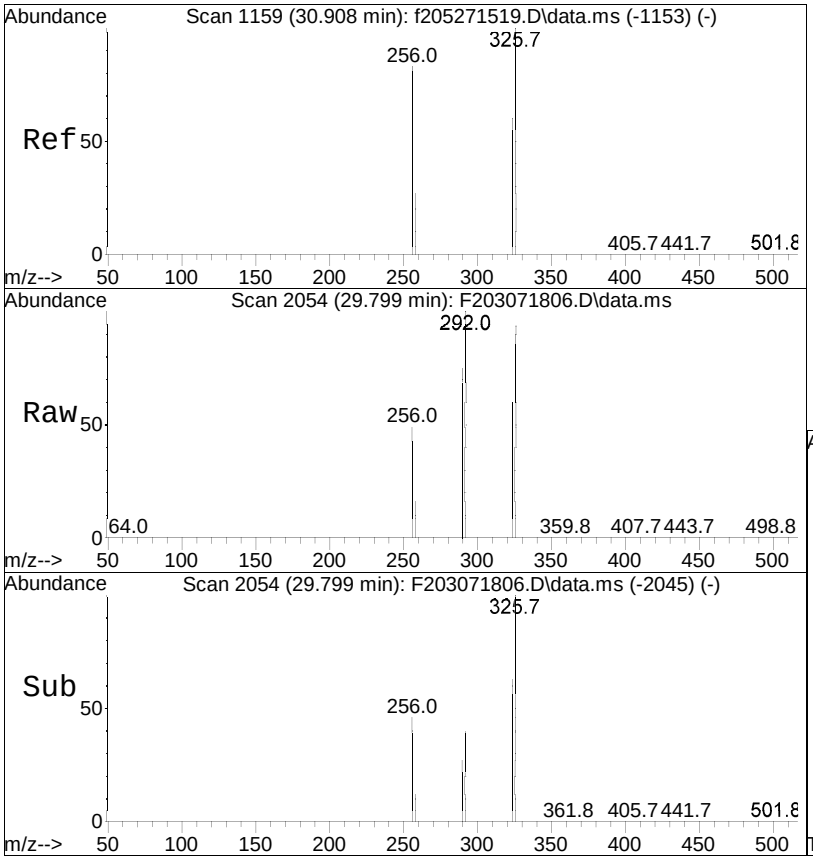


#66
Cl4-BZ#72
Concen: 82.35 ng/mL
RT: 29.782 min Scan# 2053
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 116534

Ion	Ratio	Lower	Upper
292	100		
290	77.8	62.6	93.8

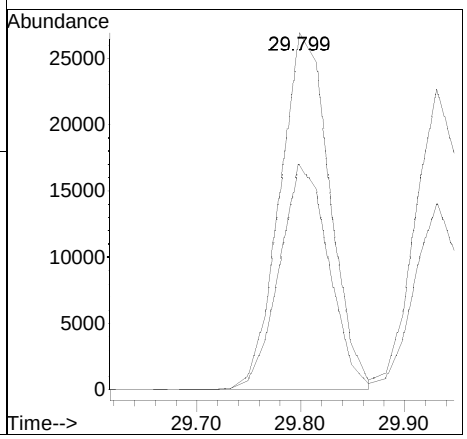


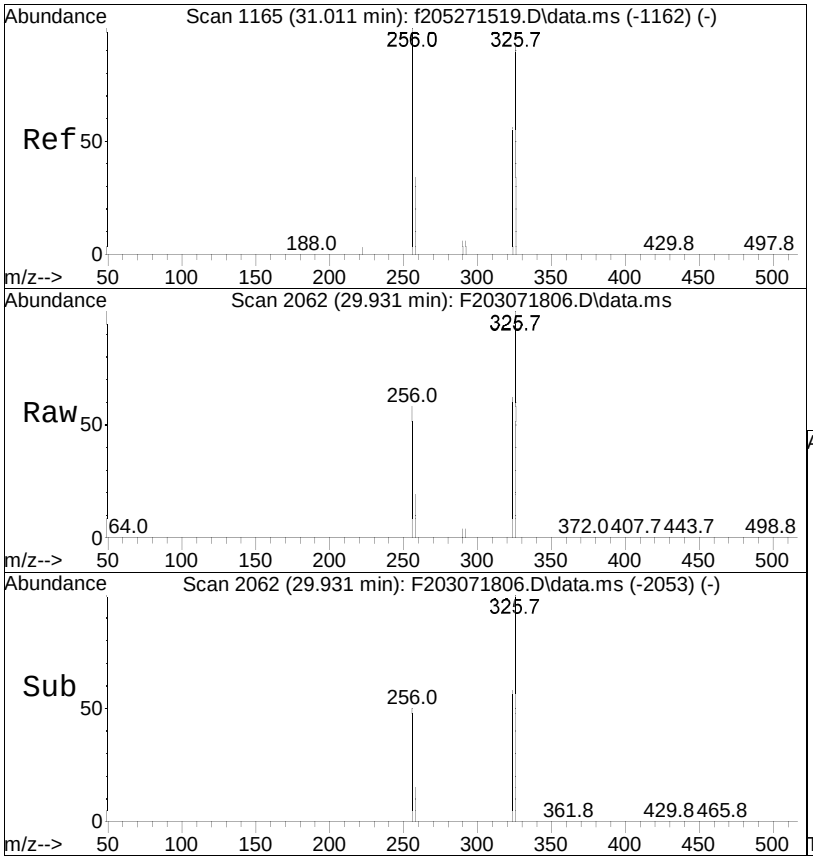


#67
Cl5-BZ#96
Concen: 79.65 ng/mL
RT: 29.799 min Scan# 2054
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 89701

Ion	Ratio	Lower	Upper
326	100		
324	62.4	47.2	70.8

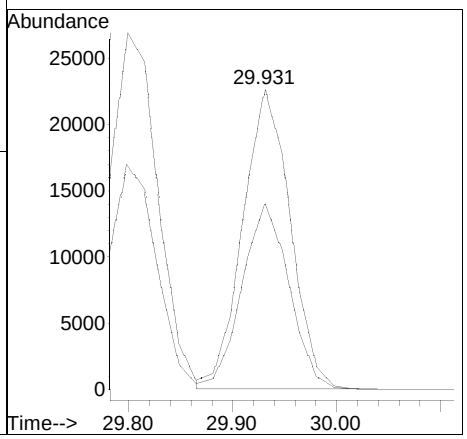


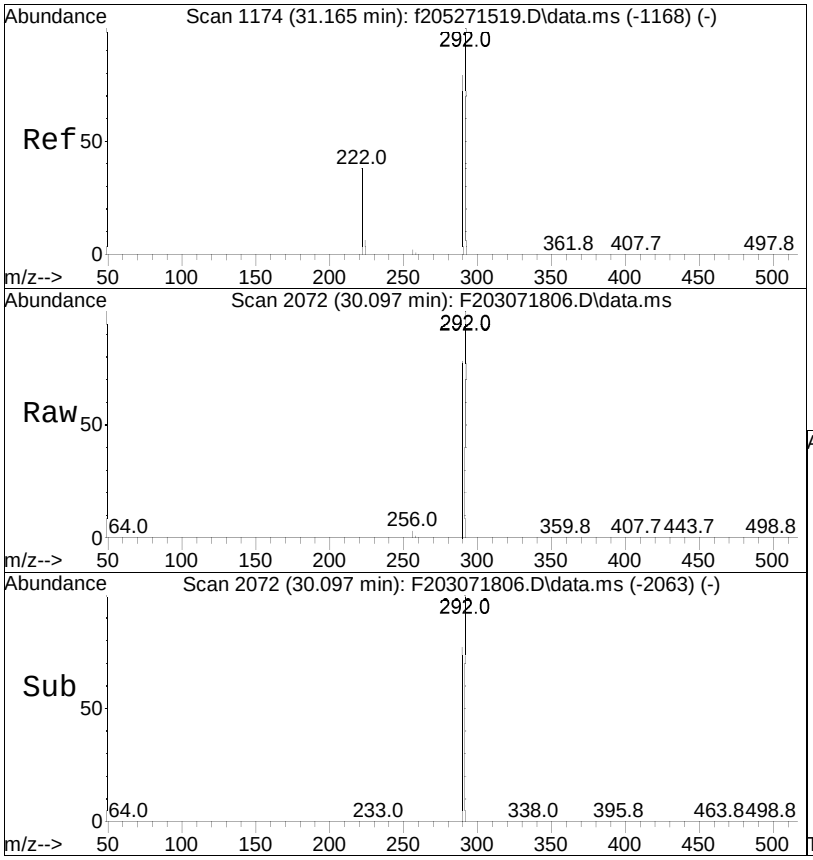


#68
Cl5-BZ#103
Concen: 81.91 ng/mL
RT: 29.931 min Scan# 2062
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 71307

Ion	Ratio	Lower	Upper
326	100		
324	61.6	51.6	77.4

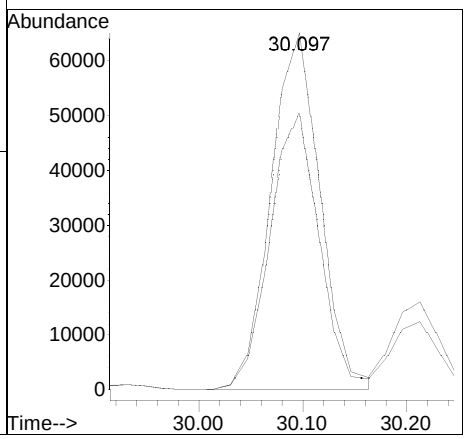


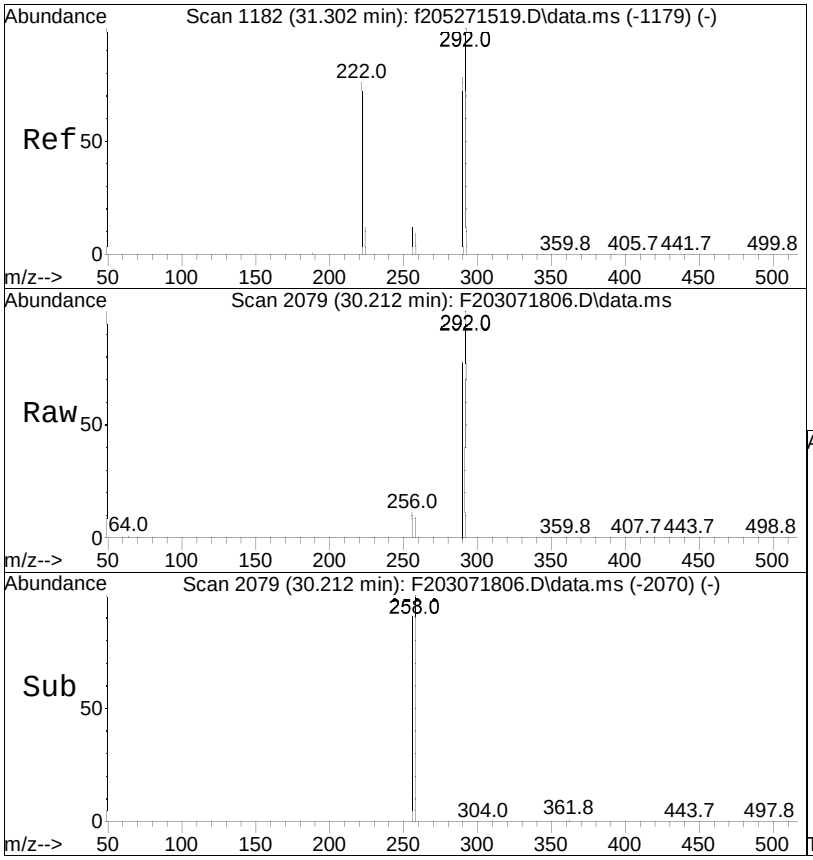


#69
Cl4-BZ#68/#64
Concen: 162.33 ng/mL
RT: 30.097 min Scan# 2072
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 212718

Ion	Ratio	Lower	Upper
292	100		
290	78.0	61.7	92.5

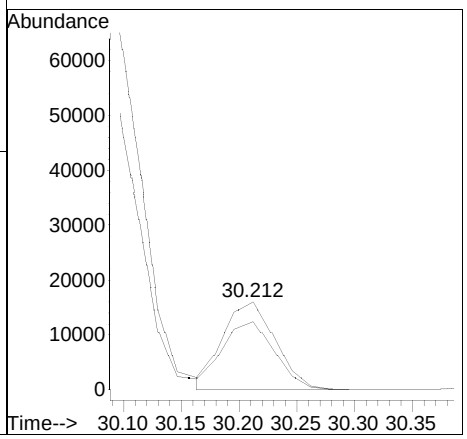


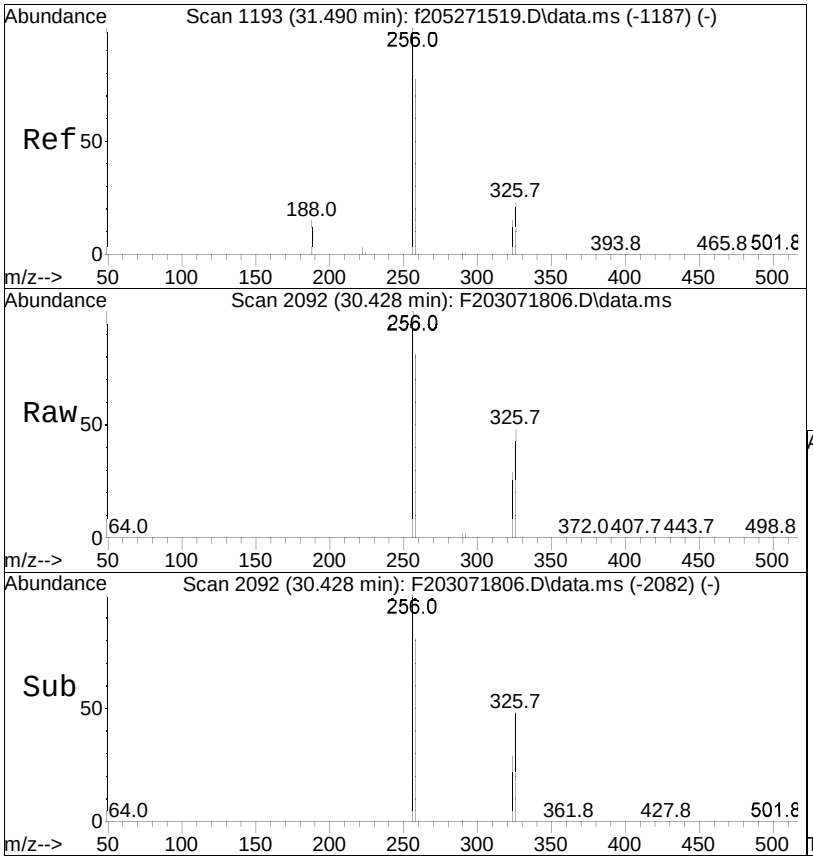


#70
Cl4-BZ#40
Concen: 78.75 ng/mL
RT: 30.212 min Scan# 2079
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 50254

Ion	Ratio	Lower	Upper
292	100		
290	77.2	63.8	95.6

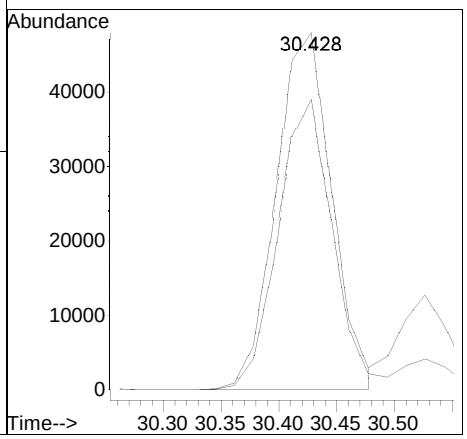


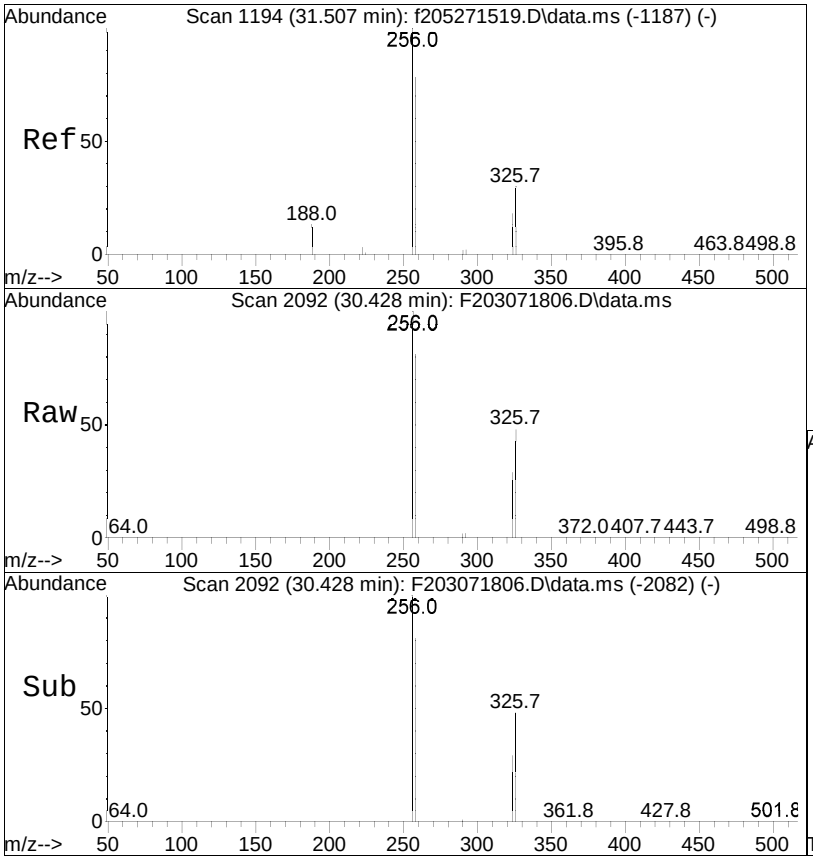


#71
Cl3-BZ#37-RTW
Concen: 80.53 ng/mL
RT: 30.428 min Scan# 2092
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:256 Resp: 160244

Ion	Ratio	Lower	Upper
256	100		
258	81.1	63.5	95.3

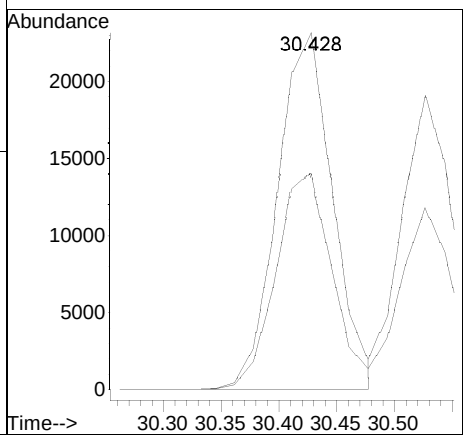


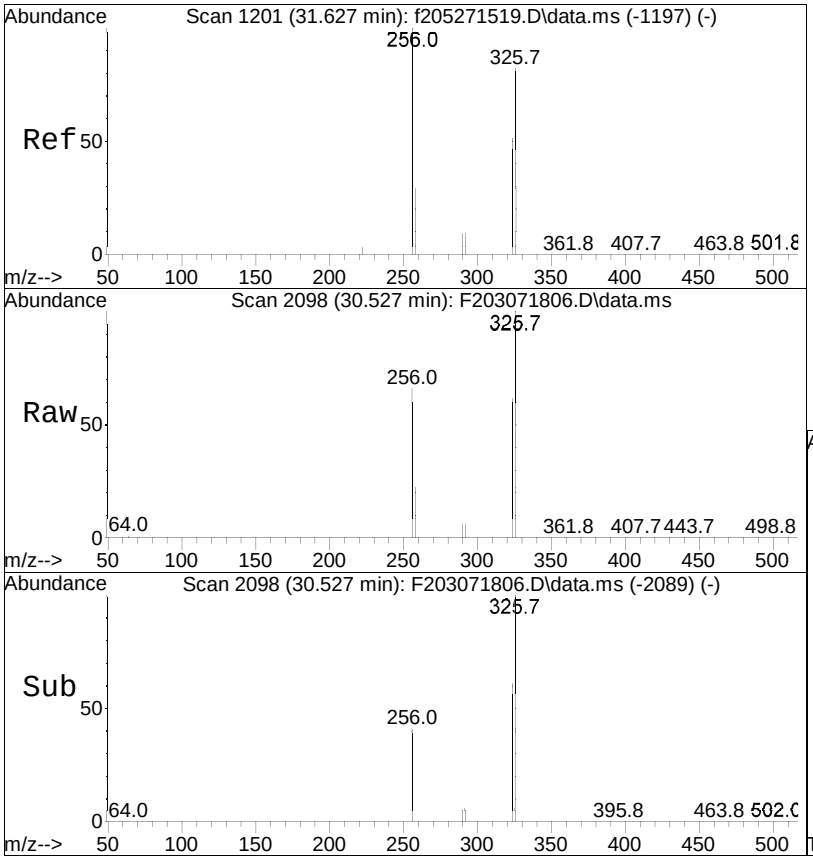


#72
Cl5-BZ#100
Concen: 82.00 ng/mL
RT: 30.428 min Scan# 2092
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 76929

Ion	Ratio	Lower	Upper
326	100		
324	61.9	48.6	73.0

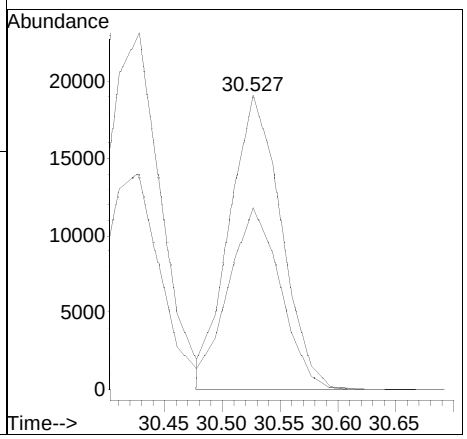


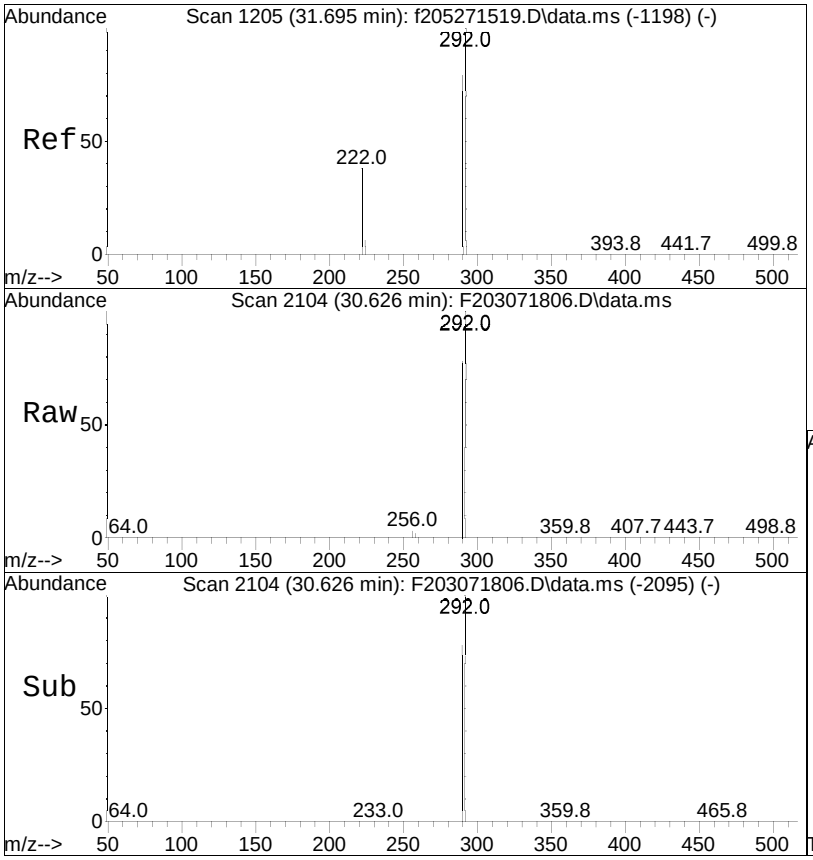


#73
Cl5-BZ#94
Concen: 84.66 ng/mL
RT: 30.527 min Scan# 2098
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 58637

Ion	Ratio	Lower	Upper
326	100		
324	61.9	49.7	74.5

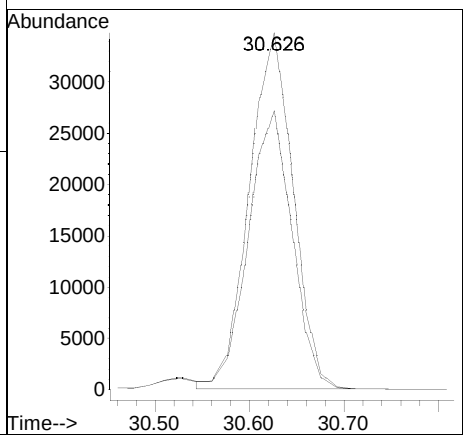


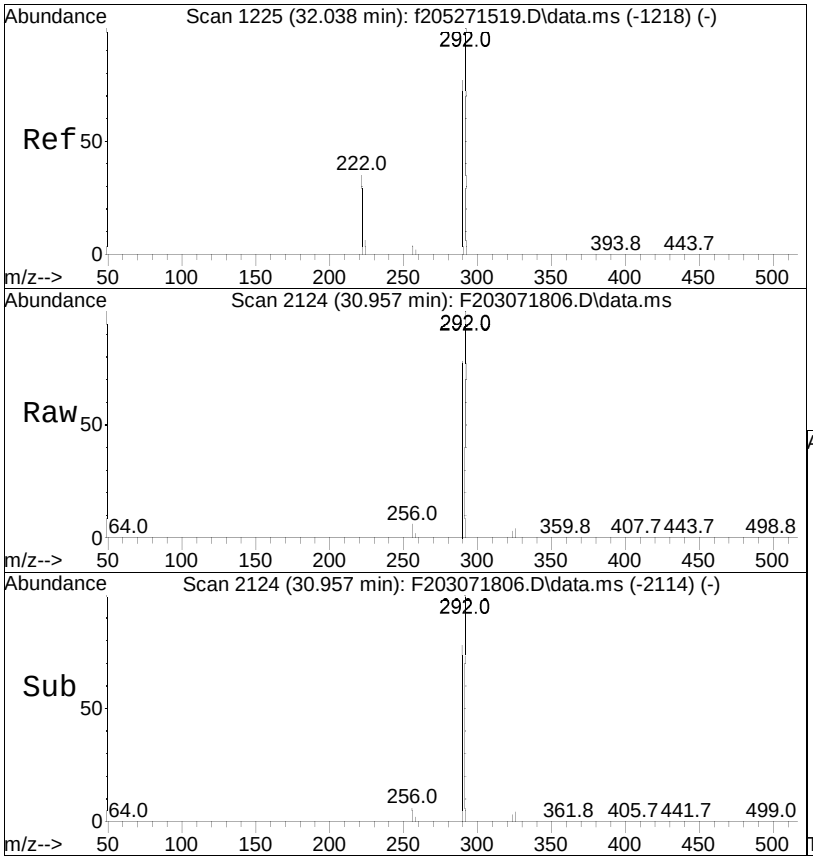


#74
Cl4-BZ#57
Concen: 79.27 ng/mL
RT: 30.626 min Scan# 2104
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 111640

Ion	Ratio	Lower	Upper
292	100		
290	78.0	63.9	95.9

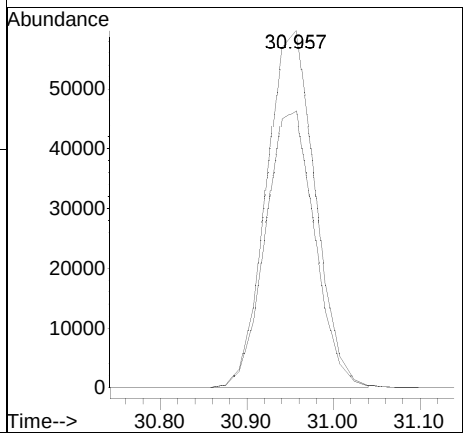


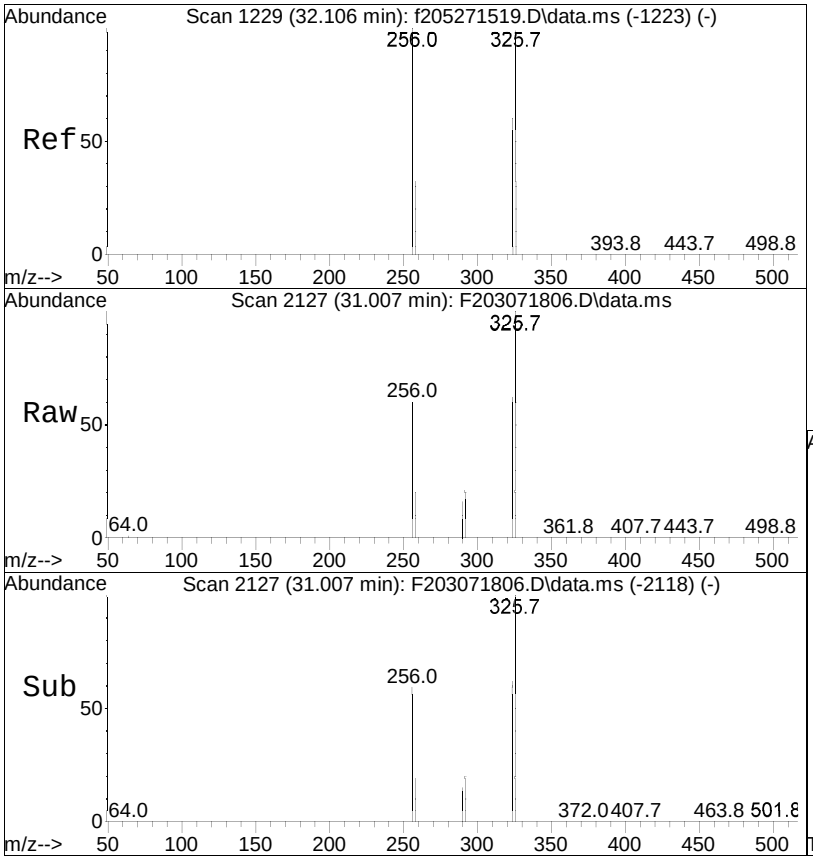


#75
Cl4-BZ#67/#58
Concen: 163.69 ng/mL
RT: 30.957 min Scan# 2124
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 232004

Ion	Ratio	Lower	Upper
292	100		
290	78.3	62.3	93.5

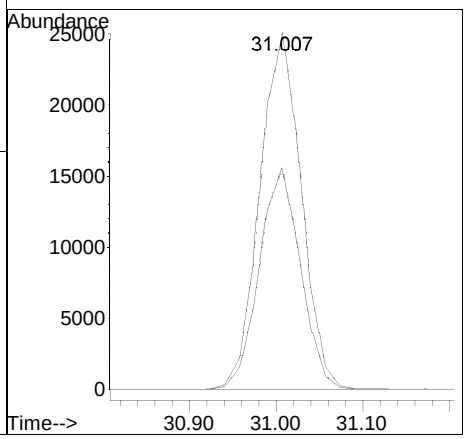


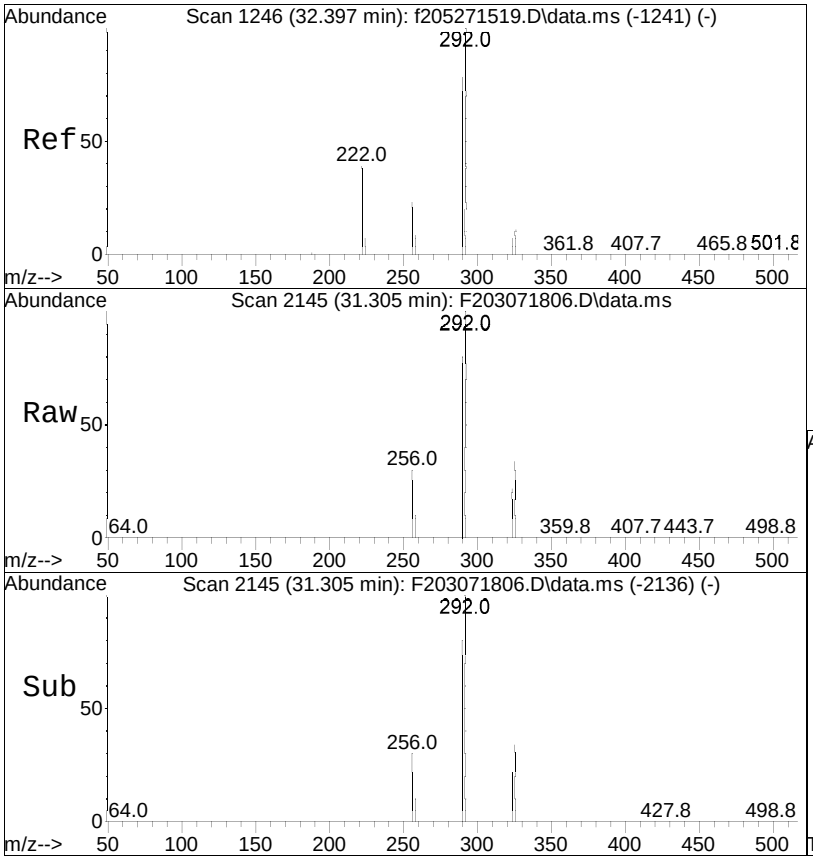


#76
Cl5-BZ#102
Concen: 82.70 ng/mL
RT: 31.007 min Scan# 2127
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 82465

Ion	Ratio	Lower	Upper
326	100		
324	61.8	49.8	74.8

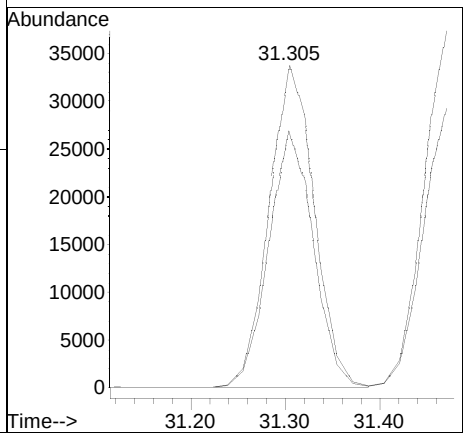


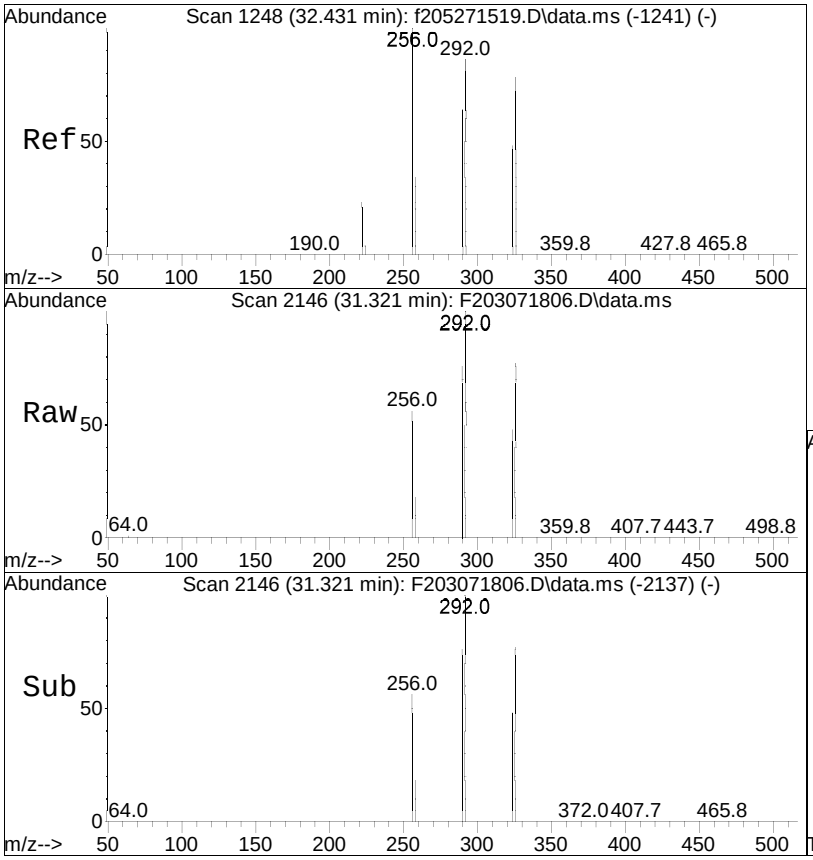


#77
Cl4-BZ#61
Concen: 80.02 ng/mL
RT: 31.305 min Scan# 2145
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 111700

Ion	Ratio	Lower	Upper
292	100		
290	78.7	61.5	92.3

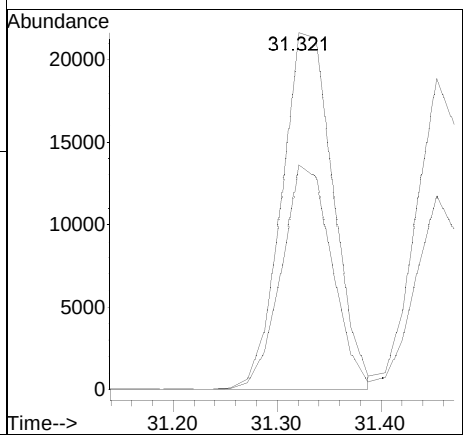


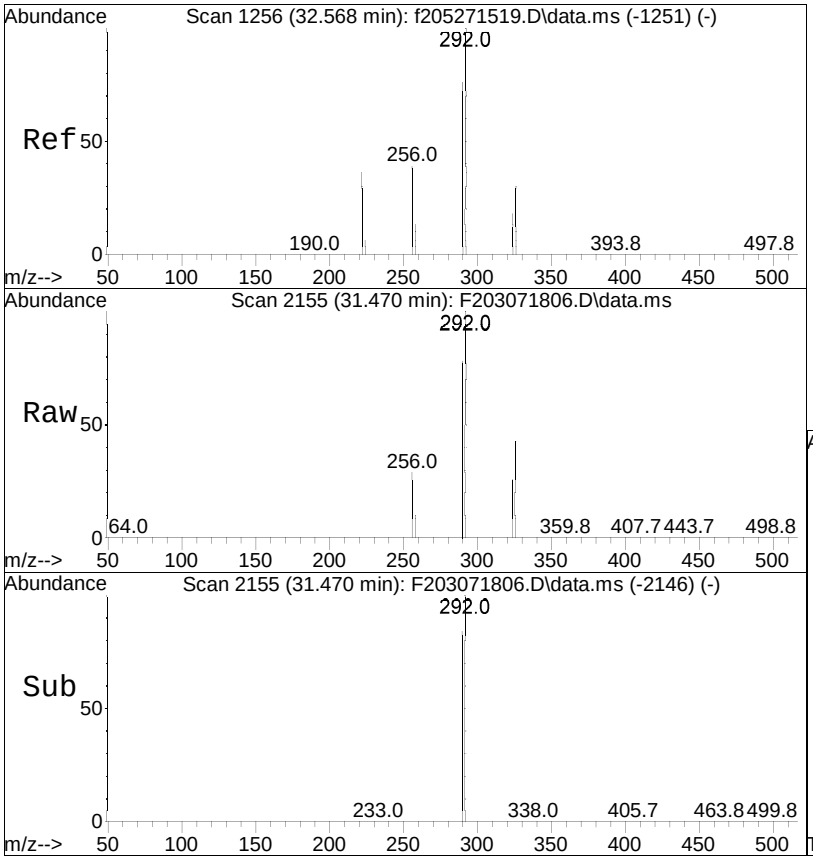


#78
Cl5-BZ#98
Concen: 81.48 ng/mL
RT: 31.321 min Scan# 2146
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 74432

Ion	Ratio	Lower	Upper
326	100		
324	61.4	50.2	75.2

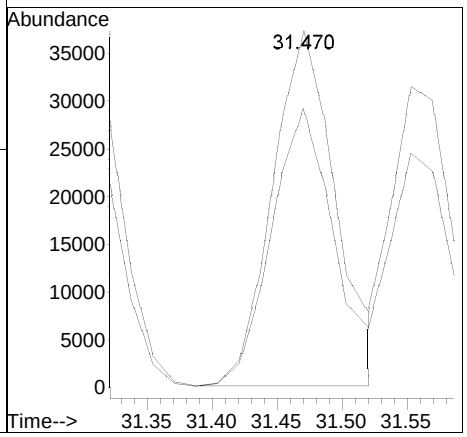


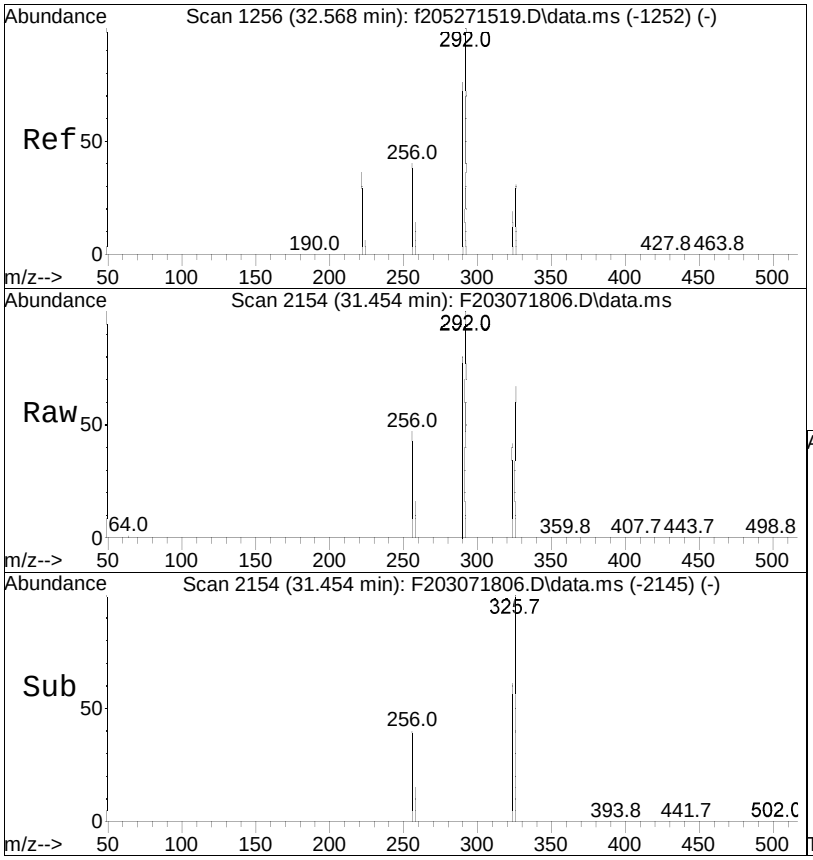


#79
Cl4-BZ#76
Concen: 85.40 ng/mL
RT: 31.470 min Scan# 2155
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 125978

Ion	Ratio	Lower	Upper
292	100		
290	78.5	62.2	93.2

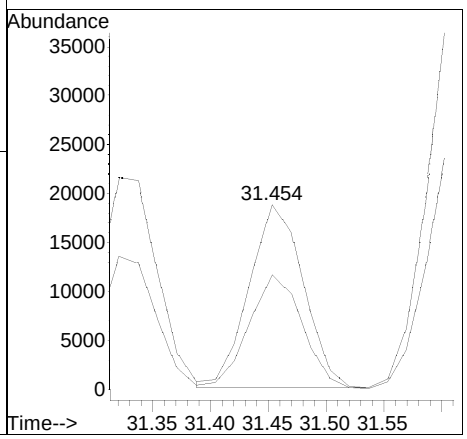


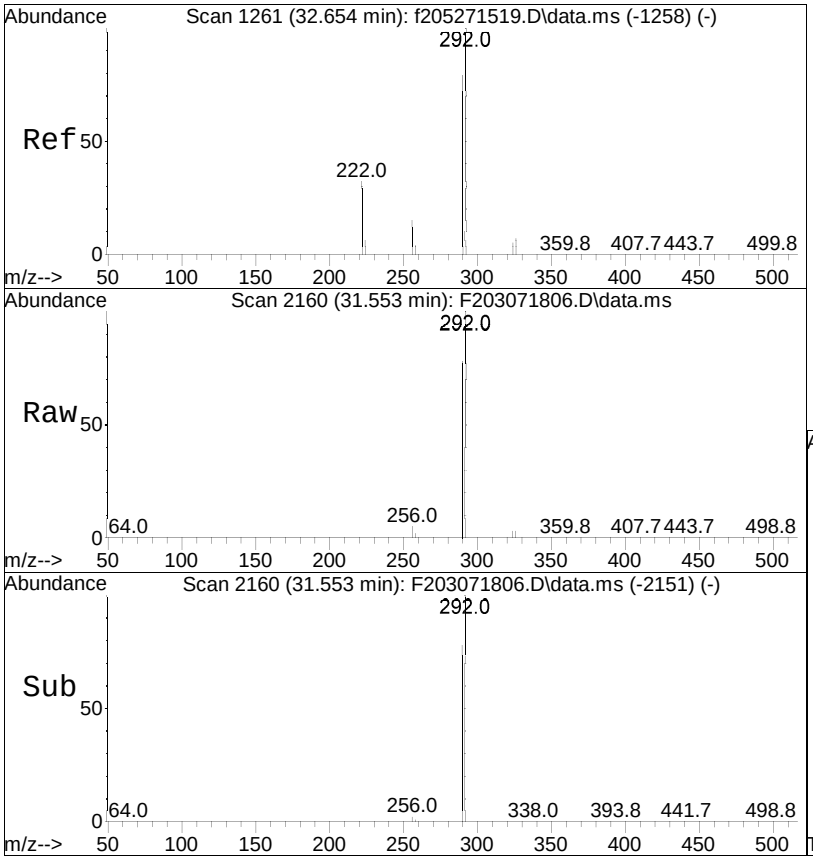


#80
Cl5-BZ#93
Concen: 82.39 ng/mL
RT: 31.454 min Scan# 2154
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 60716

Ion	Ratio	Lower	Upper
326	100		
324	61.3	49.8	74.6

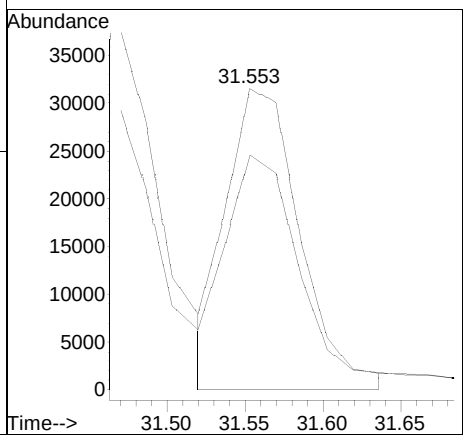


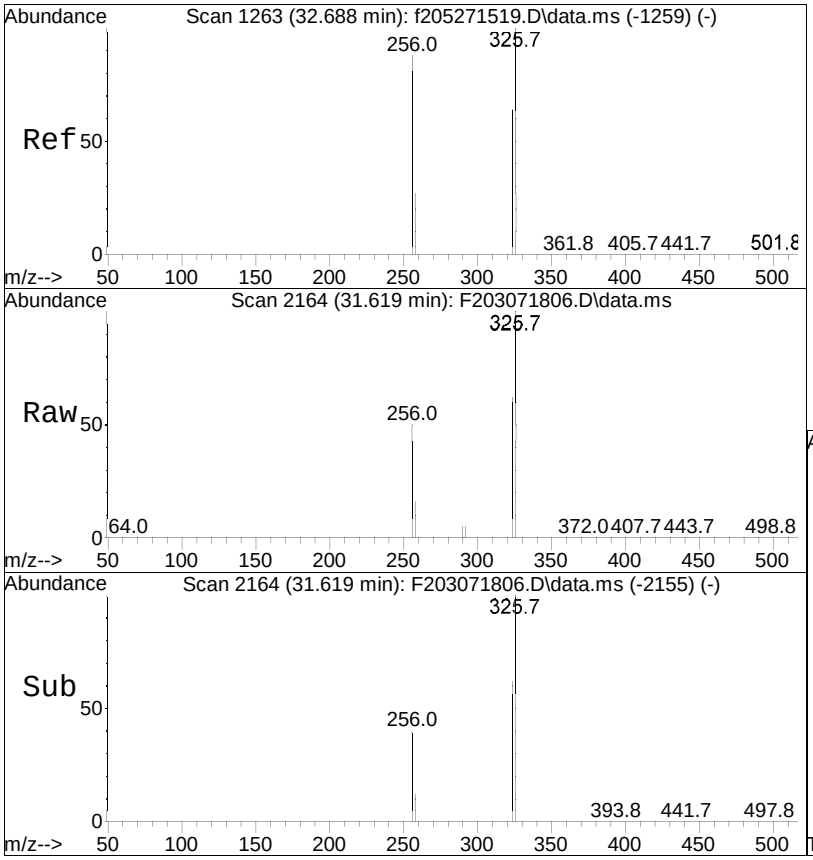


#81
Cl4-BZ#63
Concen: 78.34 ng/mL M4
RT: 31.553 min Scan# 2160
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 103682

Ion	Ratio	Lower	Upper
292	100		
290	78.0	61.7	92.5

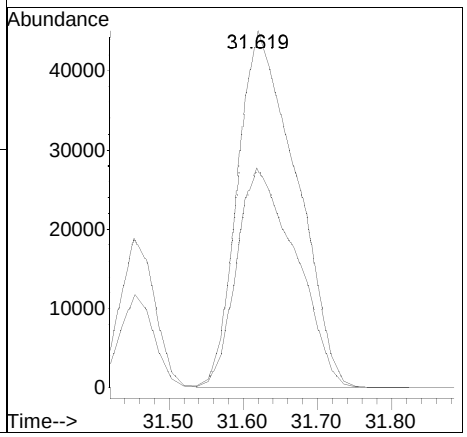


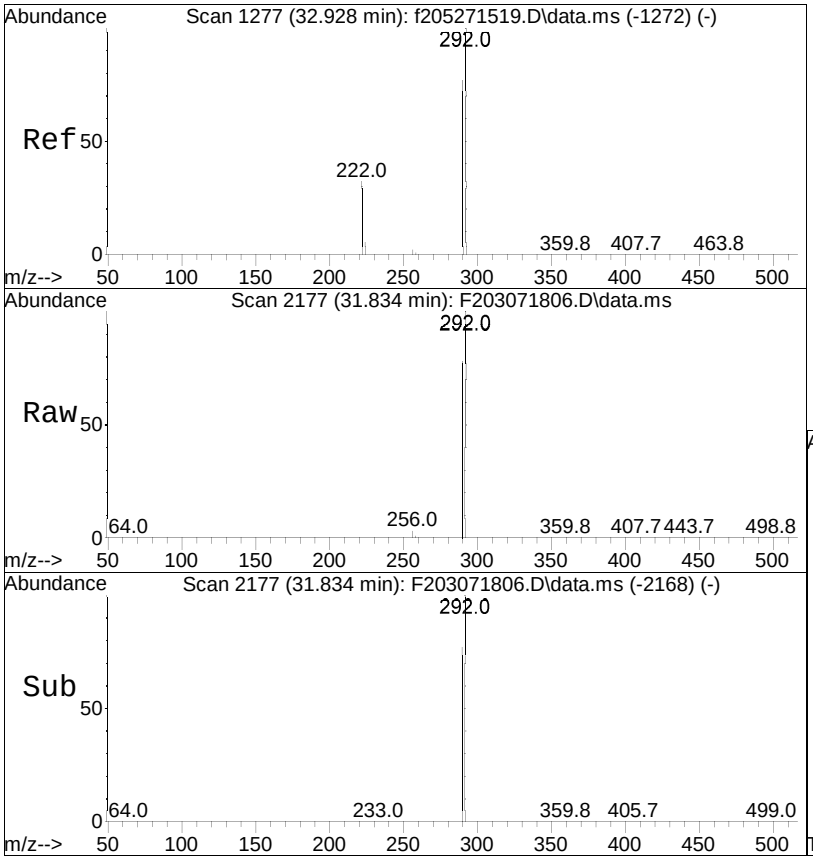


#82
Cl5-BZ#121/#95/#88
Concen: 250.58 ng/mL
RT: 31.619 min Scan# 2164
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 245078

Ion	Ratio	Lower	Upper
326	100		
324	62.2	49.4	74.2

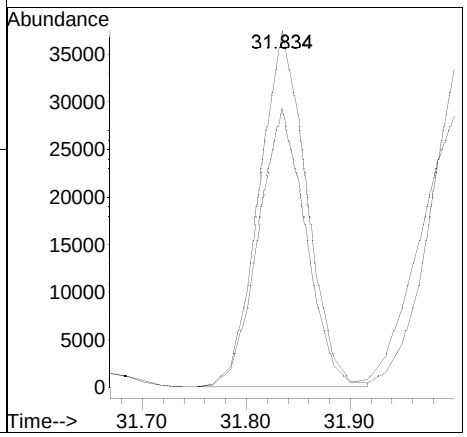


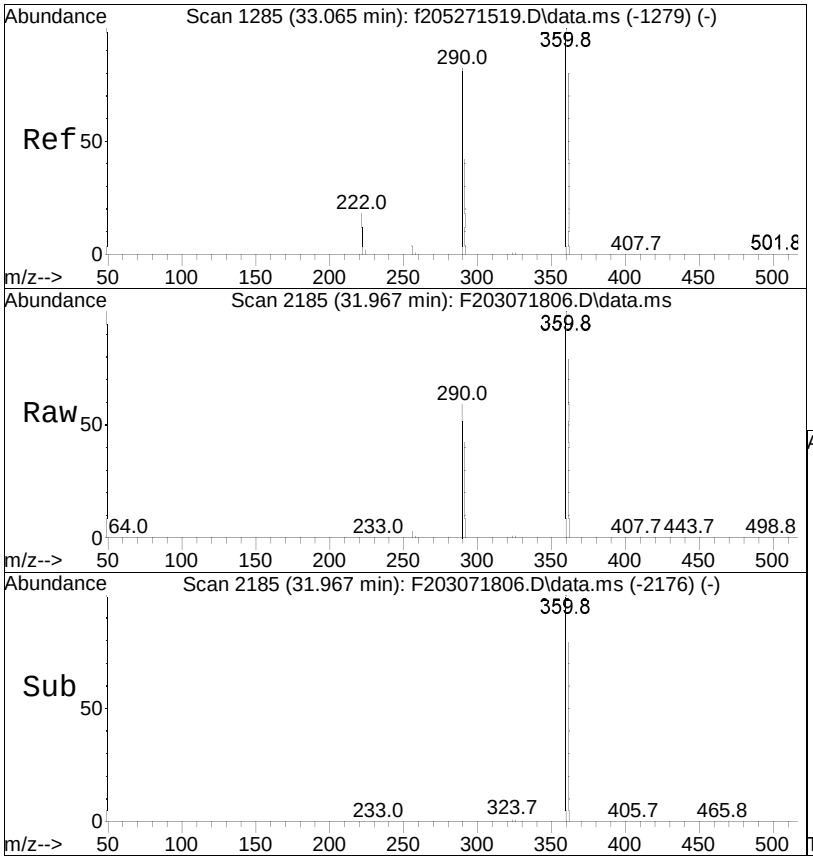


#83
Cl4-BZ#74
Concen: 80.74 ng/mL
RT: 31.834 min Scan# 2177
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 118195

Ion	Ratio	Lower	Upper
292	100		
290	78.2	63.6	95.4

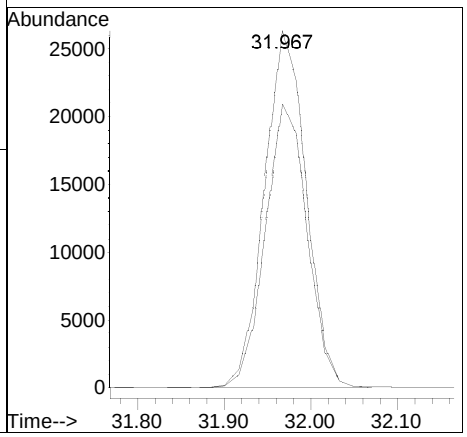


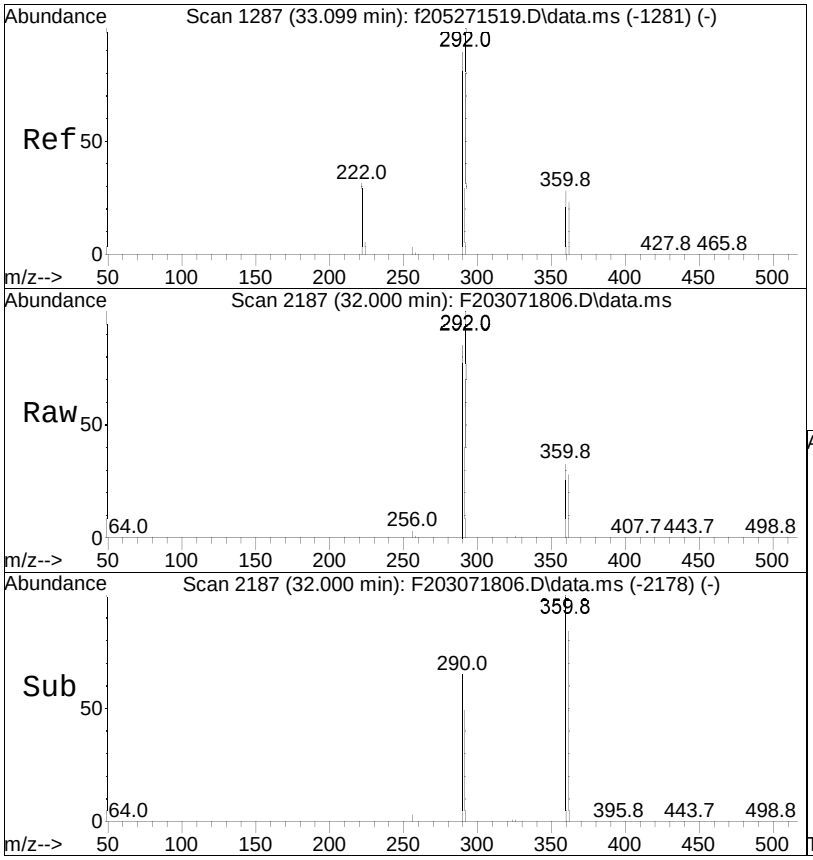


#84
Cl6-BZ#155-RTW
Concen: 80.65 ng/mL
RT: 31.967 min Scan# 2185
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 87444

Ion	Ratio	Lower	Upper
360	100		
362	79.7	63.7	95.5

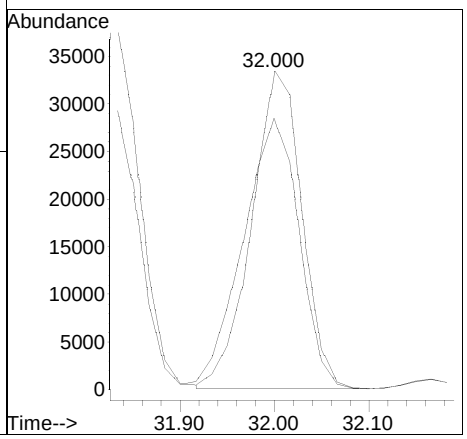


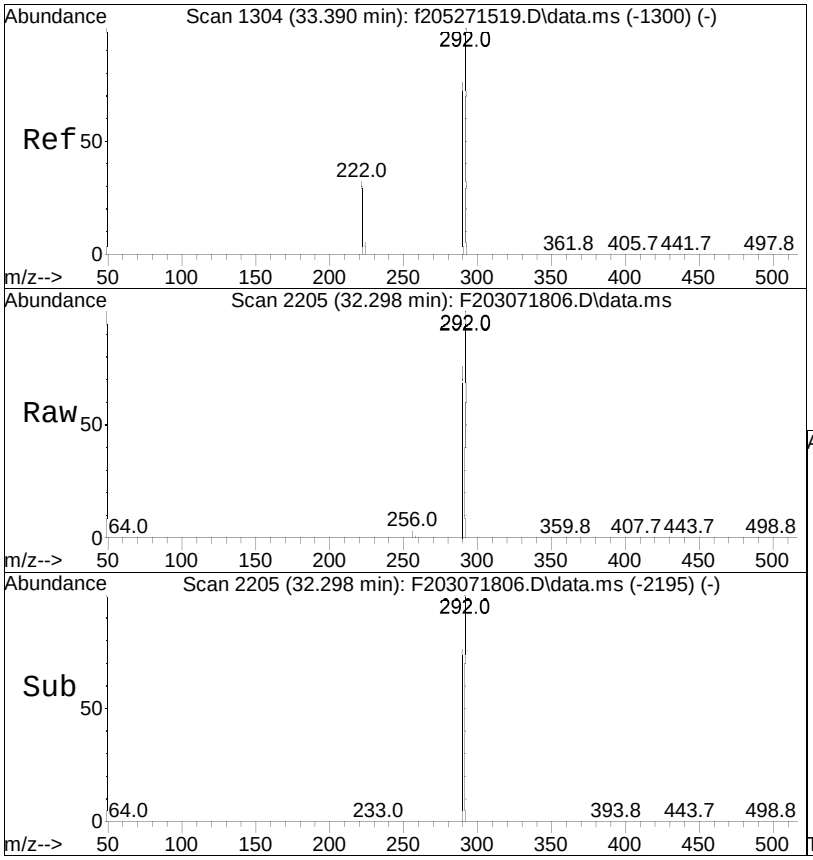


#85
Cl4-BZ#70
Concen: 81.40 ng/mL
RT: 32.000 min Scan# 2187
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 122723

Ion	Ratio	Lower	Upper
292	100		
290	85.2	66.7	100.1

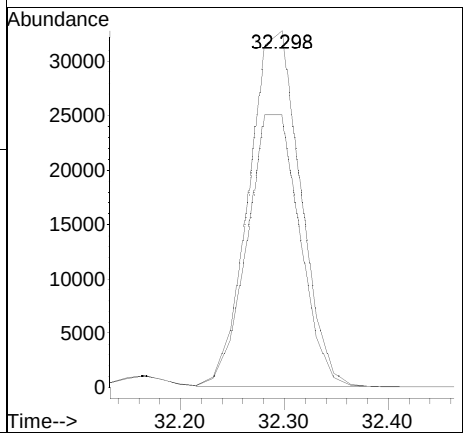


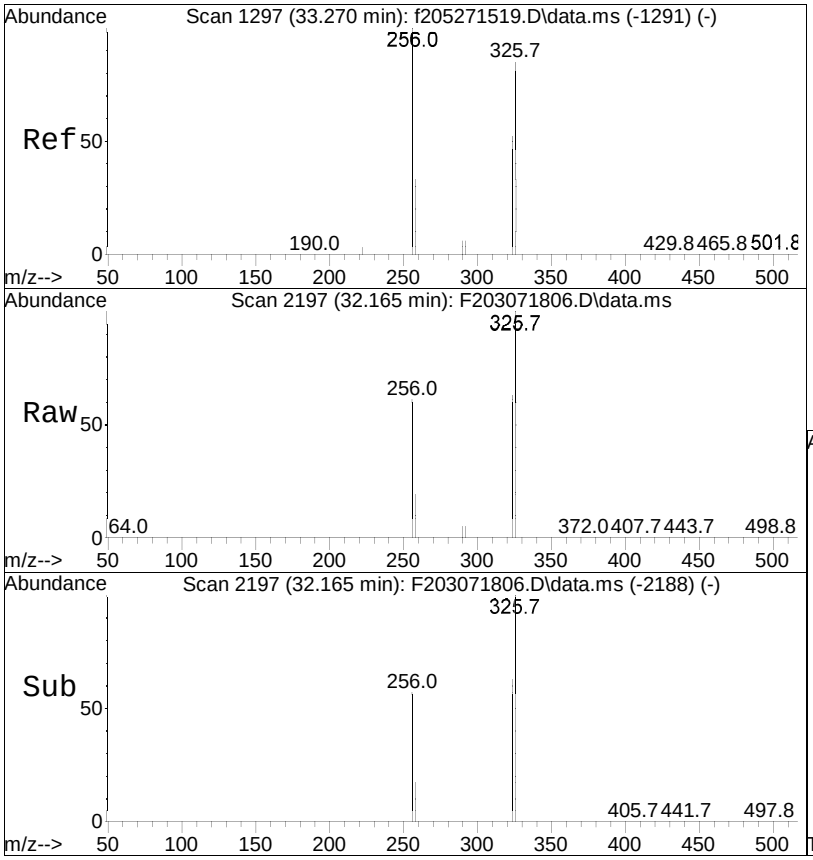


#86
Cl4-BZ#66
Concen: 82.47 ng/mL
RT: 32.298 min Scan# 2205
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 112561

Ion	Ratio	Lower	Upper
292	100		
290	76.3	62.3	93.5

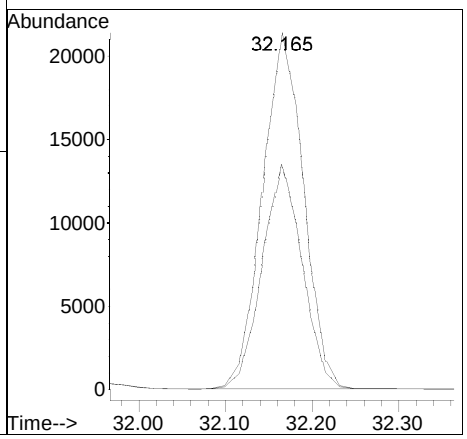


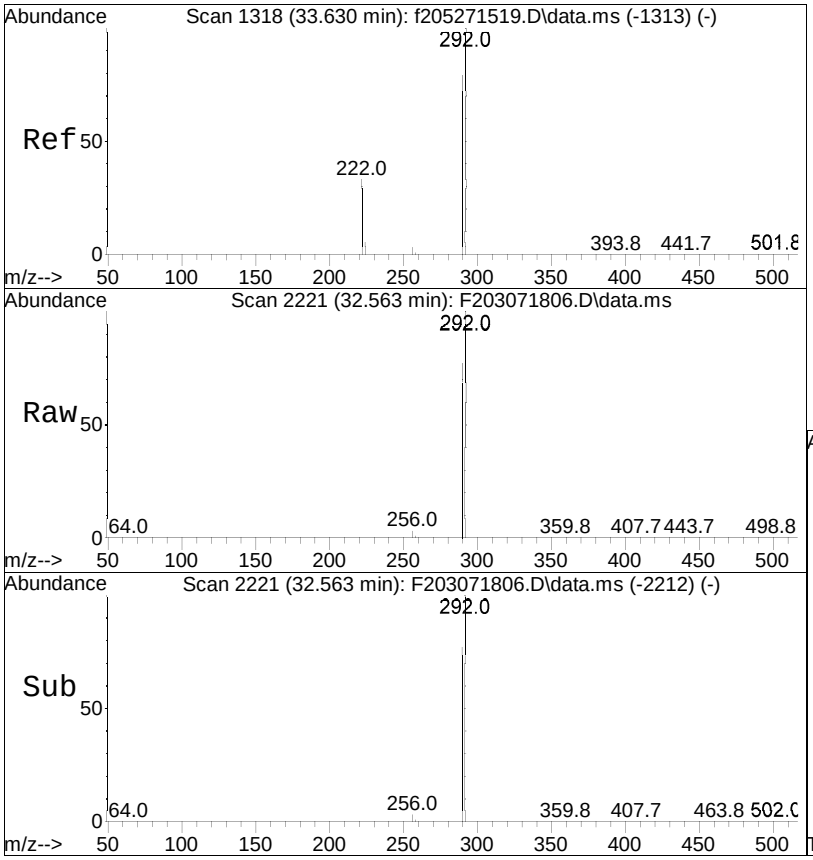


#87
Cl5-BZ#91
Concen: 81.01 ng/mL
RT: 32.165 min Scan# 2197
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 69839

Ion	Ratio	Lower	Upper
326	100		
324	63.2	50.0	75.0

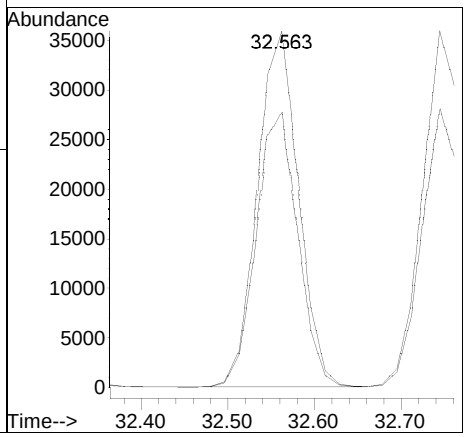


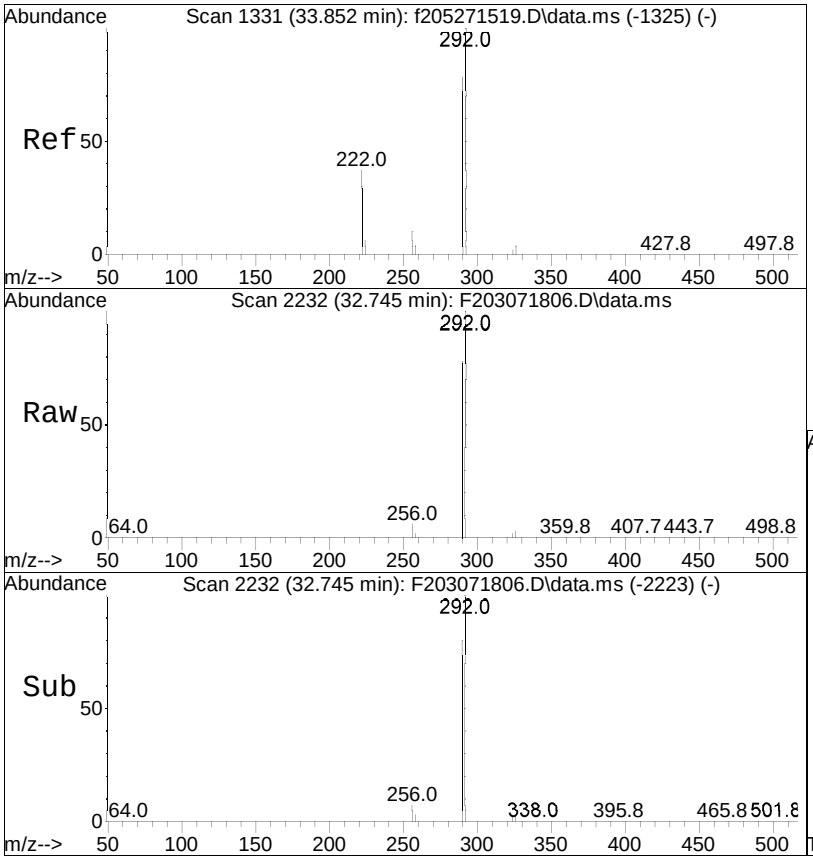


#88
Cl4-BZ#80
Concen: 82.40 ng/mL
RT: 32.563 min Scan# 2221
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 117767

Ion	Ratio	Lower	Upper
292	100		
290	78.3	63.5	95.3

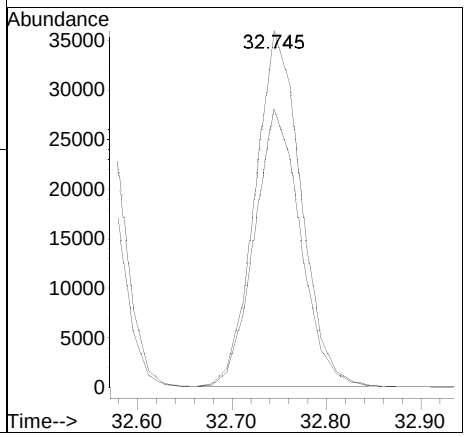


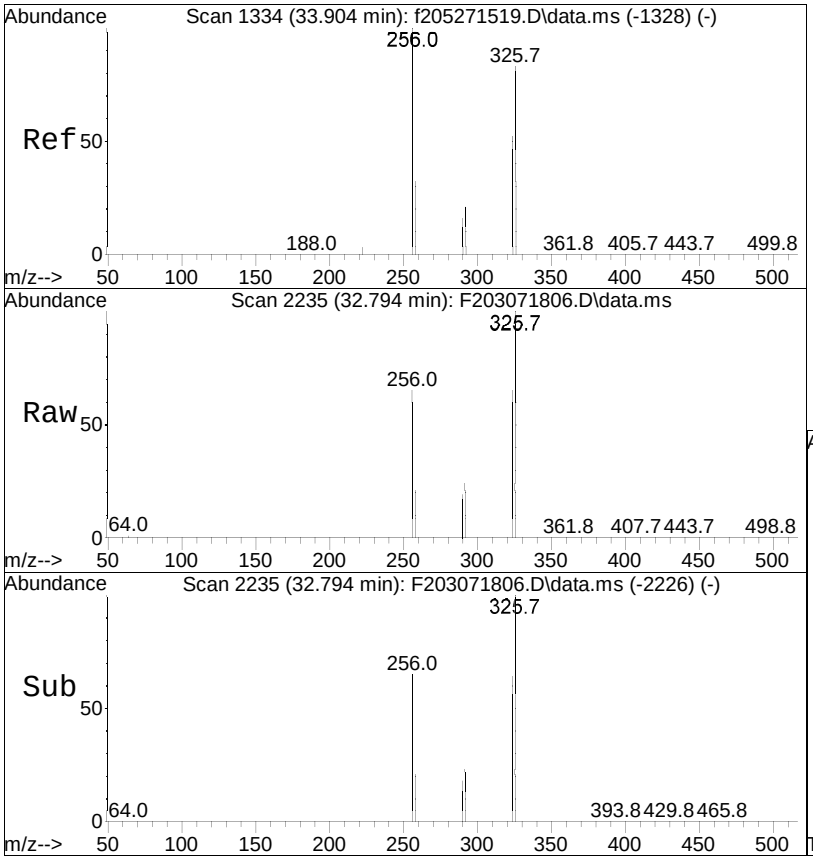


#89
Cl4-BZ#55
Concen: 82.54 ng/mL
RT: 32.745 min Scan# 2232
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 120443

Ion	Ratio	Lower	Upper
292	100		
290	78.4	61.8	92.6

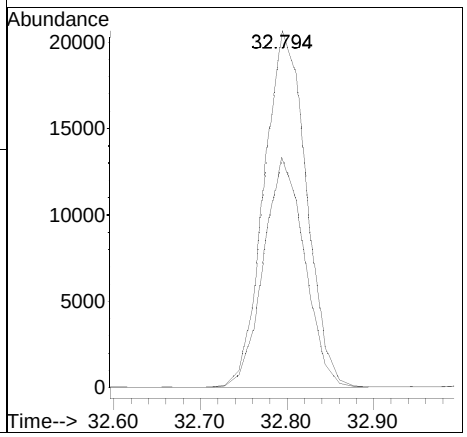


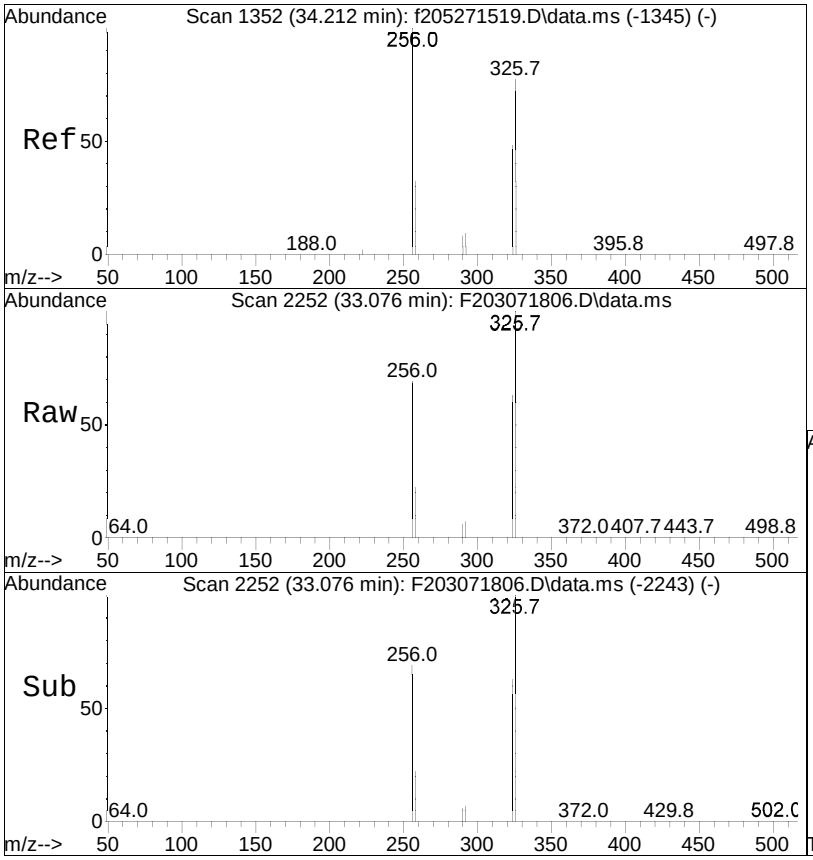


#90
Cl5-BZ#92
Concen: 82.86 ng/mL
RT: 32.794 min Scan# 2235
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 69685

Ion	Ratio	Lower	Upper
326	100		
324	64.5	49.1	73.7

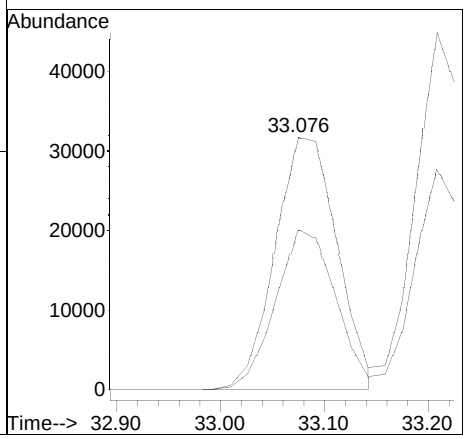


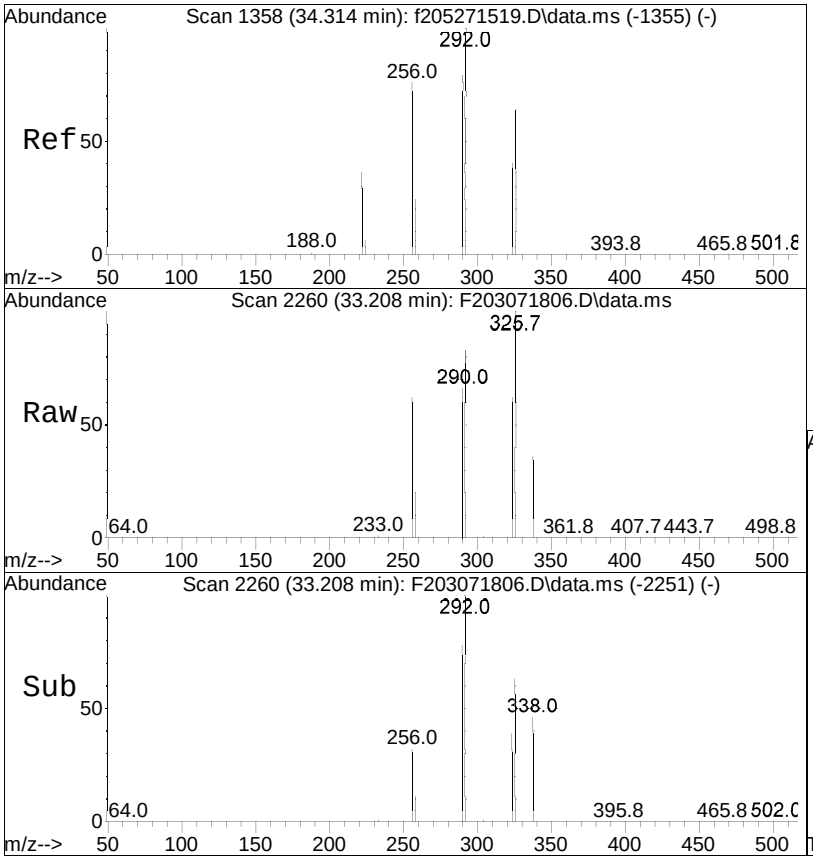


#91
Cl5-BZ#89/#84
Concen: 162.81 ng/mL
RT: 33.076 min Scan# 2252
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 131215

Ion	Ratio	Lower	Upper
326	100		
324	63.2	47.8	71.8

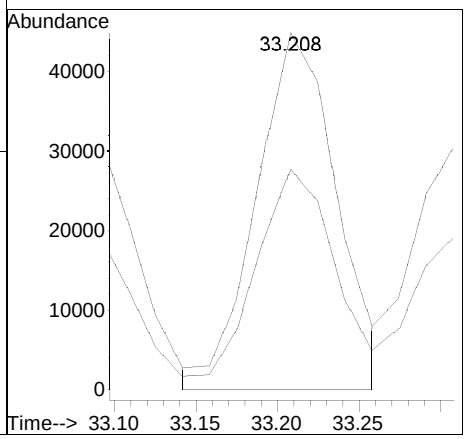


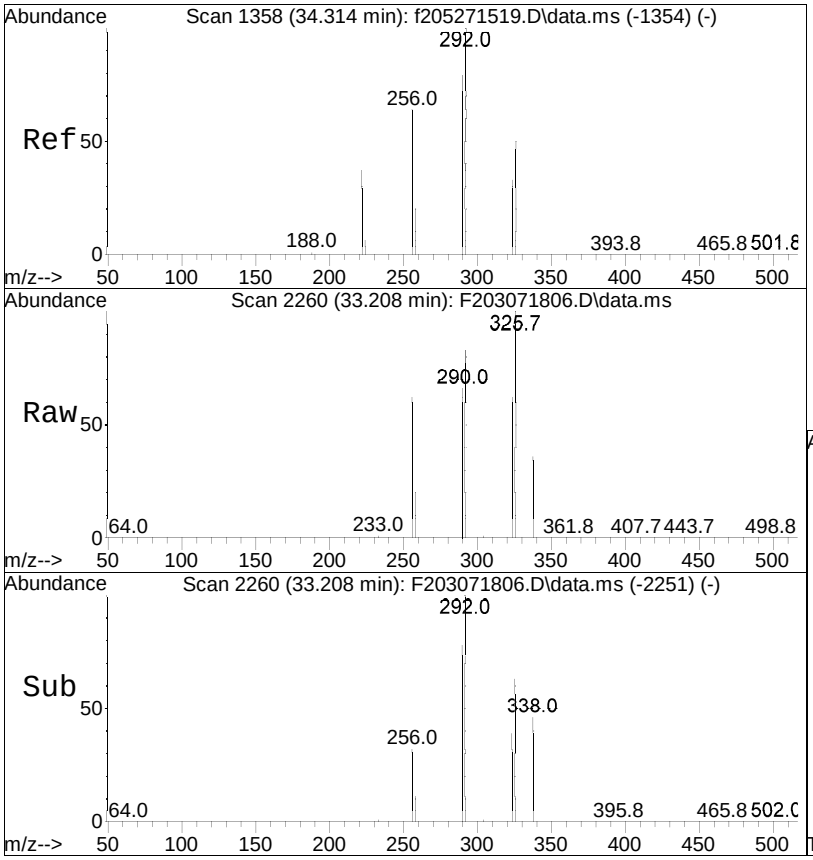


#92
Cl5-BZ#101/#90
Concen: 164.90 ng/mL M4
RT: 33.208 min Scan# 2260
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 153106

Ion	Ratio	Lower	Upper
326	100		
324	54.8	48.9	73.3

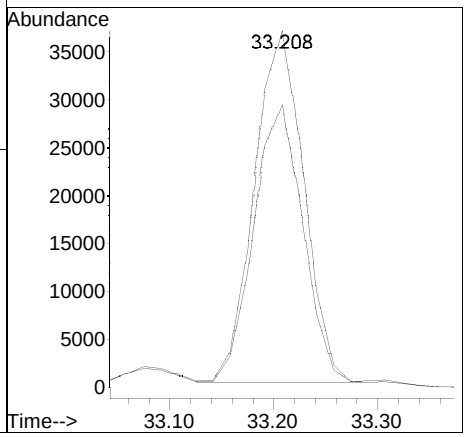


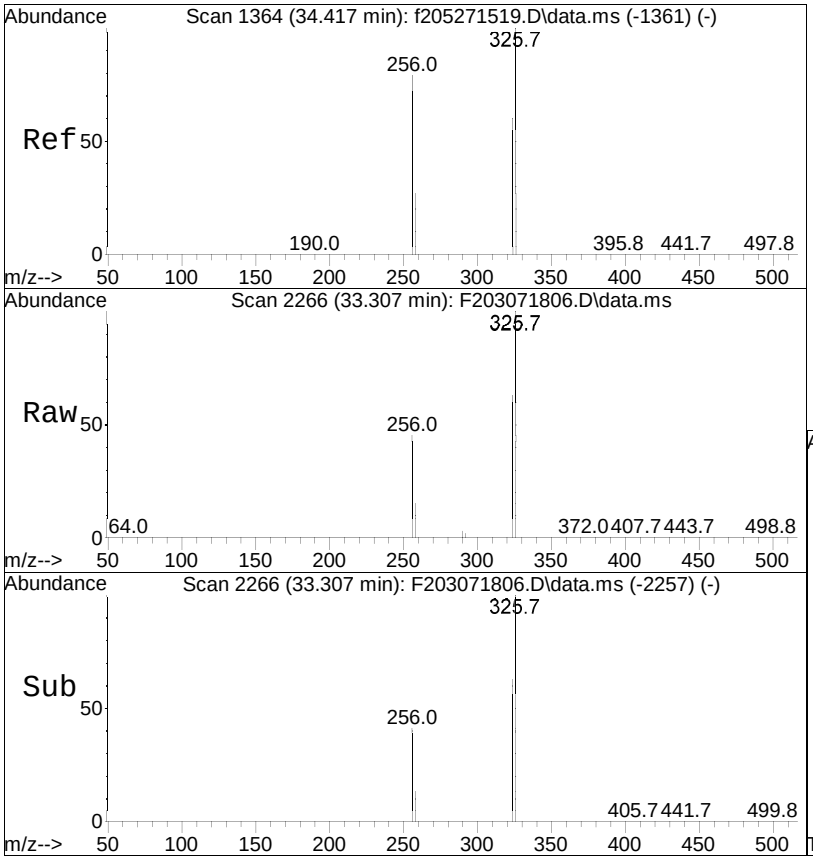


#94
Cl4-BZ#56
Concen: 83.45 ng/mL
RT: 33.208 min Scan# 2260
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 120480

Ion	Ratio	Lower	Upper
292	100		
290	78.3	63.5	95.3

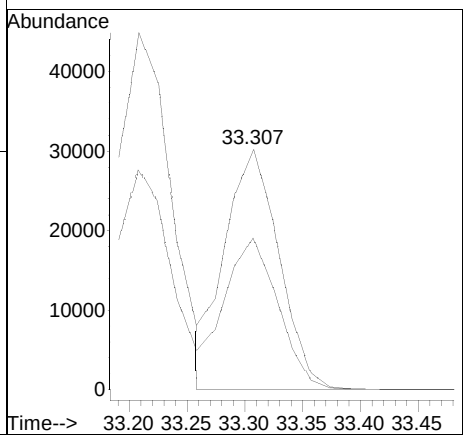


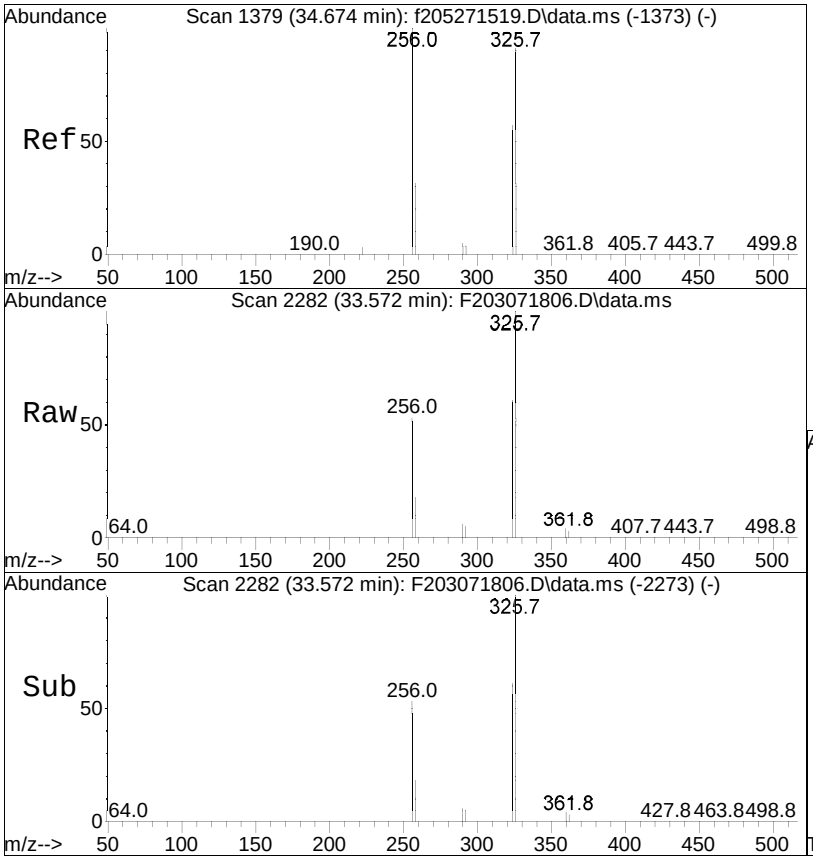


#95
Cl5-BZ#113
Concen: 89.30 ng/mL
RT: 33.307 min Scan# 2266
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 97459

Ion	Ratio	Lower	Upper
326	100		
324	62.6	50.5	75.7

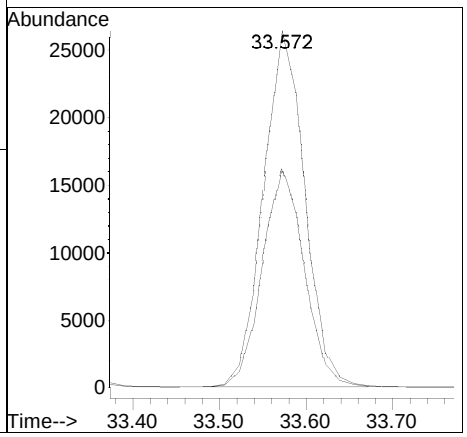


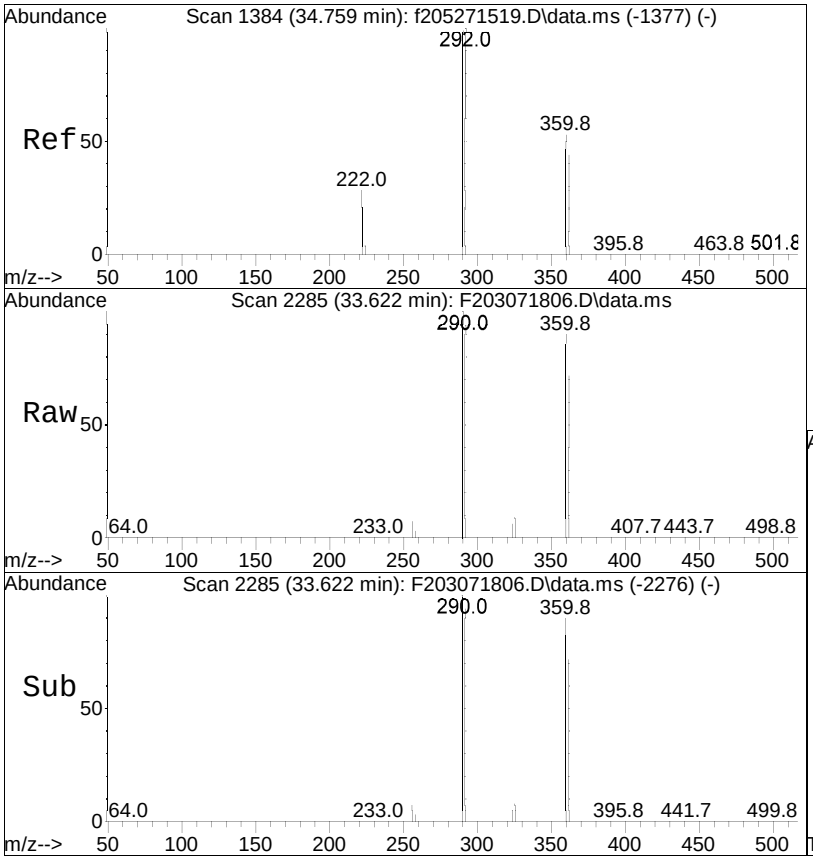


#96
Cl5-BZ#99
Concen: 82.89 ng/mL
RT: 33.572 min Scan# 2282
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 86903

Ion	Ratio	Lower	Upper
326	100		
324	62.4	50.5	75.7

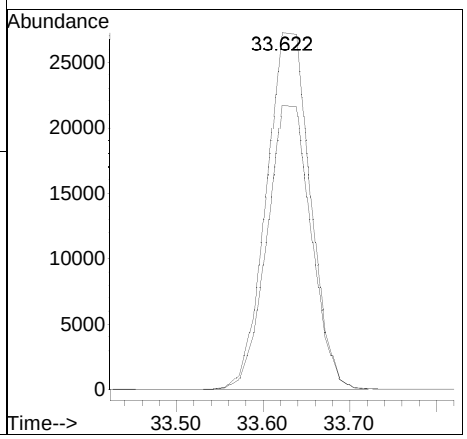


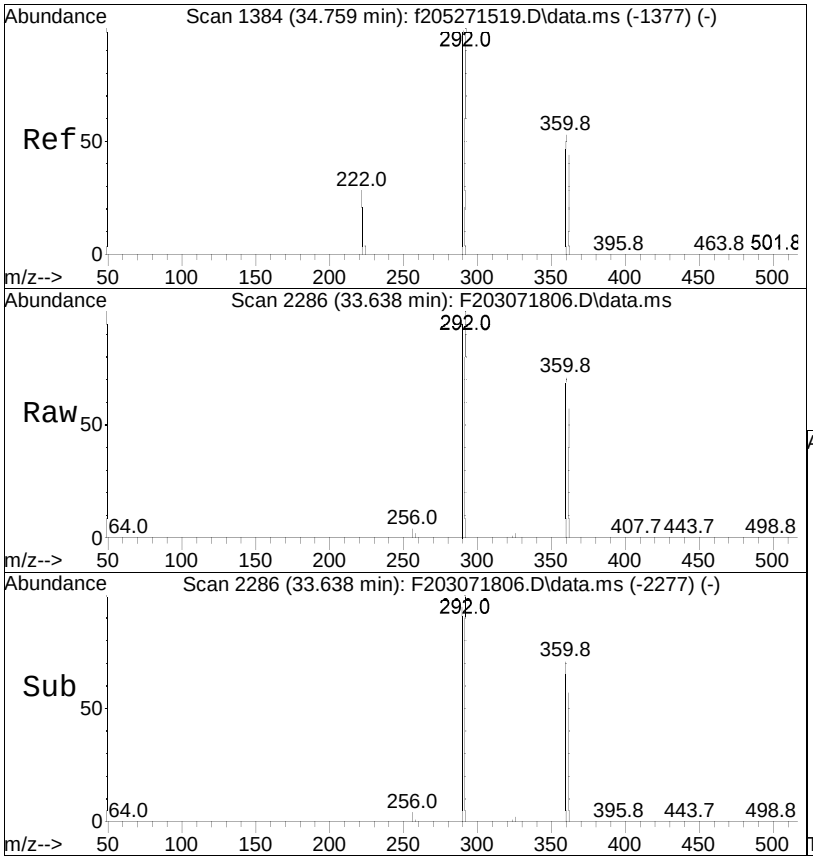


#97
Cl6-BZ#150
Concen: 82.60 ng/mL
RT: 33.622 min Scan# 2285
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 96020

Ion	Ratio	Lower	Upper
360	100		
362	79.7	65.2	97.8

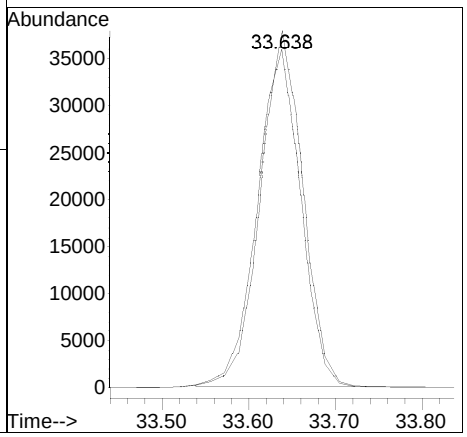


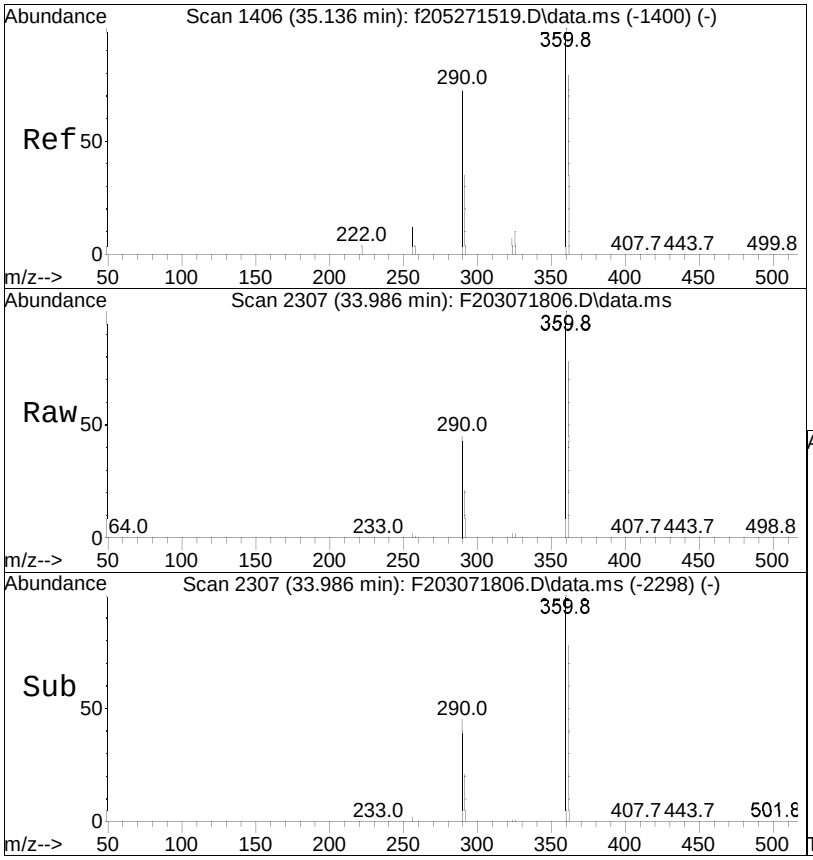


#98
Cl4-BZ#60
Concen: 83.22 ng/mL
RT: 33.638 min Scan# 2286
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 128378

Ion	Ratio	Lower	Upper
292	100		
290	97.5	79.1	118.7

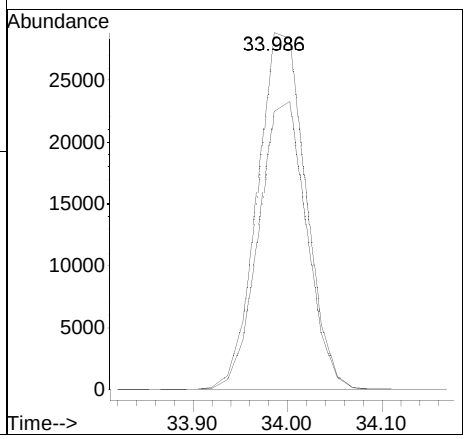


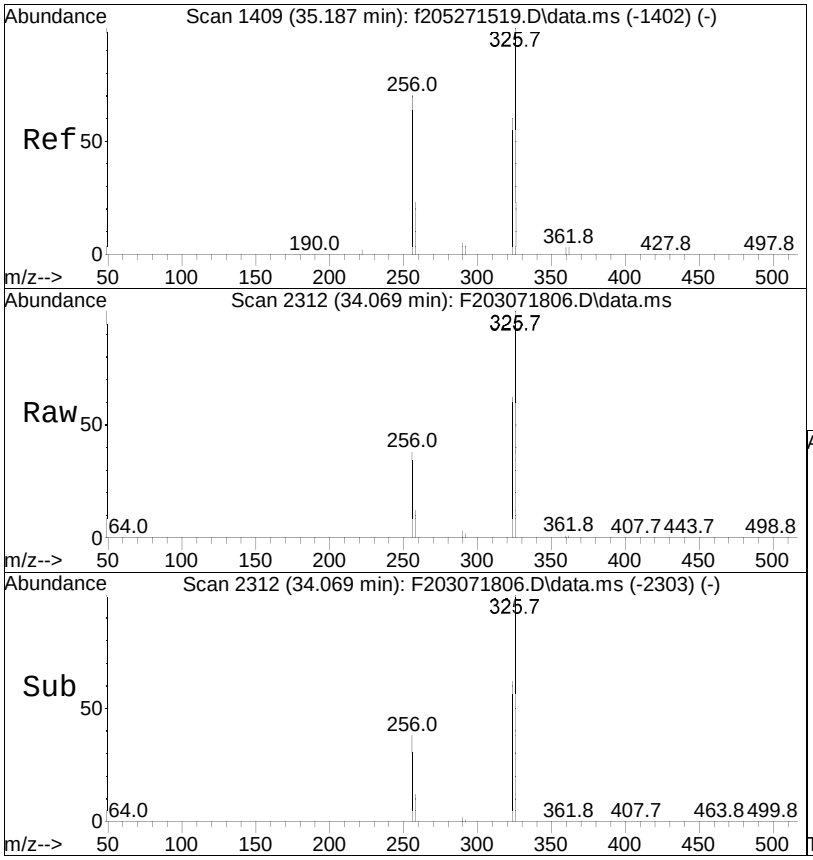


#99
Cl6-BZ#152
Concen: 81.96 ng/mL
RT: 33.986 min Scan# 2307
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 102142

Ion	Ratio	Lower	Upper
360	100		
362	80.0	64.2	96.4

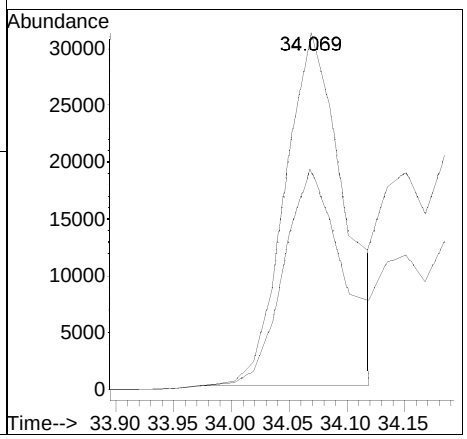


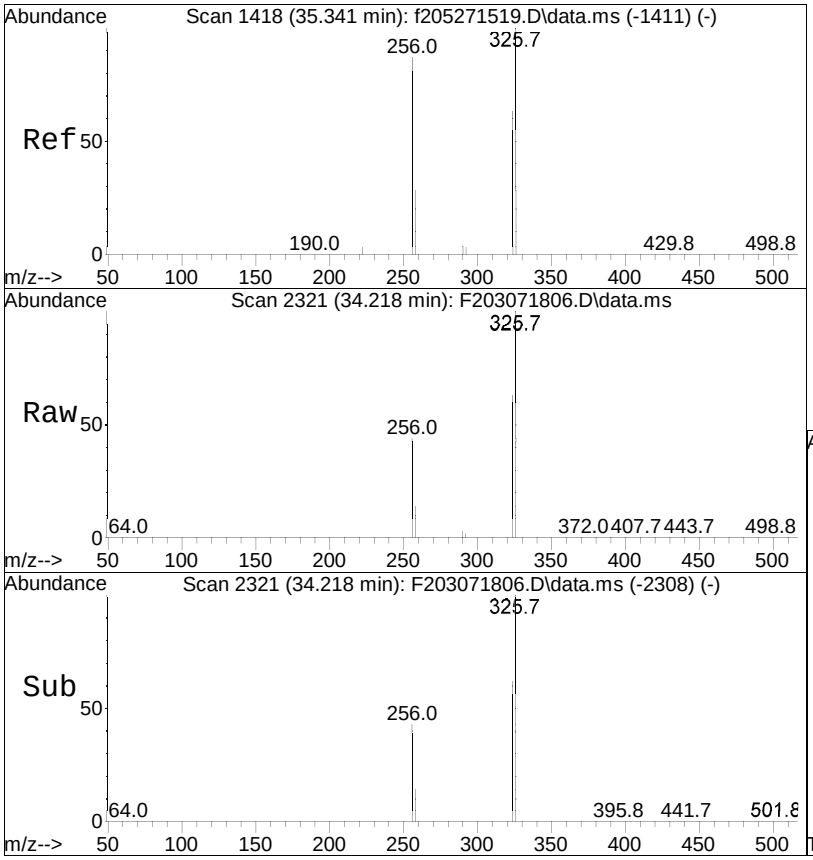


#100
Cl5-BZ#119
Concen: 88.98 ng/mL
RT: 34.069 min Scan# 2312
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 112999

Ion	Ratio	Lower	Upper
326	100		
324	62.0	47.9	71.9

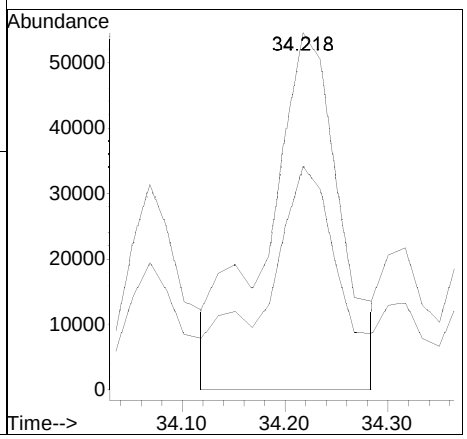


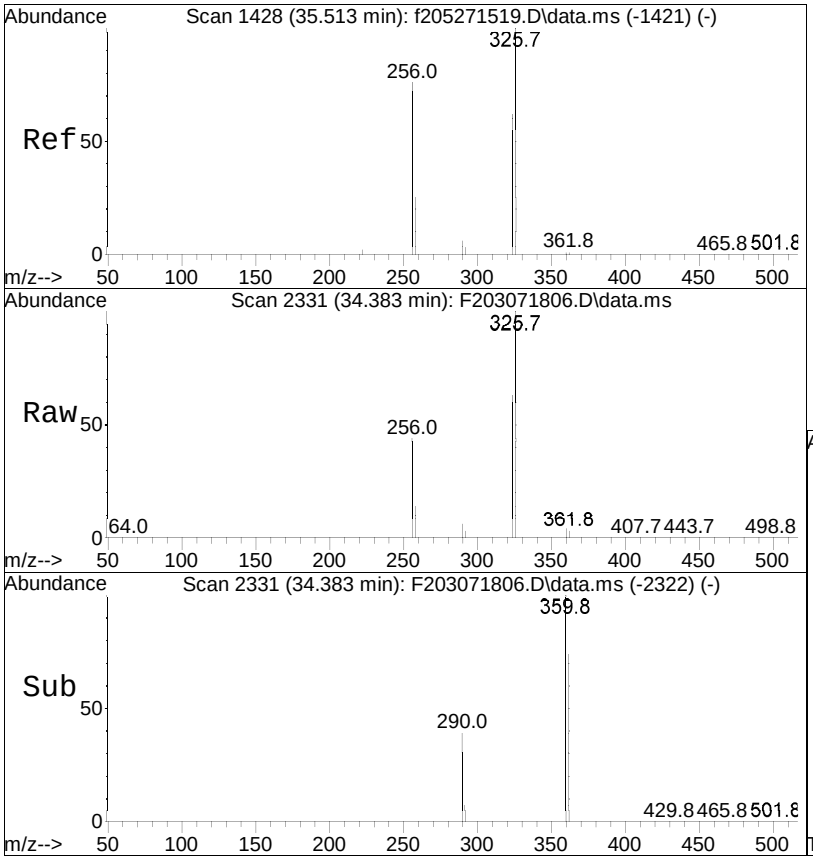


#101
Cl5-BZ#83/#125/#112
Concen: 259.21 ng/mL M4
RT: 34.218 min Scan# 2321
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 273938

Ion	Ratio	Lower	Upper
326	100		
324	33.7	49.5	74.3#

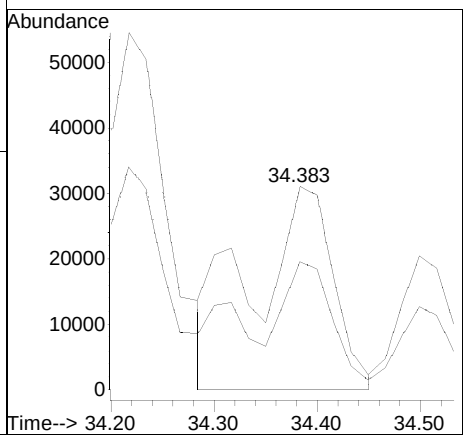


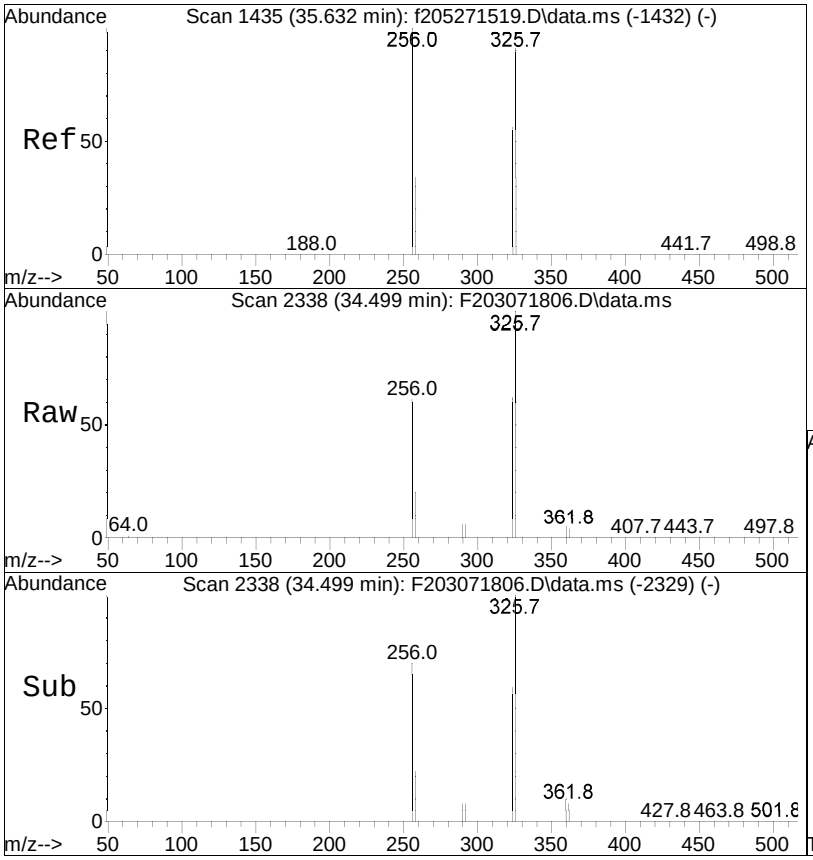


#102
Cl5-BZ#86/#109
Concen: 161.71 ng/mL M4
RT: 34.383 min Scan# 2331
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 169909

Ion	Ratio	Lower	Upper
326	100		
324	33.5	49.7	74.5#

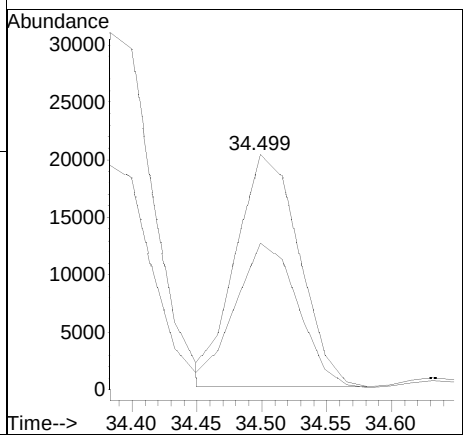


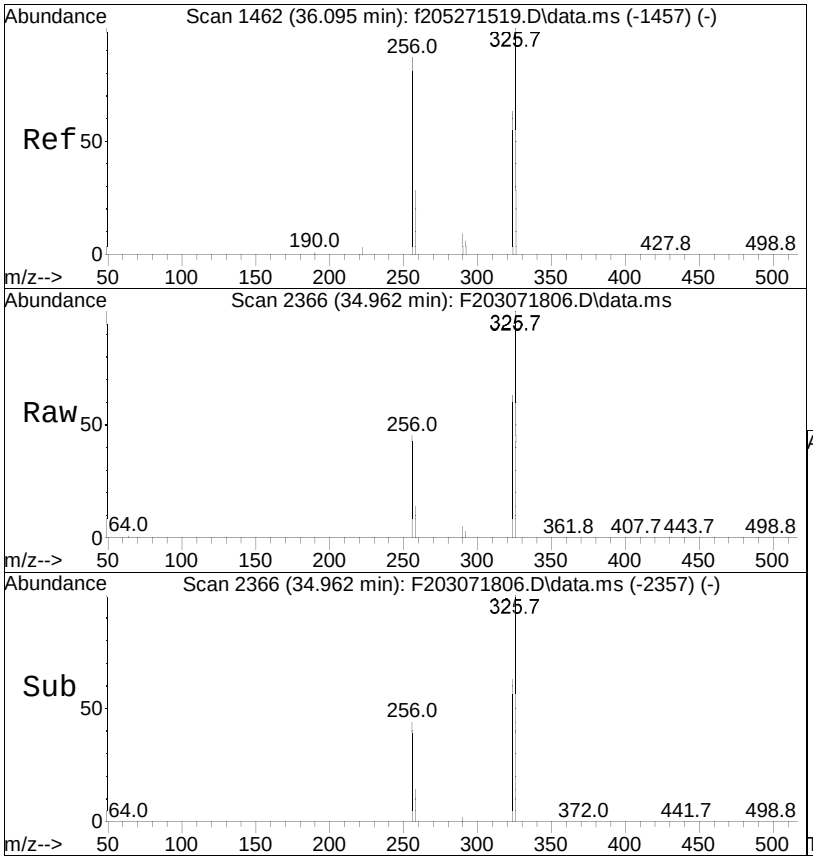


#103
Cl5-BZ#97
Concen: 87.29 ng/mL
RT: 34.499 min Scan# 2338
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 68372

Ion	Ratio	Lower	Upper
326	100		
324	61.8	51.2	76.8

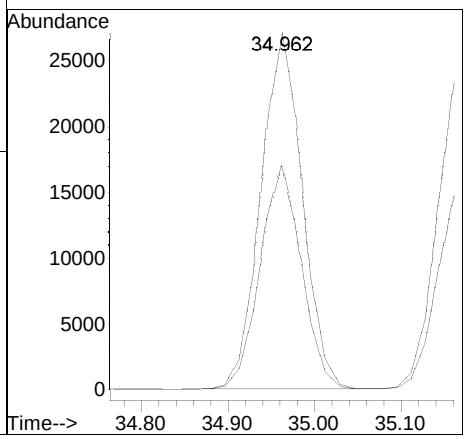


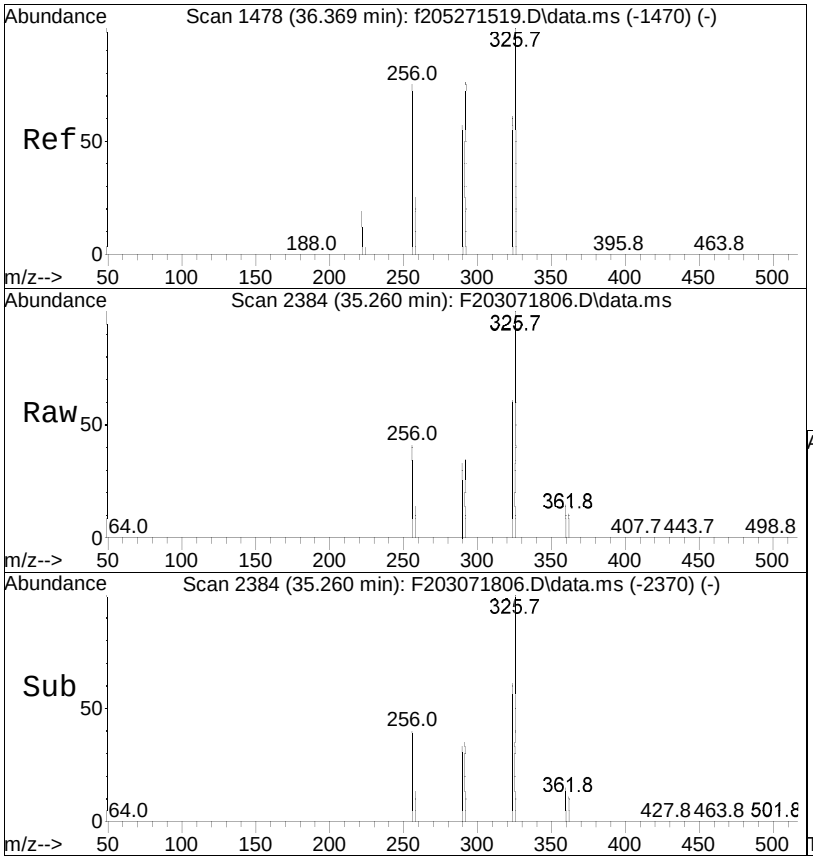


#104
Cl5-BZ#116
Concen: 82.94 ng/mL
RT: 34.962 min Scan# 2366
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 89650

Ion	Ratio	Lower	Upper
326	100		
324	62.6	49.0	73.6

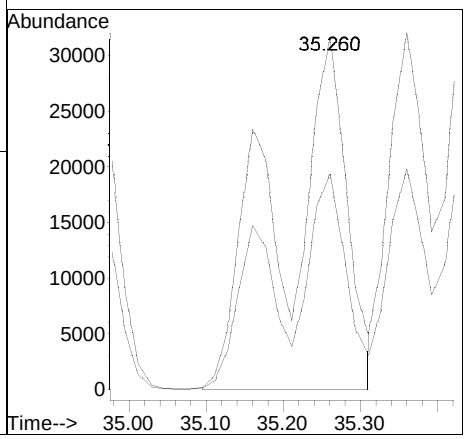


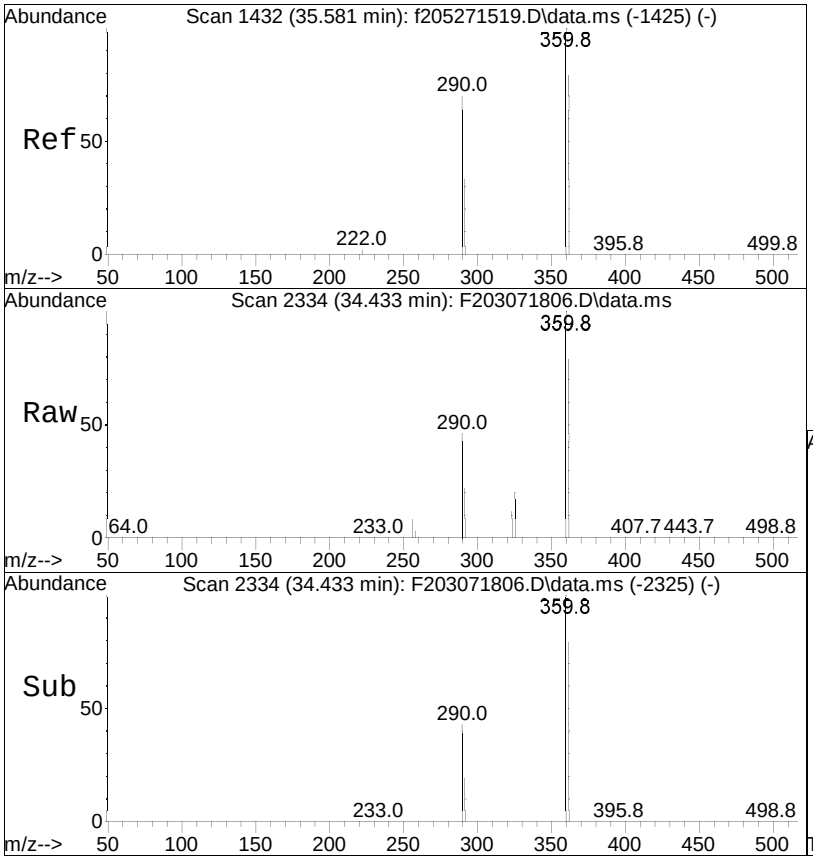


#105
Cl5-BZ#87/#111
Concen: 177.84 ng/mL M4
RT: 35.260 min Scan# 2384
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 187920

Ion	Ratio	Lower	Upper
326	100		
324	26.7	50.6	75.8#

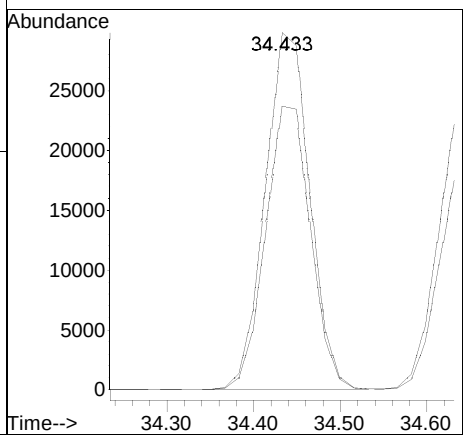


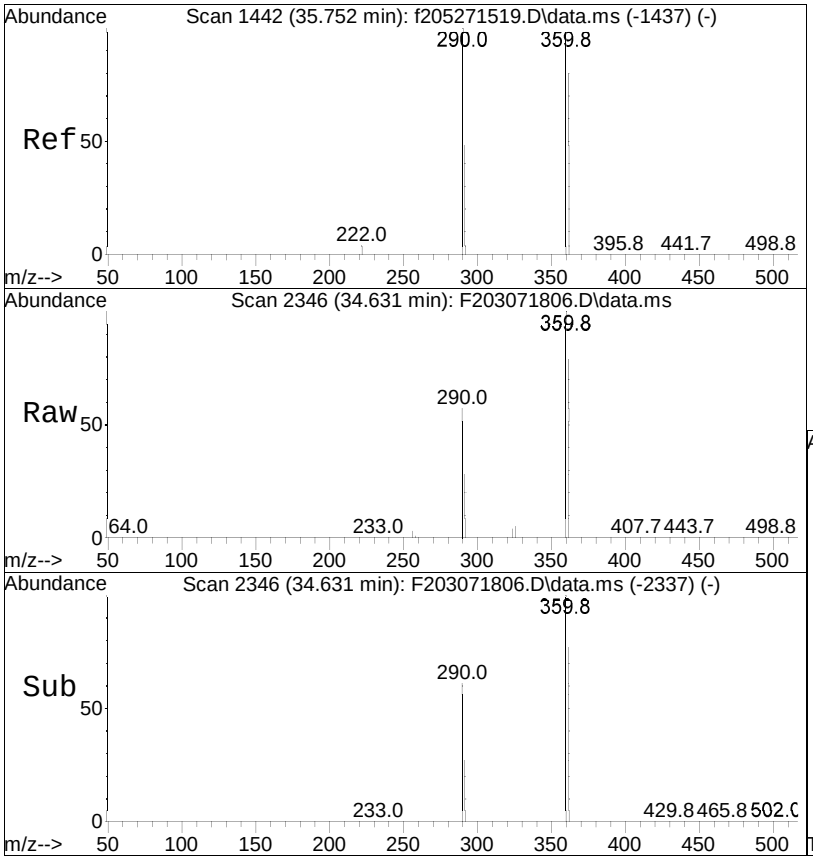


#108
Cl6-BZ#145
Concen: 82.71 ng/mL
RT: 34.433 min Scan# 2334
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 106411

Ion	Ratio	Lower	Upper
360	100		
362	80.2	64.9	97.3

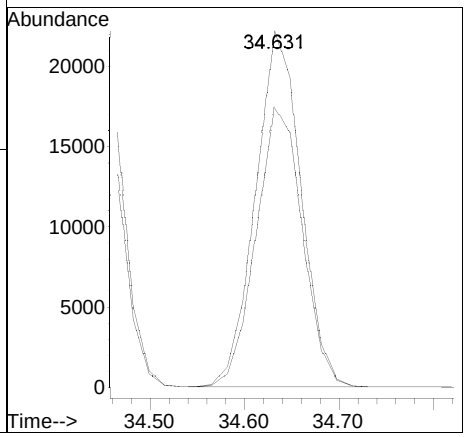


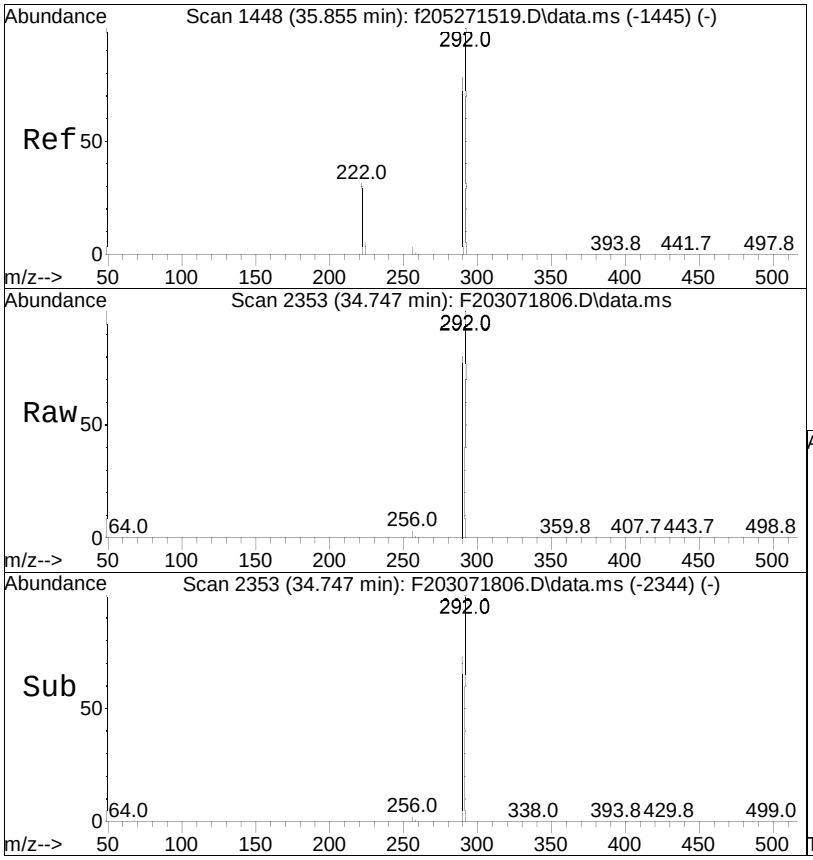


#109
Cl6-BZ#148
Concen: 83.96 ng/mL
RT: 34.631 min Scan# 2346
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 73801

Ion	Ratio	Lower	Upper
360	100		
362	80.1	63.3	94.9

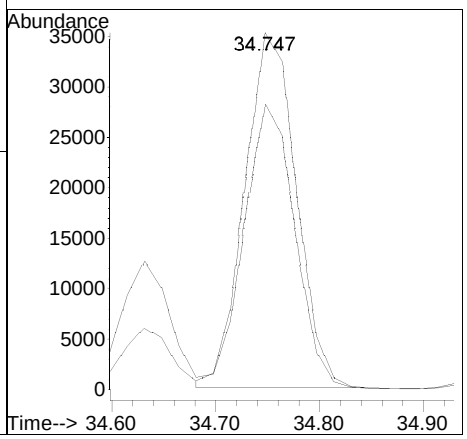


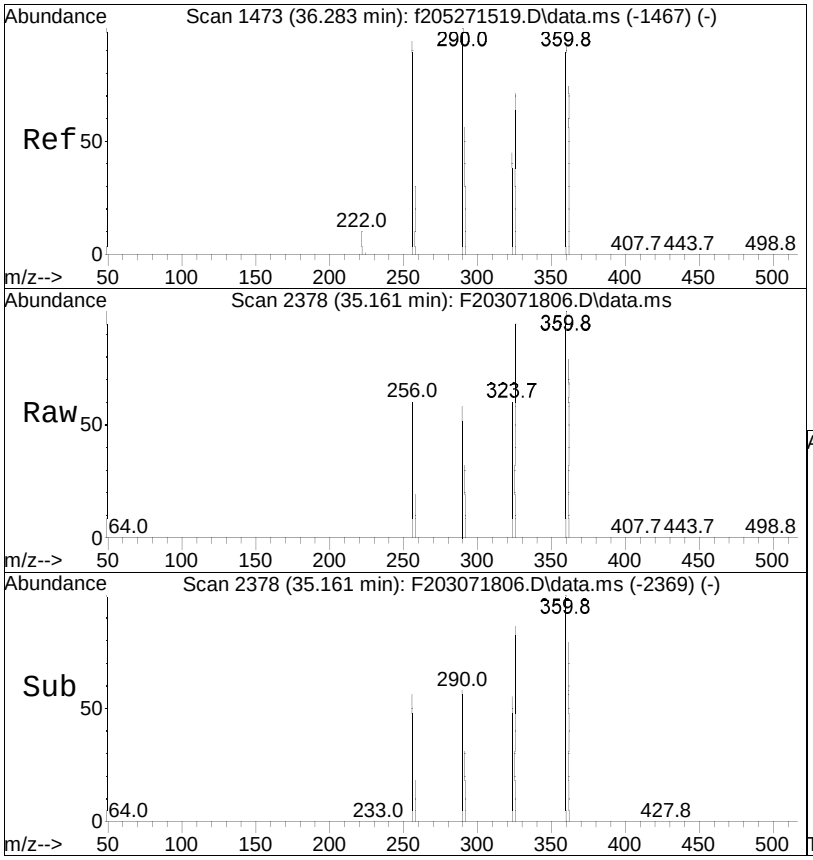


#110
Cl4-BZ#79
Concen: 85.12 ng/mL
RT: 34.747 min Scan# 2353
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 120964

Ion	Ratio	Lower	Upper
292	100		
290	78.9	62.6	93.8

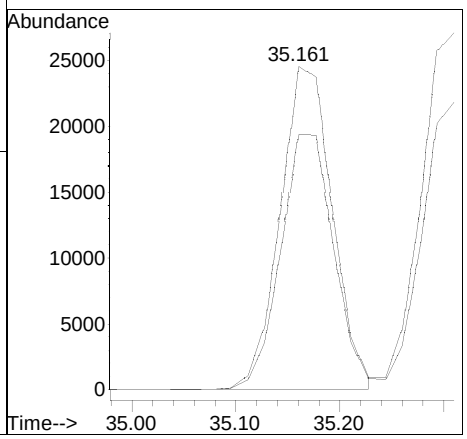


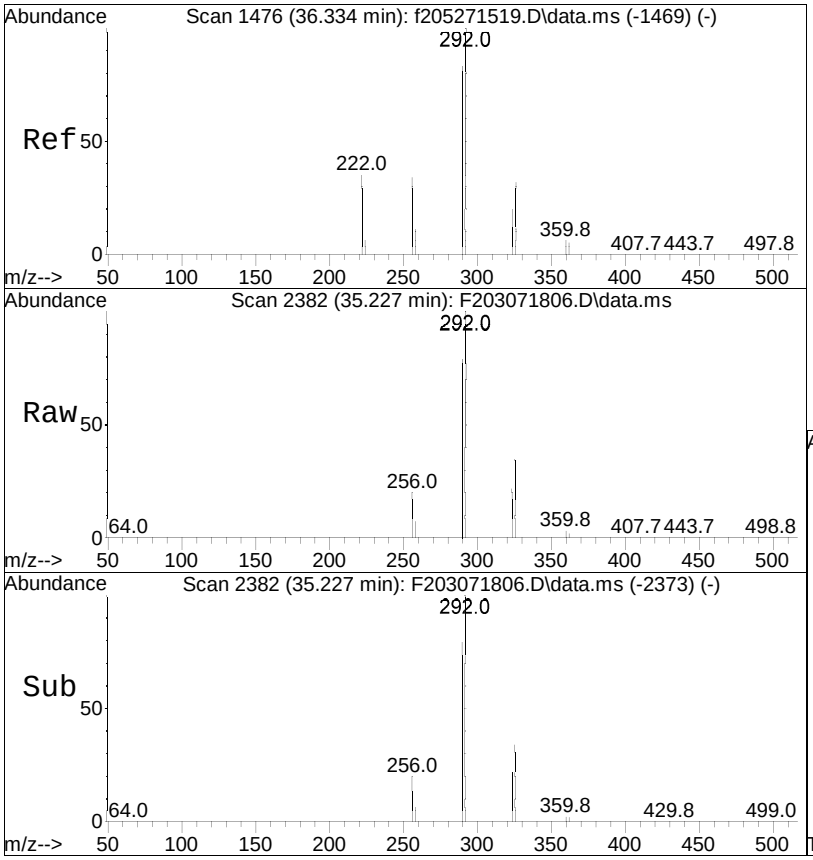


#111
Cl6-BZ#154-Cal
Concen: 84.11 ng/mL
RT: 35.161 min Scan# 2378
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 85449

Ion	Ratio	Lower	Upper
360	100		
362	81.2	64.2	96.4

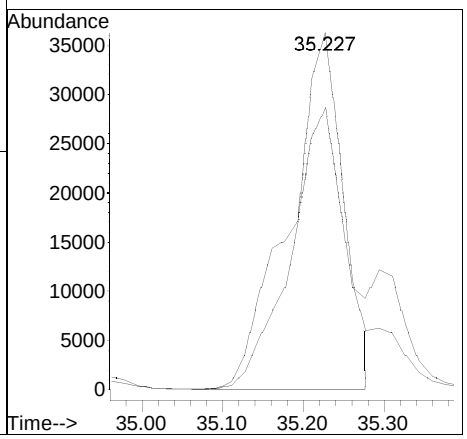


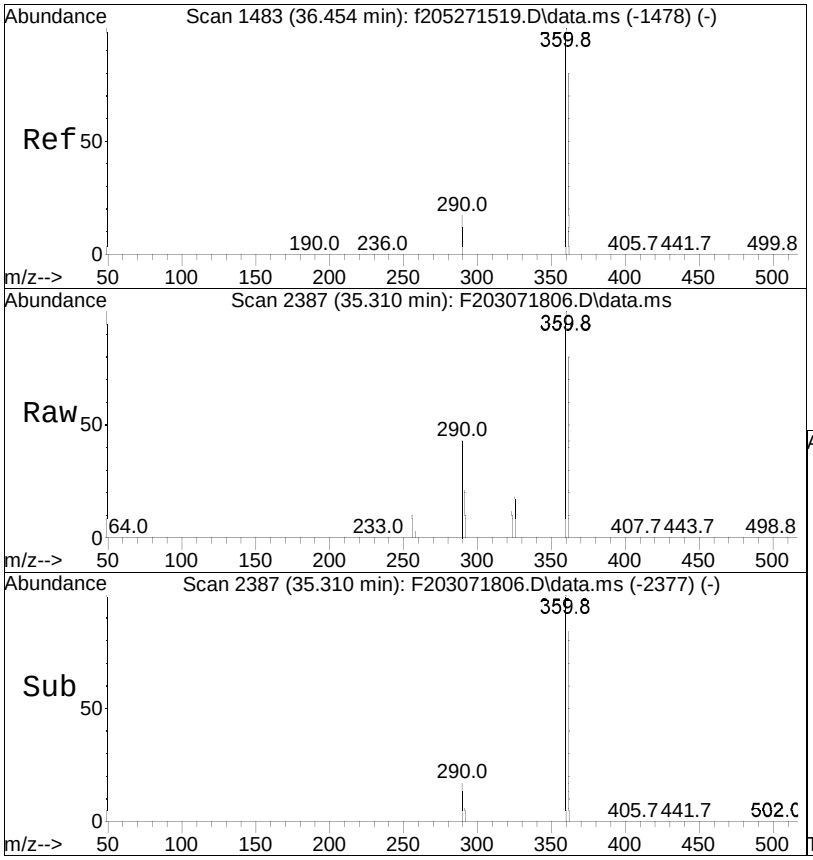


#114
Cl4-BZ#78
Concen: 85.78 ng/mL M4
RT: 35.227 min Scan# 2382
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 150891

Ion	Ratio	Lower	Upper
292	100		
290	77.3	65.0	97.6

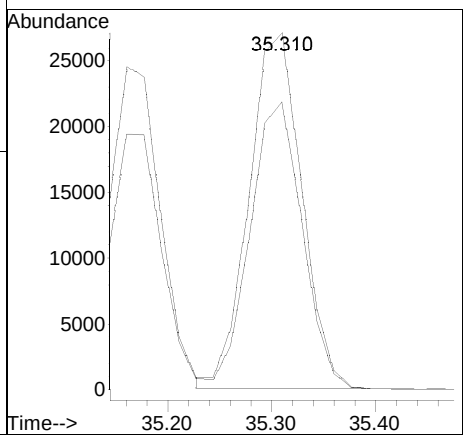


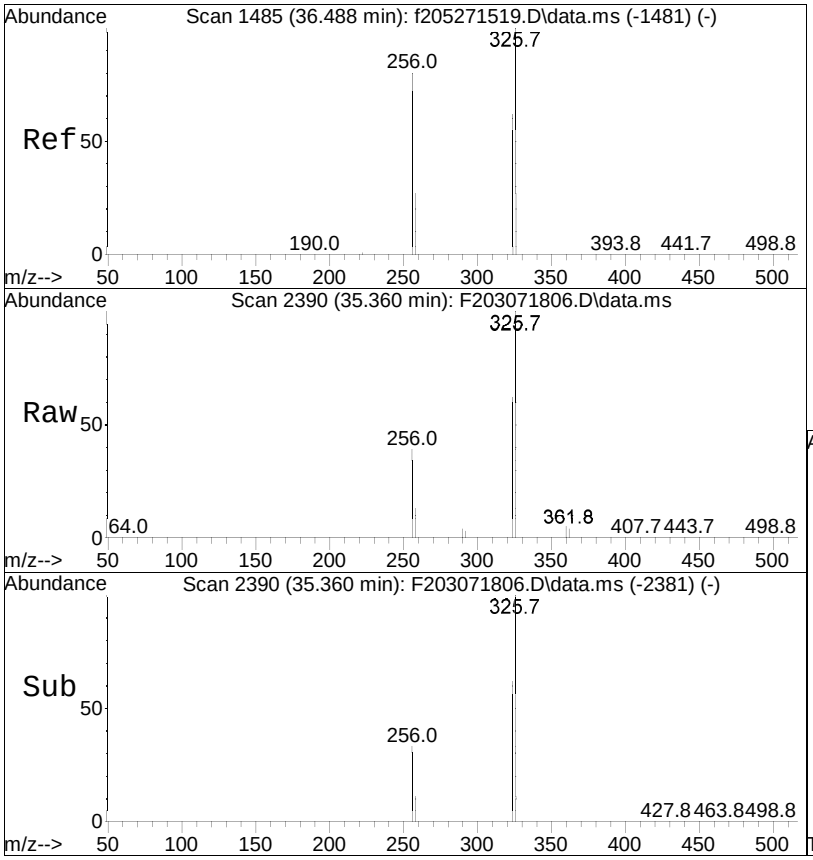


#115
Cl6-BZ#136
Concen: 84.53 ng/mL
RT: 35.310 min Scan# 2387
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 95201

Ion	Ratio	Lower	Upper
360	100		
362	79.3	64.9	97.3

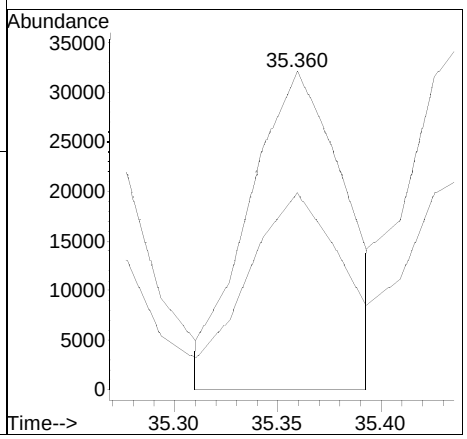


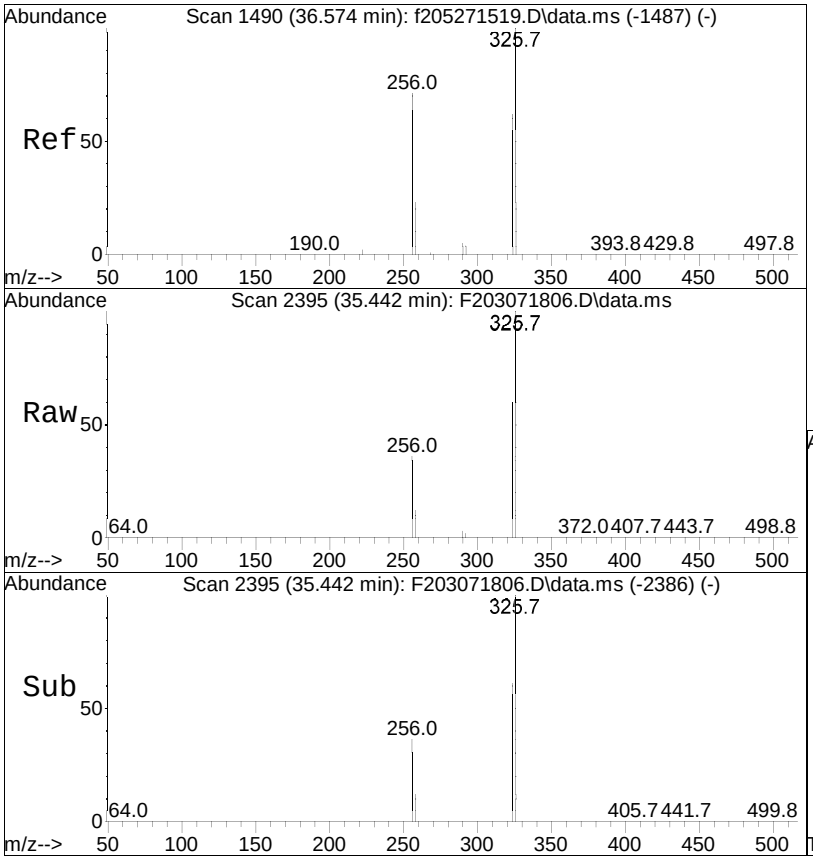


#116
Cl5-BZ#117
Concen: 78.78 ng/mL M4
RT: 35.360 min Scan# 2390
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 105365

Ion	Ratio	Lower	Upper
326	100		
324	46.9	49.1	73.7#

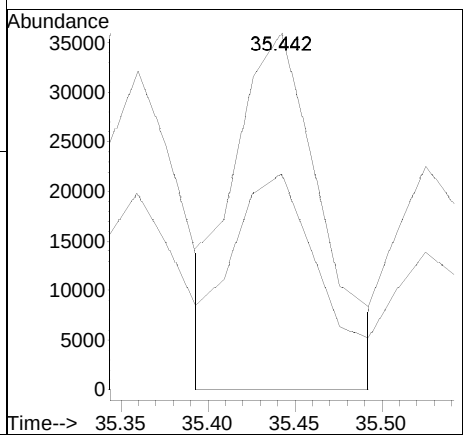


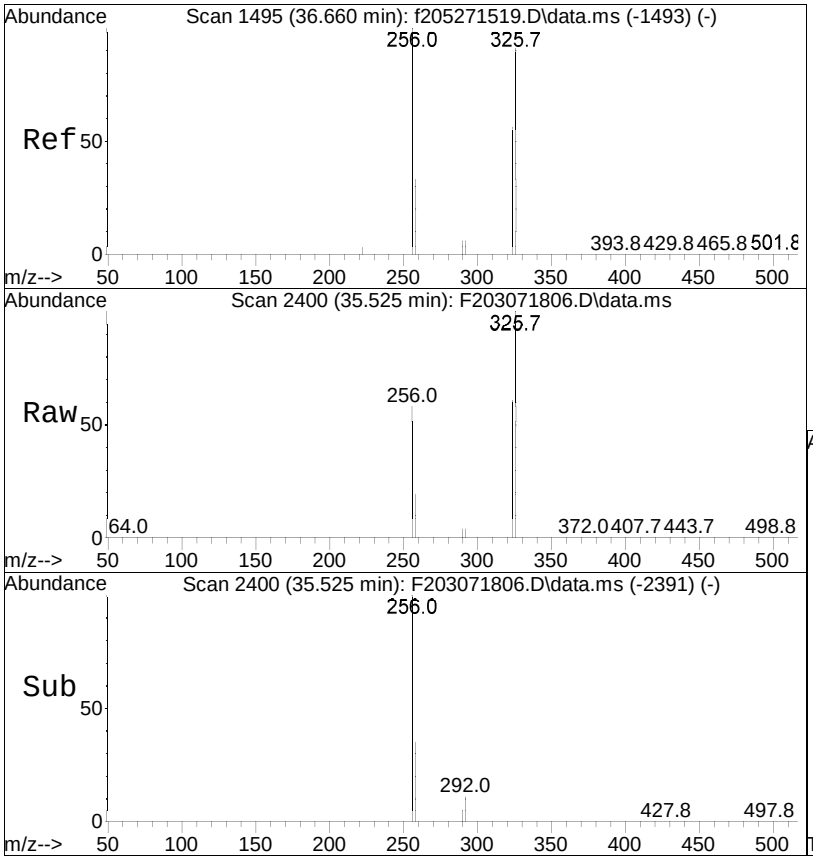


#117
Cl5-BZ#115
Concen: 95.57 ng/mL M4
RT: 35.442 min Scan# 2395
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 126655

Ion	Ratio	Lower	Upper
326	100		
324	37.3	48.7	73.1#

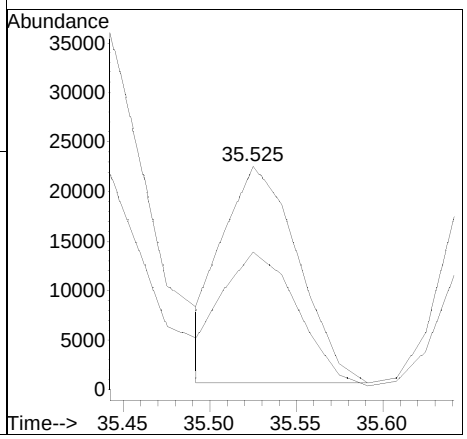


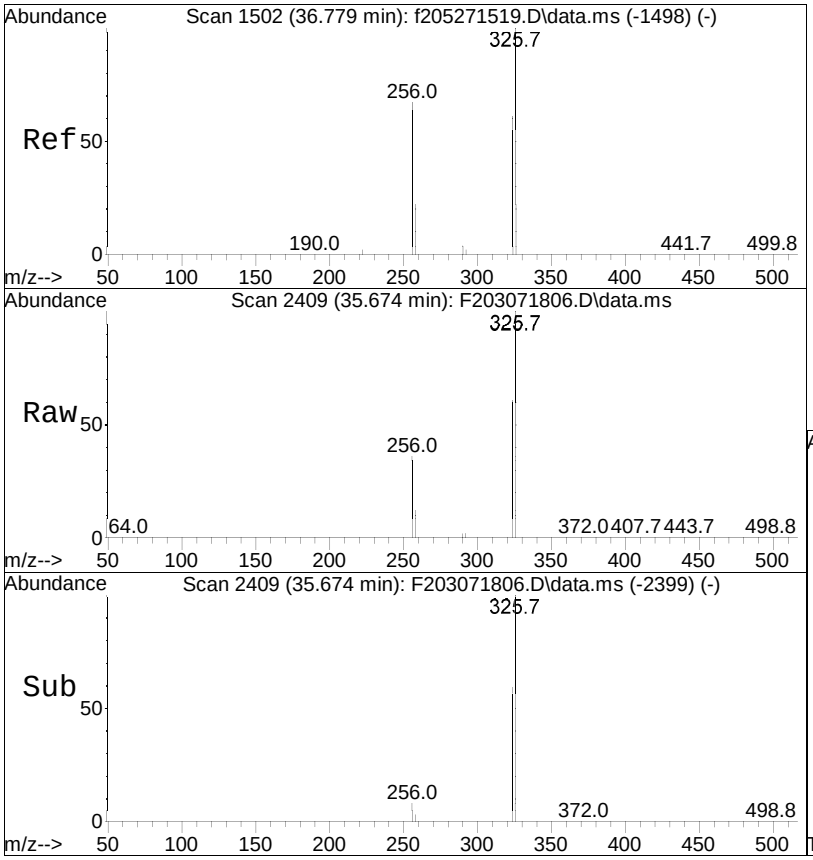


#118
Cl5-BZ#85
Concen: 78.88 ng/mL
RT: 35.525 min Scan# 2400
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 65293

Ion	Ratio	Lower	Upper
326	100		
324	61.8	49.6	74.4

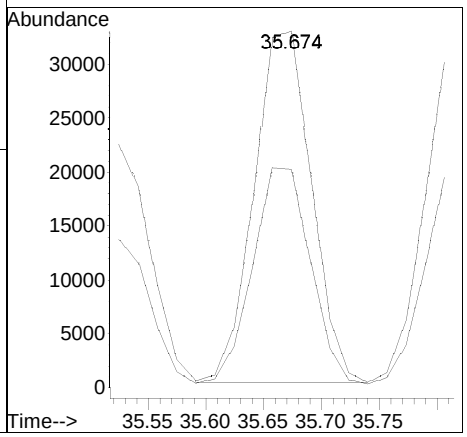


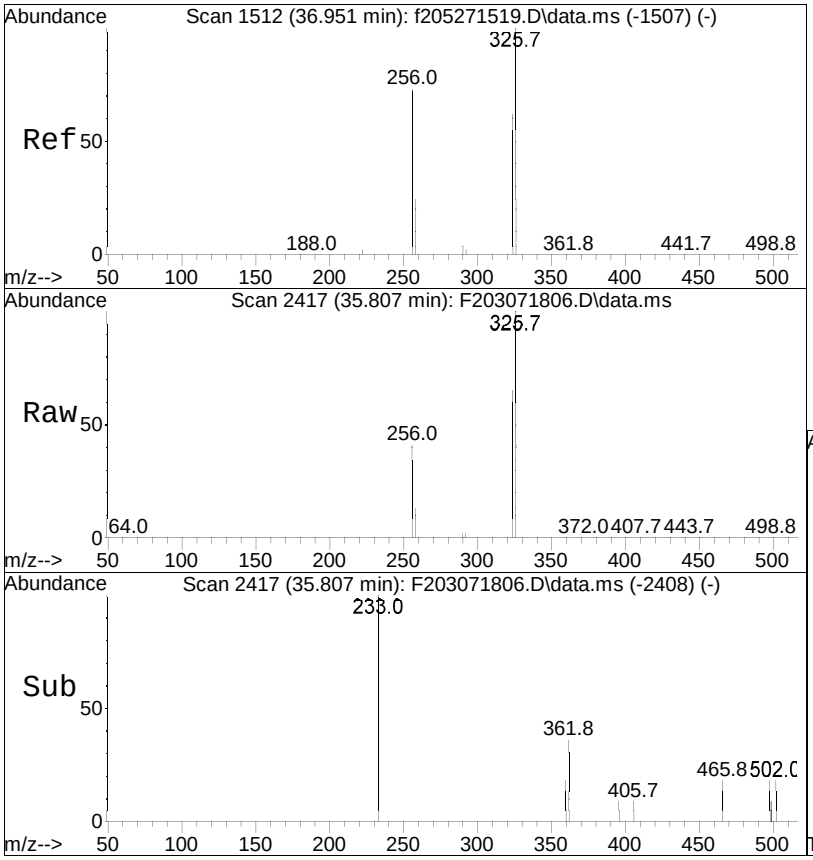


#119
Cl5-BZ#120
Concen: 87.03 ng/mL
RT: 35.674 min Scan# 2409
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 112744

Ion	Ratio	Lower	Upper
326	100		
324	62.0	49.7	74.5

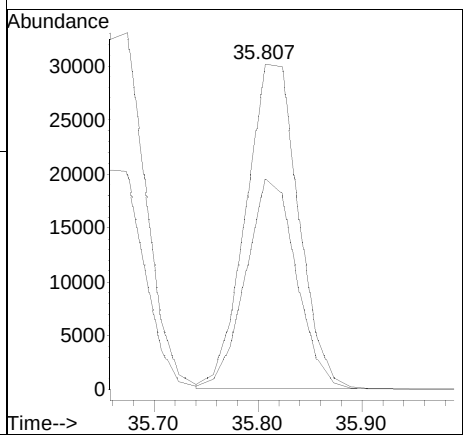


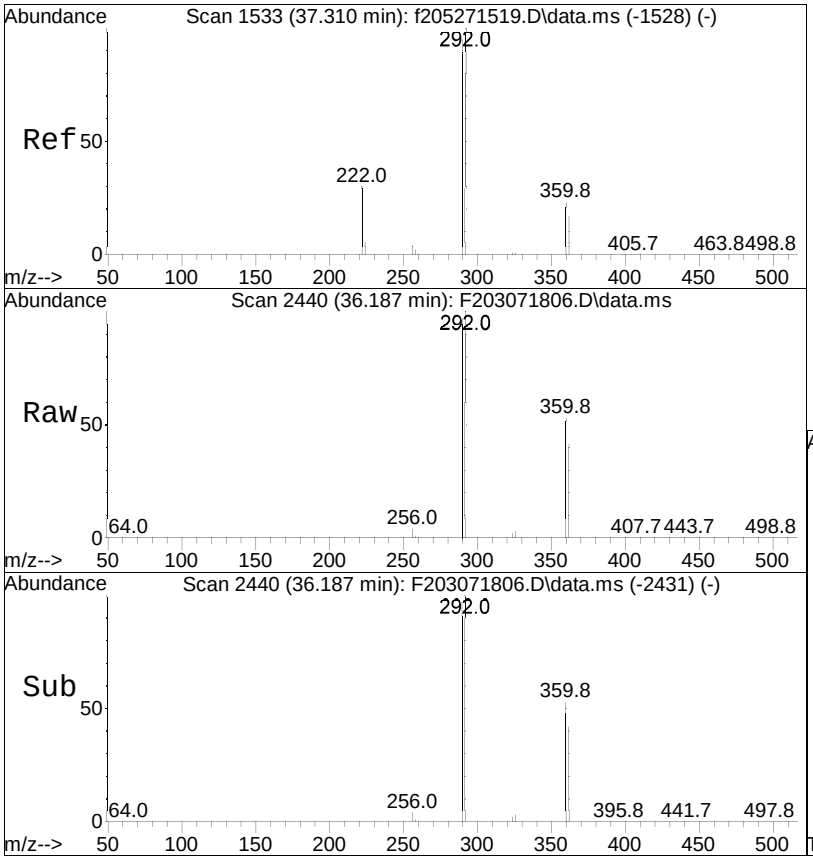


#120
Cl5-BZ#110
Concen: 84.41 ng/mL
RT: 35.807 min Scan# 2417
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 105552

Ion	Ratio	Lower	Upper
326	100		
324	62.0	49.4	74.2

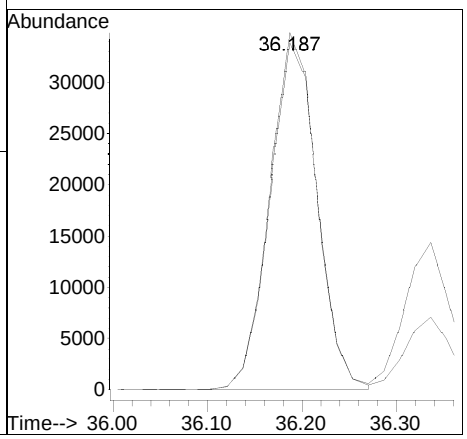


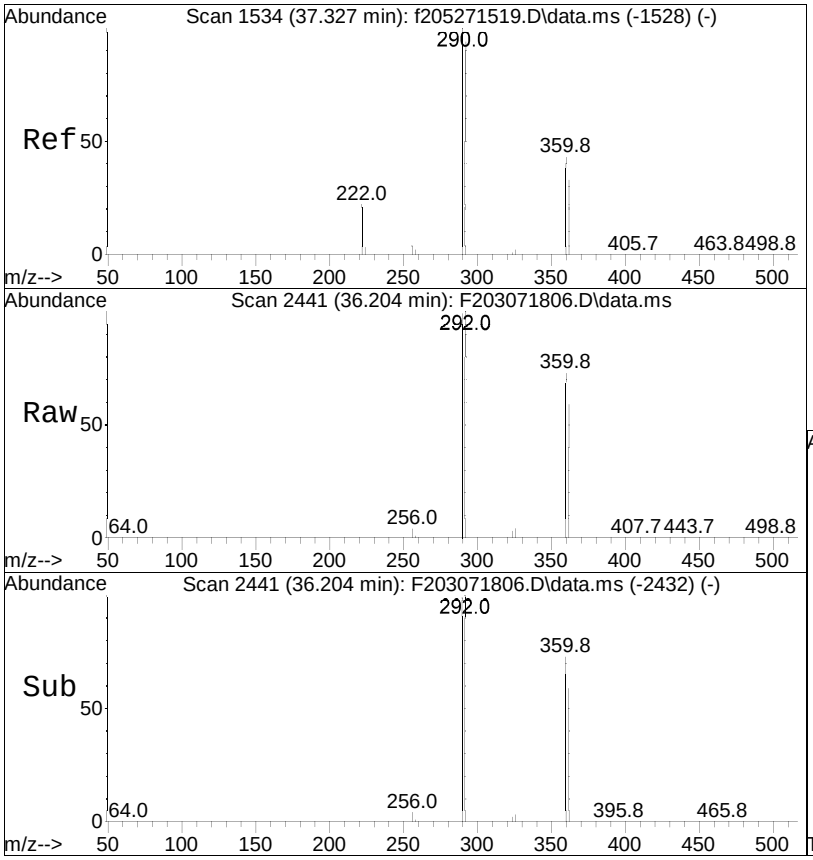


#121
Cl4-BZ#81
Concen: 83.85 ng/mL
RT: 36.187 min Scan# 2440
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 119617

Ion	Ratio	Lower	Upper
292	100		
290	97.4	78.3	117.5

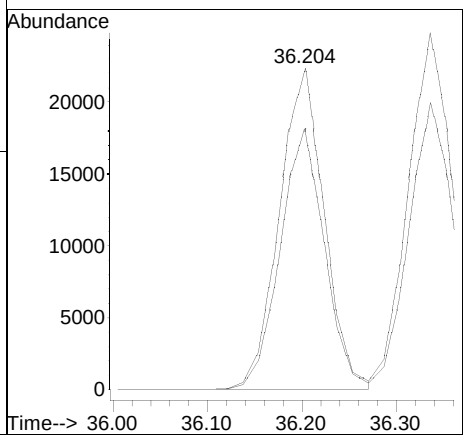


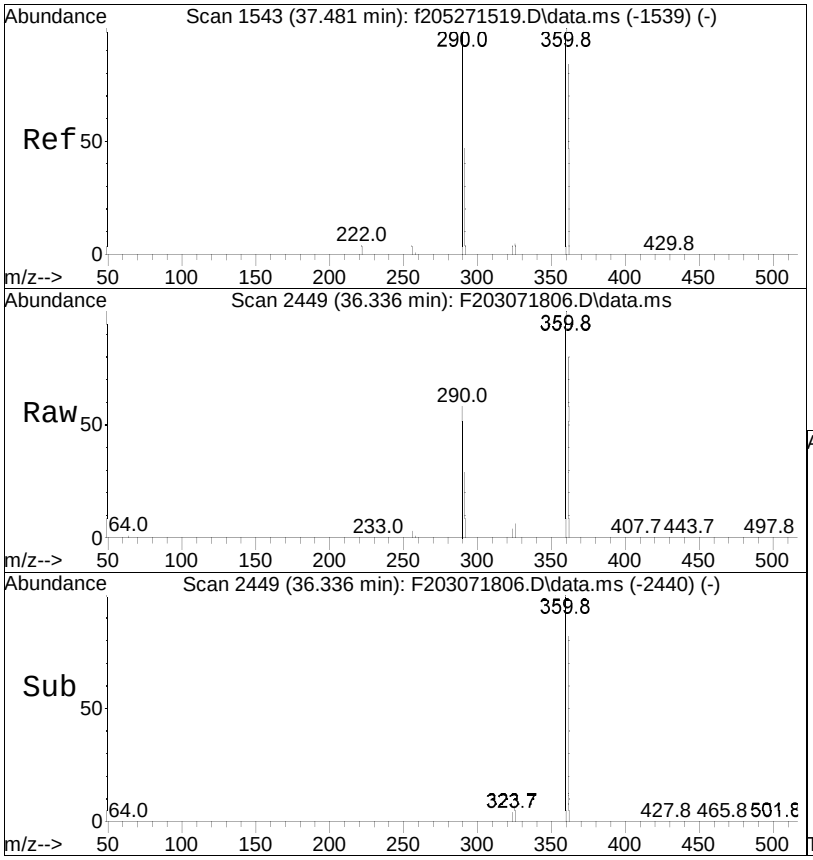


#123
Cl6-BZ#151
Concen: 84.92 ng/mL
RT: 36.204 min Scan# 2441
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 73509

Ion	Ratio	Lower	Upper
360	100		
362	80.2	62.7	94.1

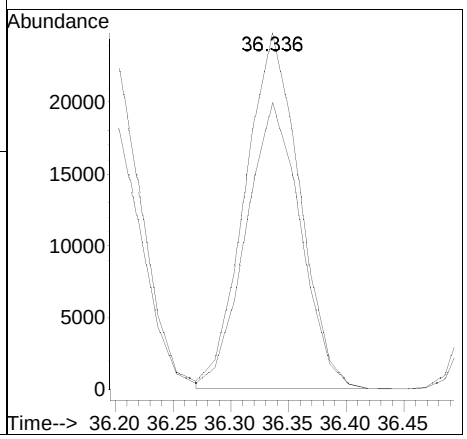


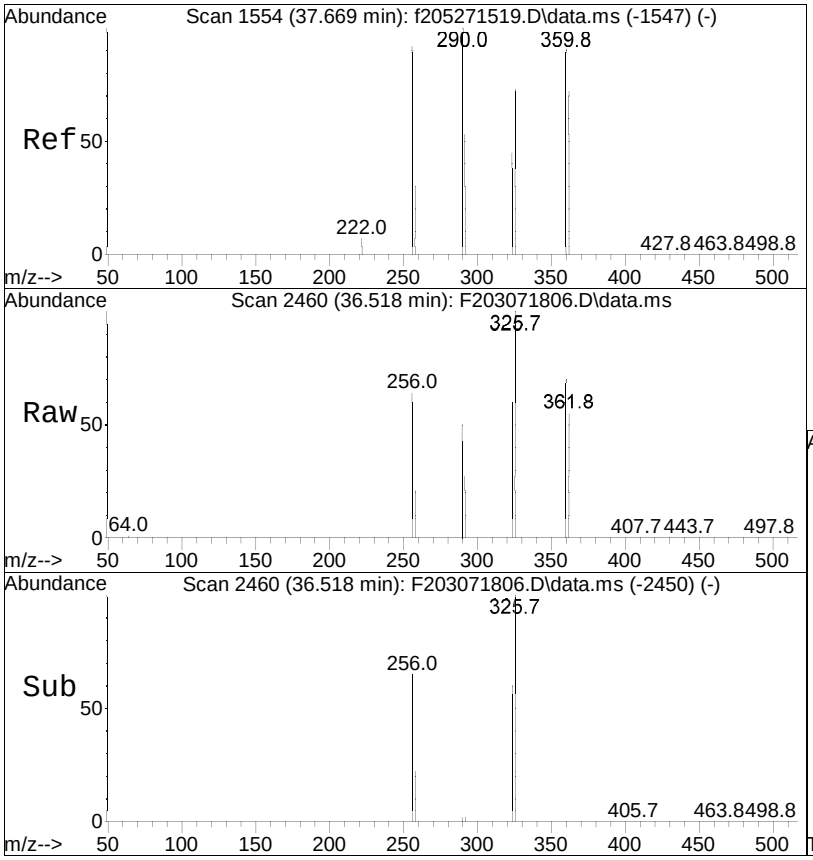


#124
Cl6-BZ#135
Concen: 88.56 ng/mL
RT: 36.336 min Scan# 2449
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 80859

Ion	Ratio	Lower	Upper
360	100		
362	80.9	64.3	96.5

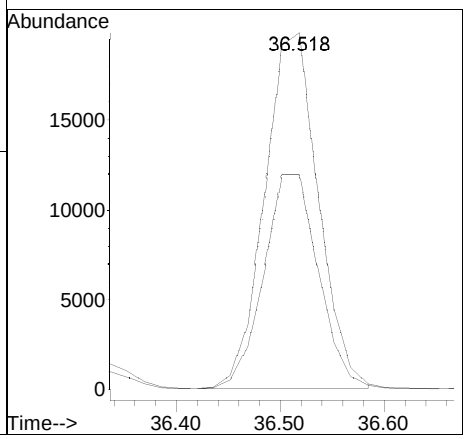


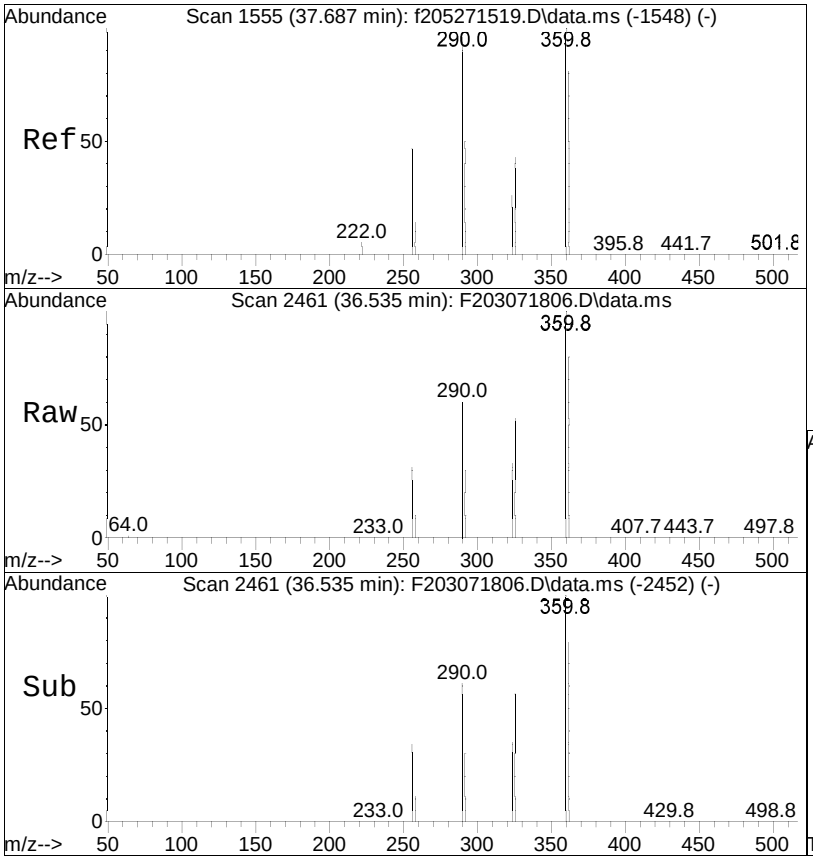


#125
Cl5-BZ#82
Concen: 90.48 ng/mL
RT: 36.518 min Scan# 2460
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 70661

Ion	Ratio	Lower	Upper
326	100		
324	61.4	48.7	73.1

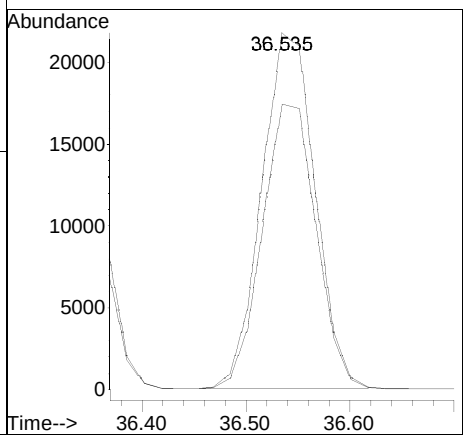


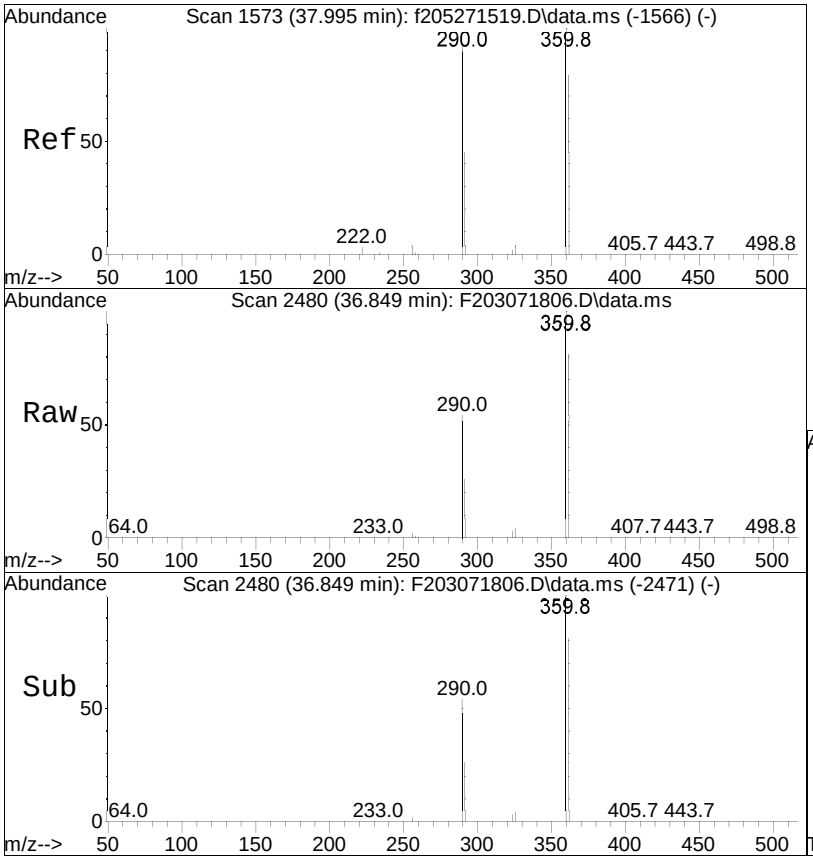


#126
Cl6-BZ#144
Concen: 87.04 ng/mL
RT: 36.535 min Scan# 2461
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 77472

Ion	Ratio	Lower	Upper
360	100		
362	80.5	64.8	97.2

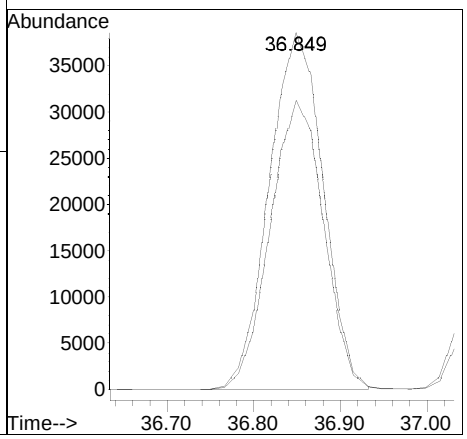


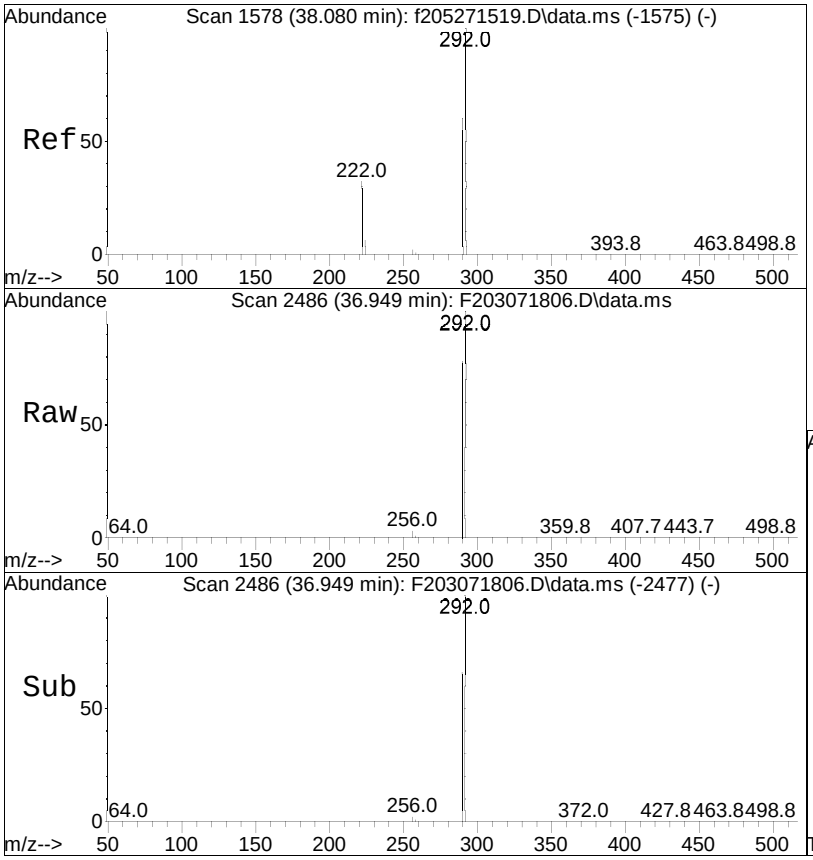


#127
Cl6-BZ#147/#149
Concen: 175.02 ng/mL
RT: 36.849 min Scan# 2480
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 166328

Ion	Ratio	Lower	Upper
360	100		
362	80.1	62.6	94.0

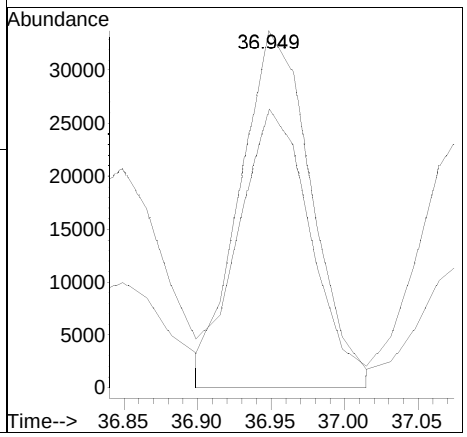


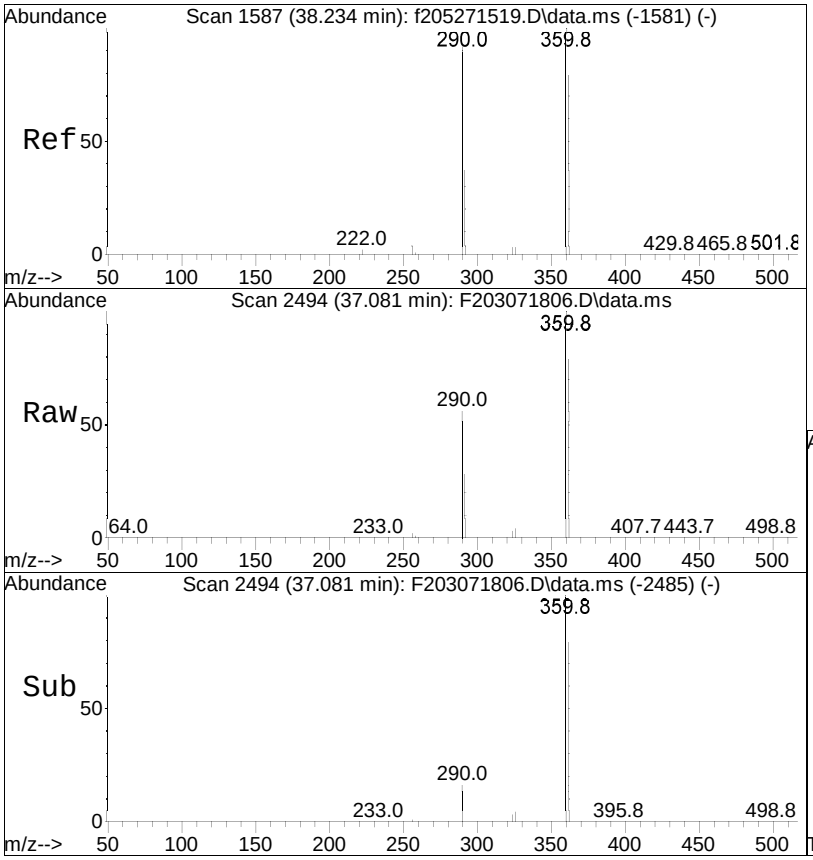


#128
Cl4-BZ#77-RTW
Concen: 87.71 ng/mL M4
RT: 36.949 min Scan# 2486
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:292 Resp: 113912

Ion	Ratio	Lower	Upper
292	100		
290	78.0	62.0	93.0

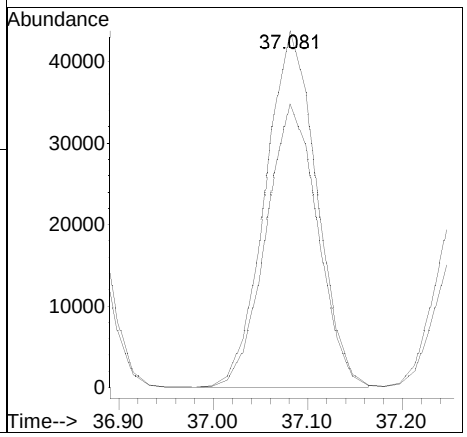


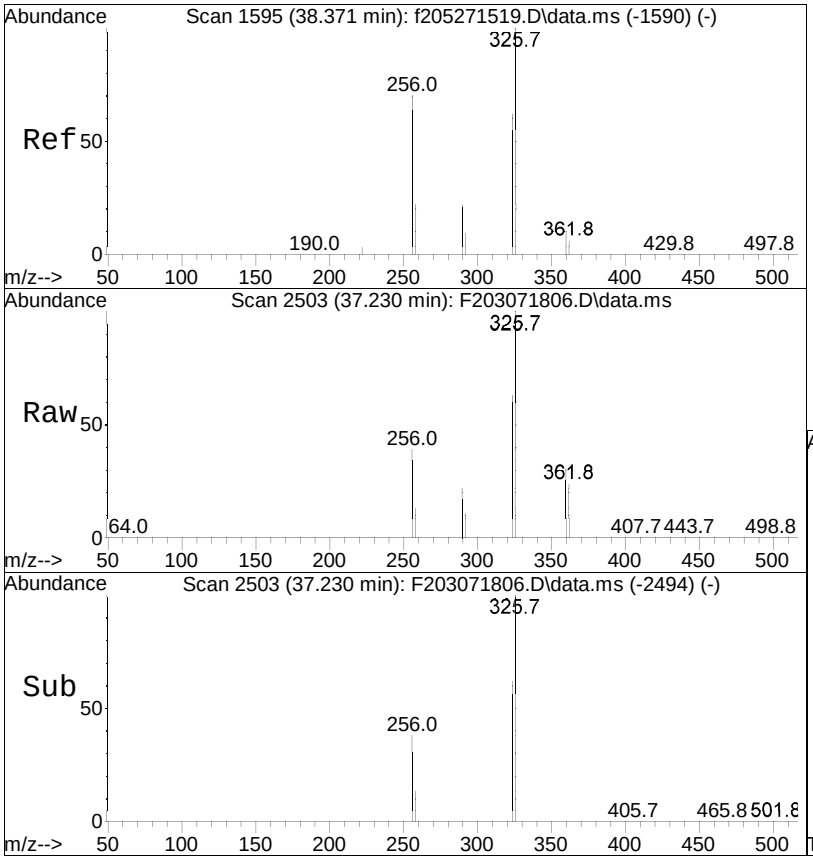


#129
Cl6-BZ#143/#139
Concen: 180.09 ng/mL
RT: 37.081 min Scan# 2494
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 164478

Ion	Ratio	Lower	Upper
360	100		
362	80.1	64.7	97.1

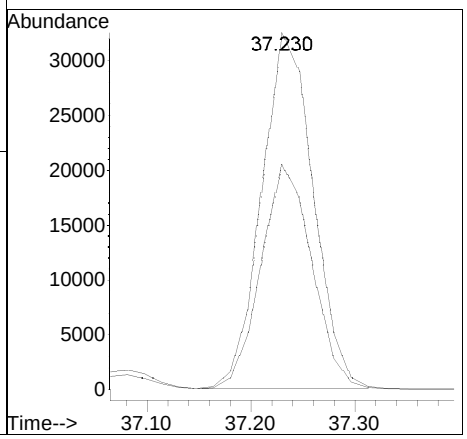


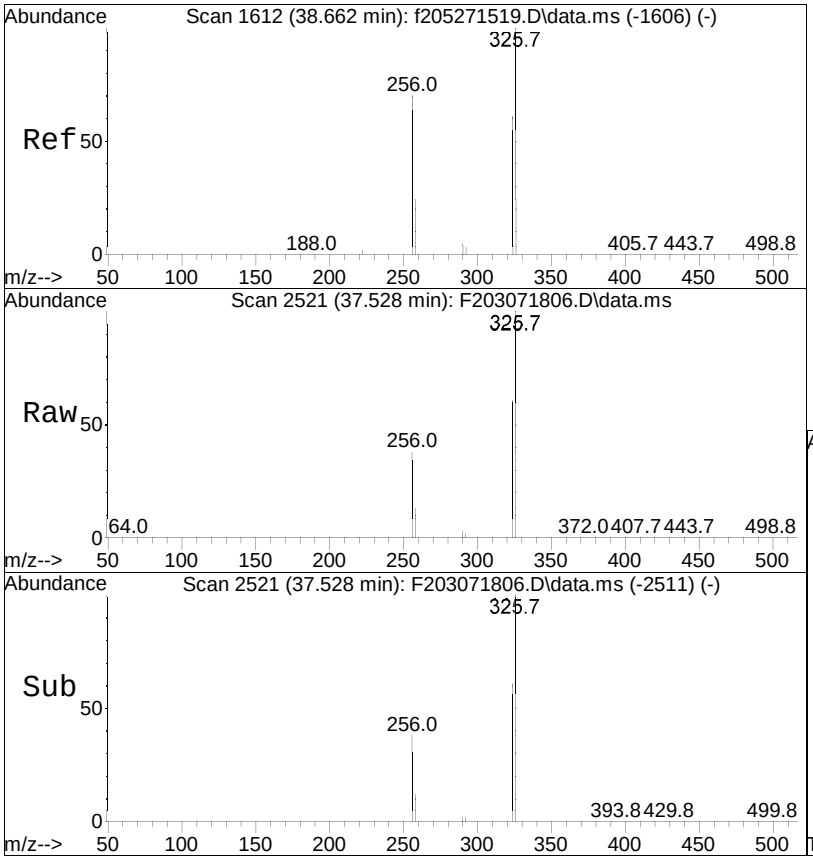


#130
Cl5-BZ#124
Concen: 90.55 ng/mL
RT: 37.230 min Scan# 2503
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 111187

Ion	Ratio	Lower	Upper
326	100		
324	62.1	49.2	73.8

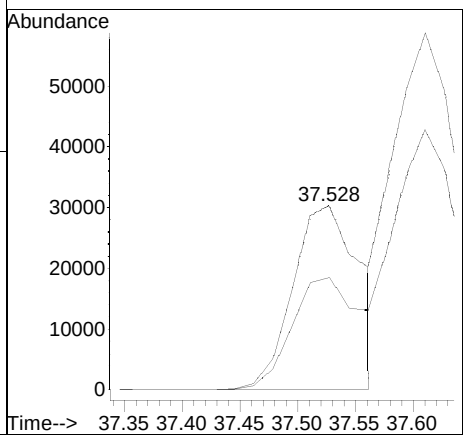


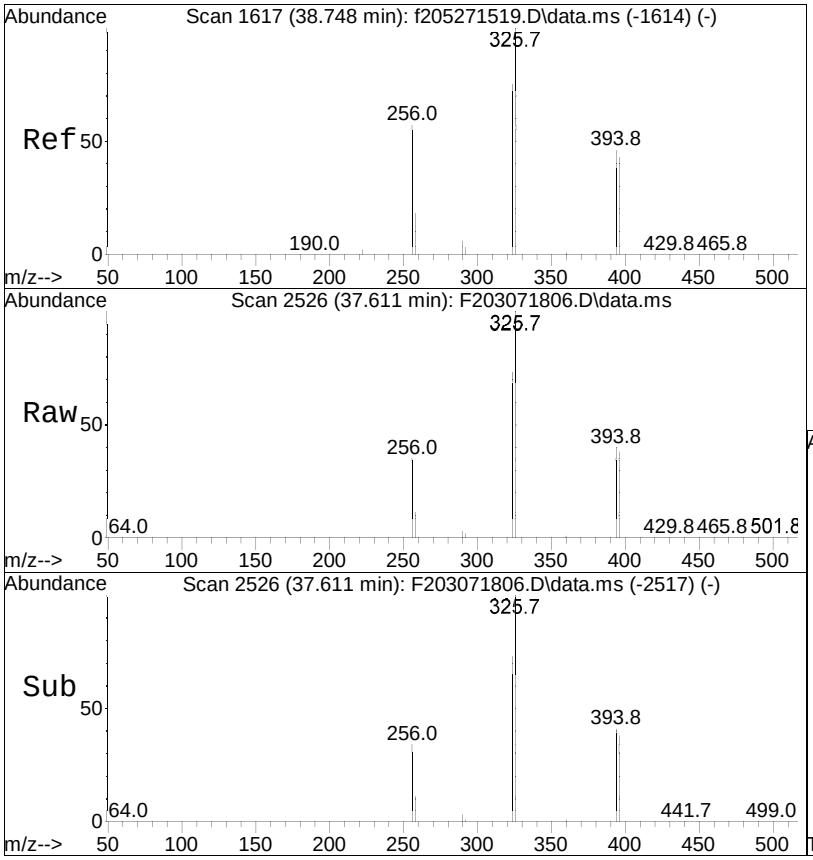


#131
Cl5-BZ#108
Concen: 98.19 ng/mL
RT: 37.528 min Scan# 2521
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 122476

Ion	Ratio	Lower	Upper
326	100		
324	62.5	50.0	75.0

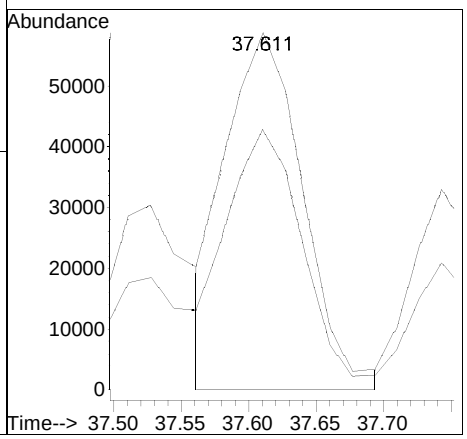


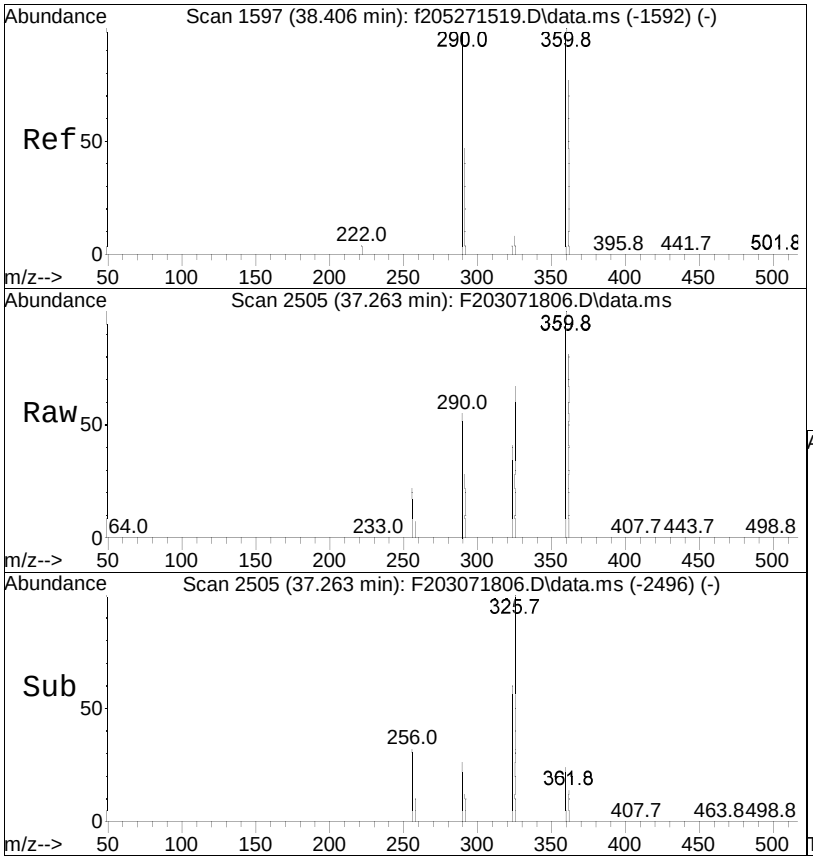


#132
Cl5-BZ#107/#123
Concen: 177.16 ng/mL M4
RT: 37.611 min Scan# 2526
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 235596

Ion	Ratio	Lower	Upper
326	100		
324	64.3	57.6	86.4

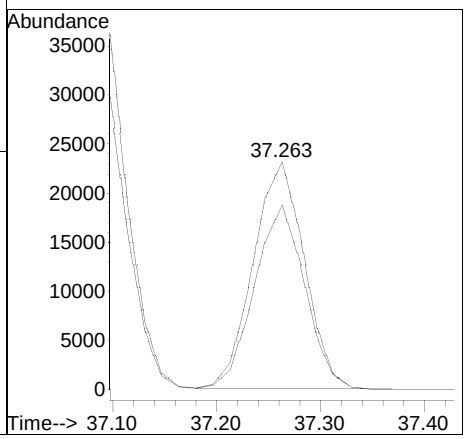


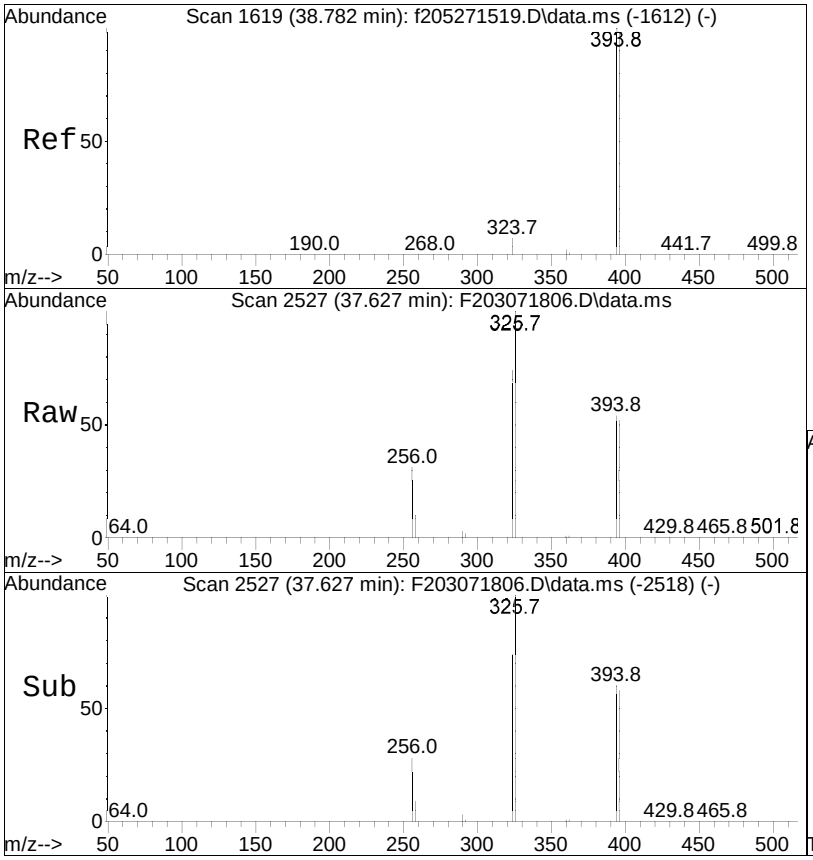


#133
Cl6-BZ#140
Concen: 89.01 ng/mL
RT: 37.263 min Scan# 2505
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 78563

Ion	Ratio	Lower	Upper
360	100		
362	80.2	64.8	97.2

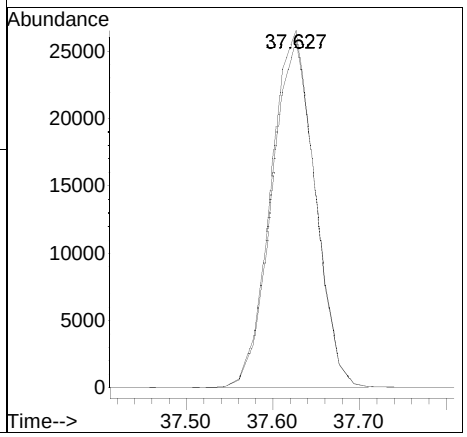


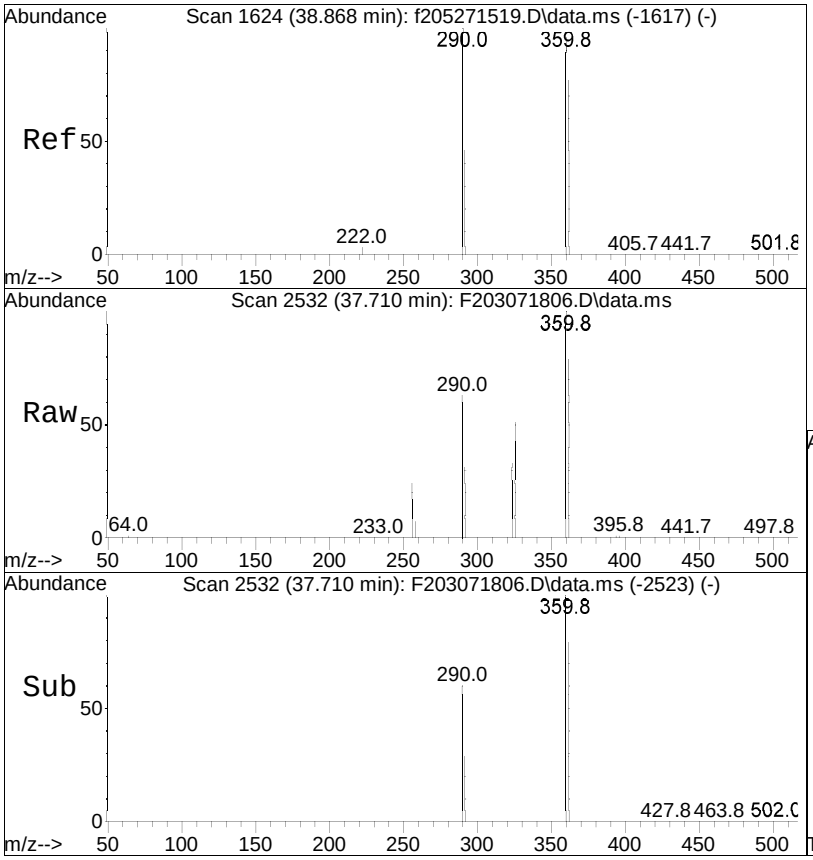


#134
Cl7-BZ#188-Cal/RTW
Concen: 89.42 ng/mL
RT: 37.627 min Scan# 2527
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 92814

Ion	Ratio	Lower	Upper
394	100		
396	96.4	76.3	114.5

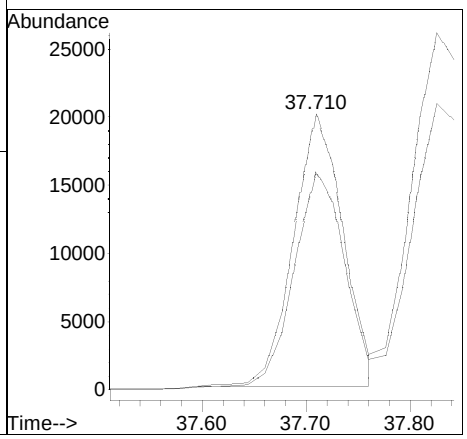


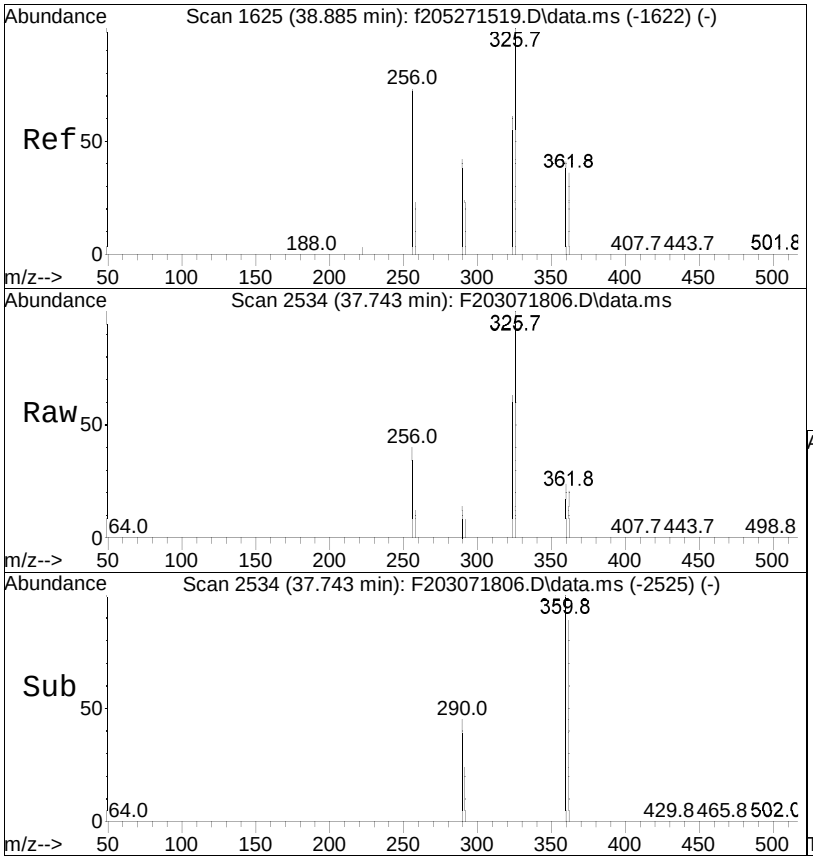


#137
Cl6-BZ#134
Concen: 88.52 ng/mL
RT: 37.710 min Scan# 2532
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 66590

Ion	Ratio	Lower	Upper
360	100		
362	80.7	61.2	91.8

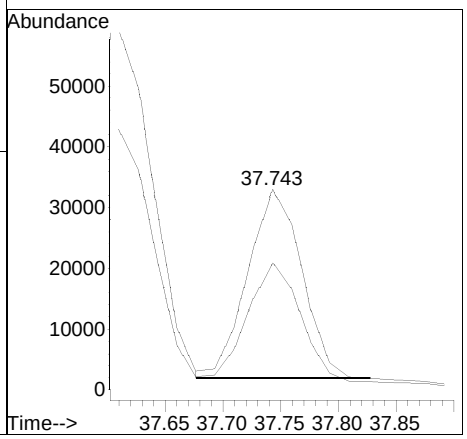


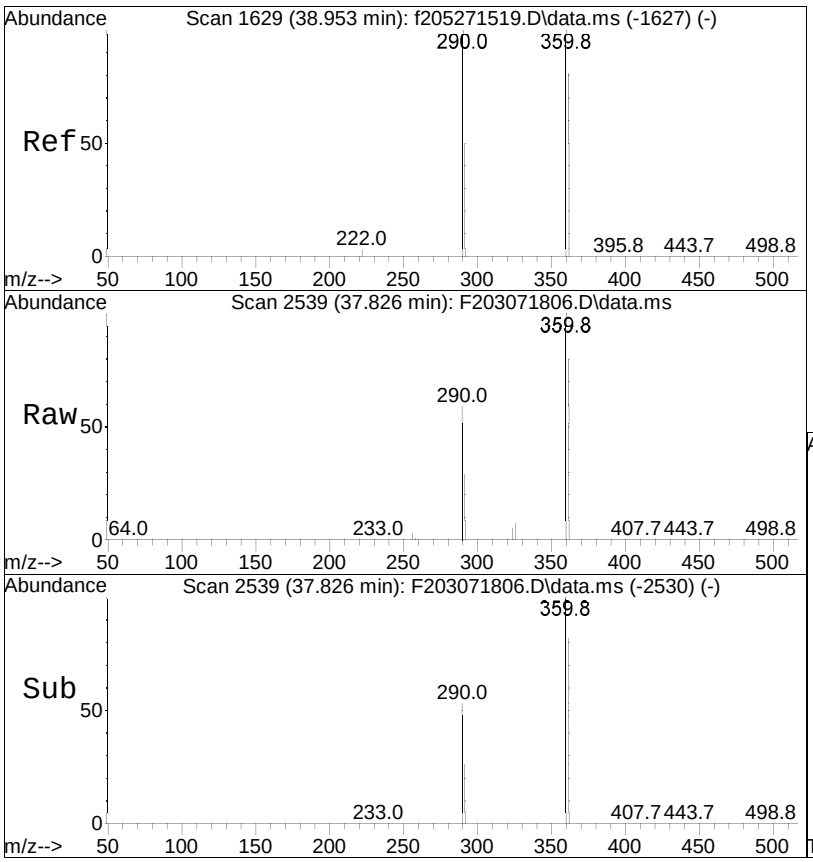


#138
Cl5-BZ#106
Concen: 83.40 ng/mL
RT: 37.743 min Scan# 2534
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 100853

Ion	Ratio	Lower	Upper
326	100		
324	61.8	49.8	74.8

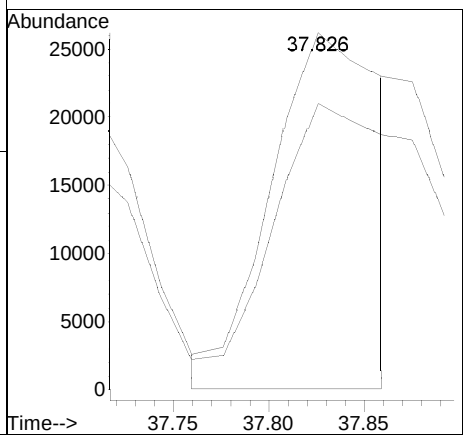


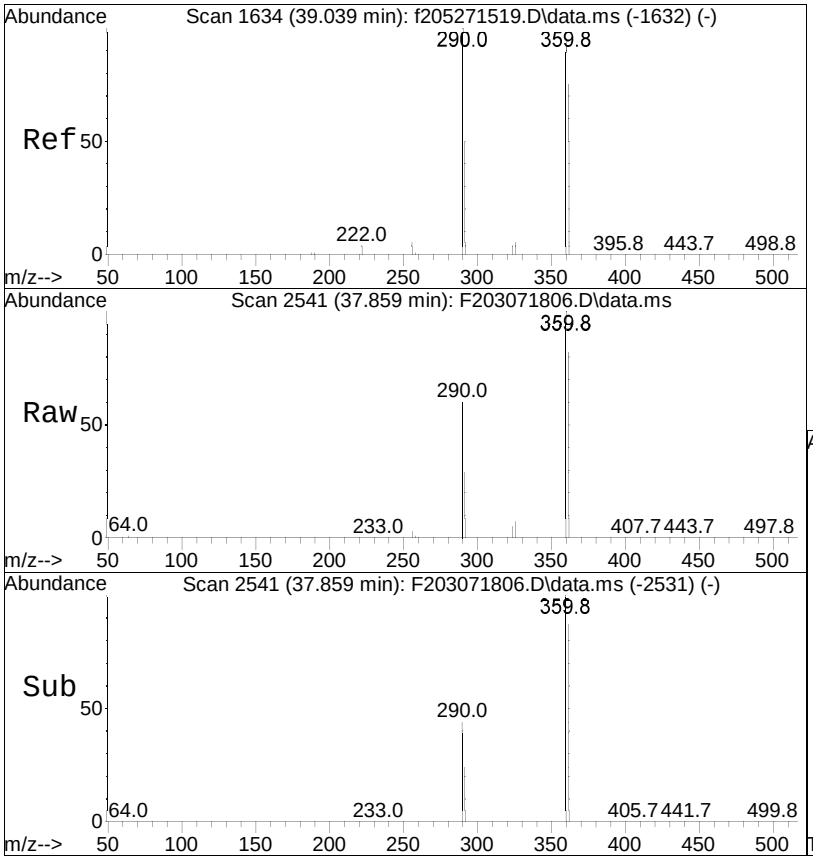


#139
Cl6-BZ#133
Concen: 102.36 ng/mL M4
RT: 37.826 min Scan# 2539
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 104812

Ion	Ratio	Lower	Upper
360	100		
362	96.6	62.5	93.7#

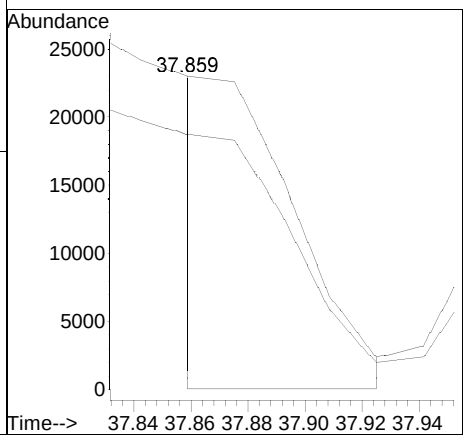


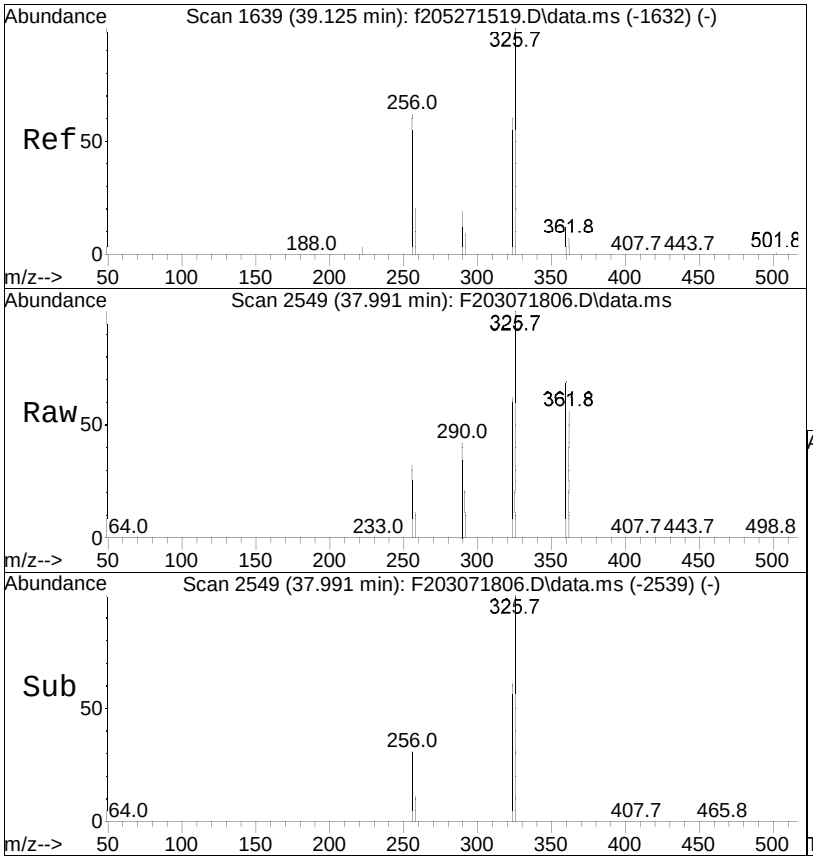


#140
Cl6-BZ#142
Concen: 68.11 ng/mL M3
RT: 37.859 min Scan# 2541
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 46870

Ion	Ratio	Lower	Upper
360	100		
362	220.1	63.2	94.8#

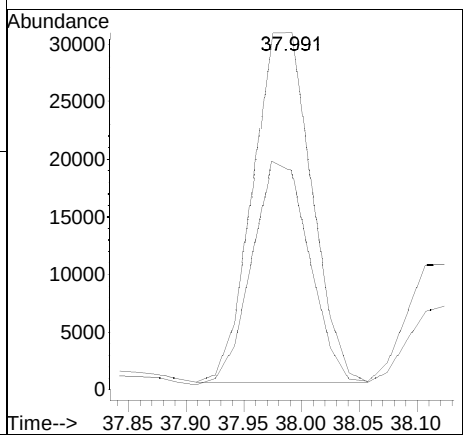


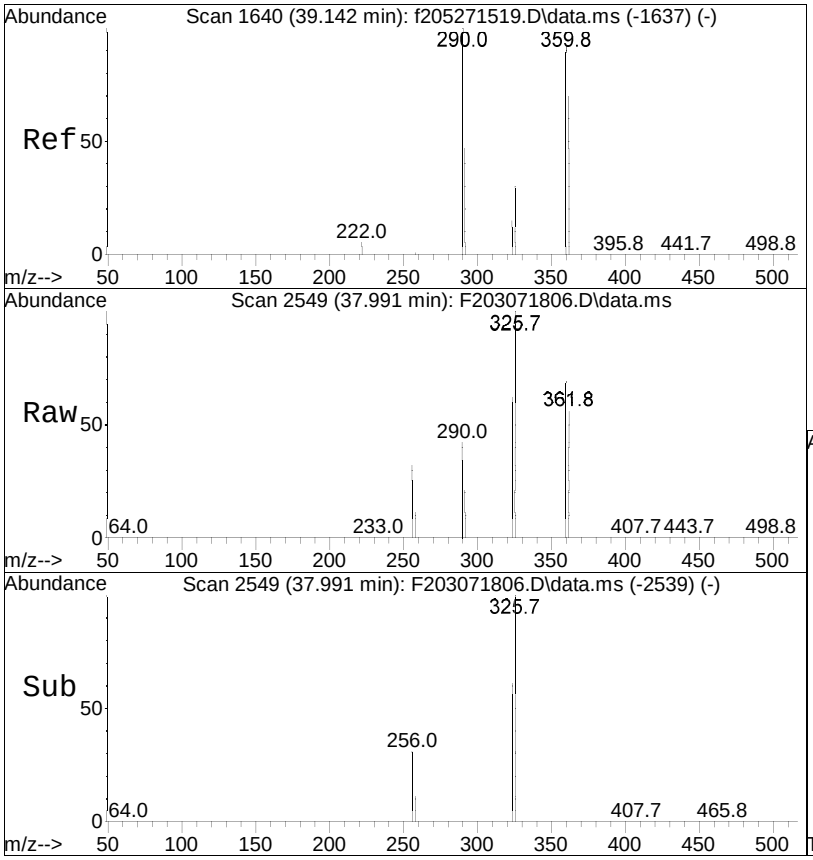


#141
Cl5-BZ#118
Concen: 91.07 ng/mL
RT: 37.991 min Scan# 2549
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 106893

Ion	Ratio	Lower	Upper
326	100		
324	63.1	51.4	77.0

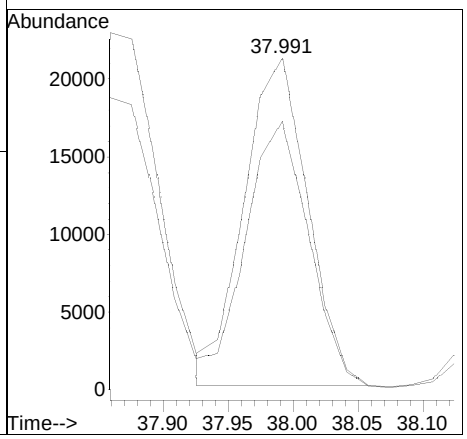


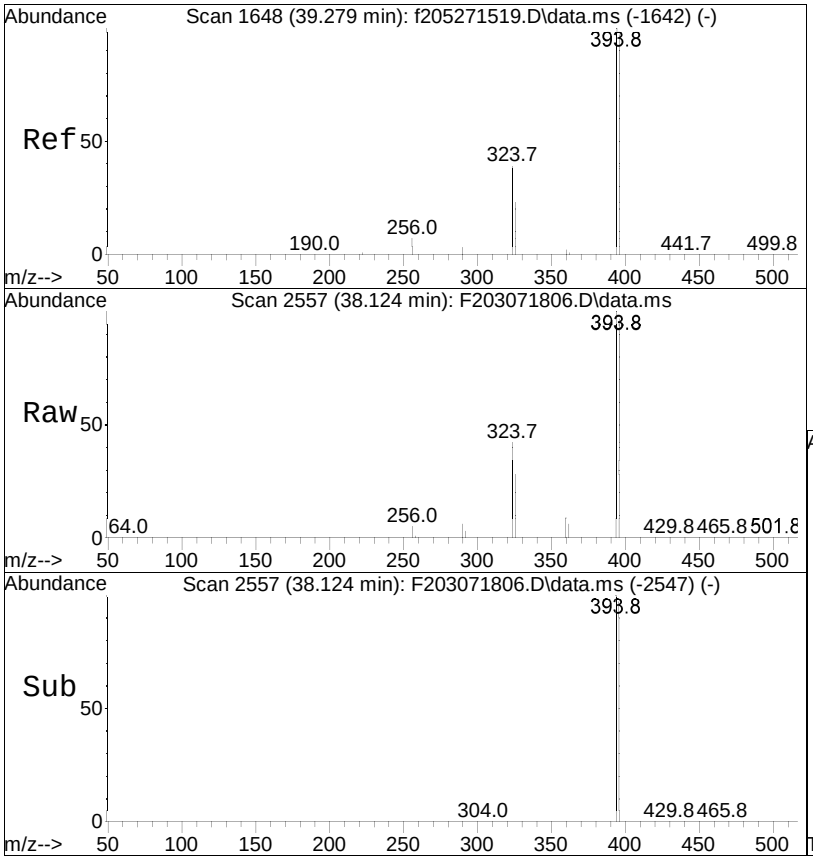


#142
Cl6-BZ#131
Concen: 90.29 ng/mL
RT: 37.991 min Scan# 2549
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 71575

Ion	Ratio	Lower	Upper
360	100		
362	80.4	64.2	96.4

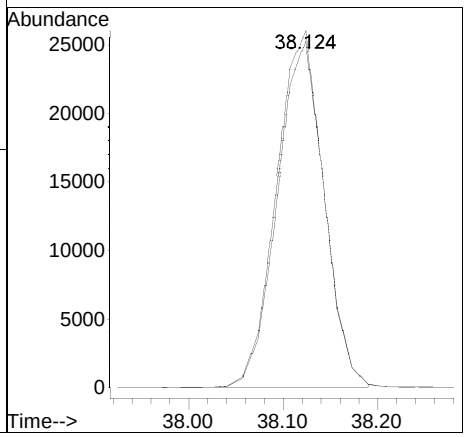


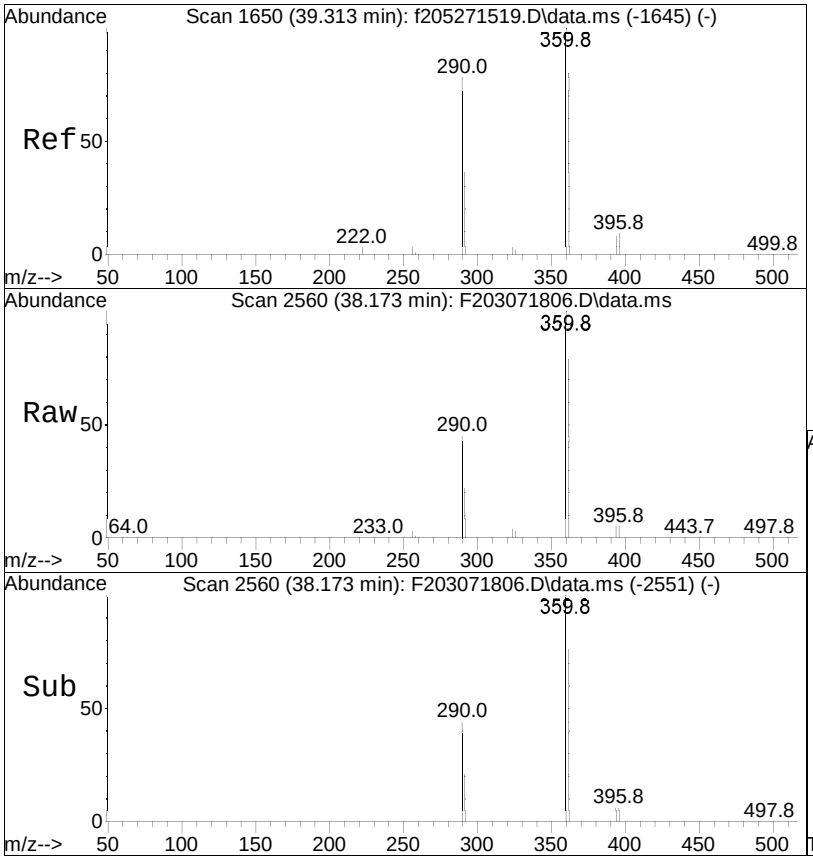


#143
Cl7-BZ#184
Concen: 87.57 ng/mL
RT: 38.124 min Scan# 2557
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 89831

Ion	Ratio	Lower	Upper
394	100		
396	96.4	75.3	112.9

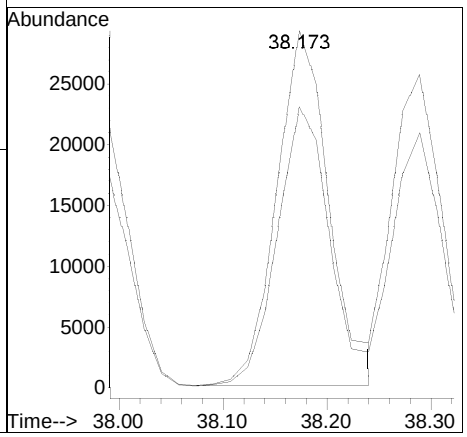


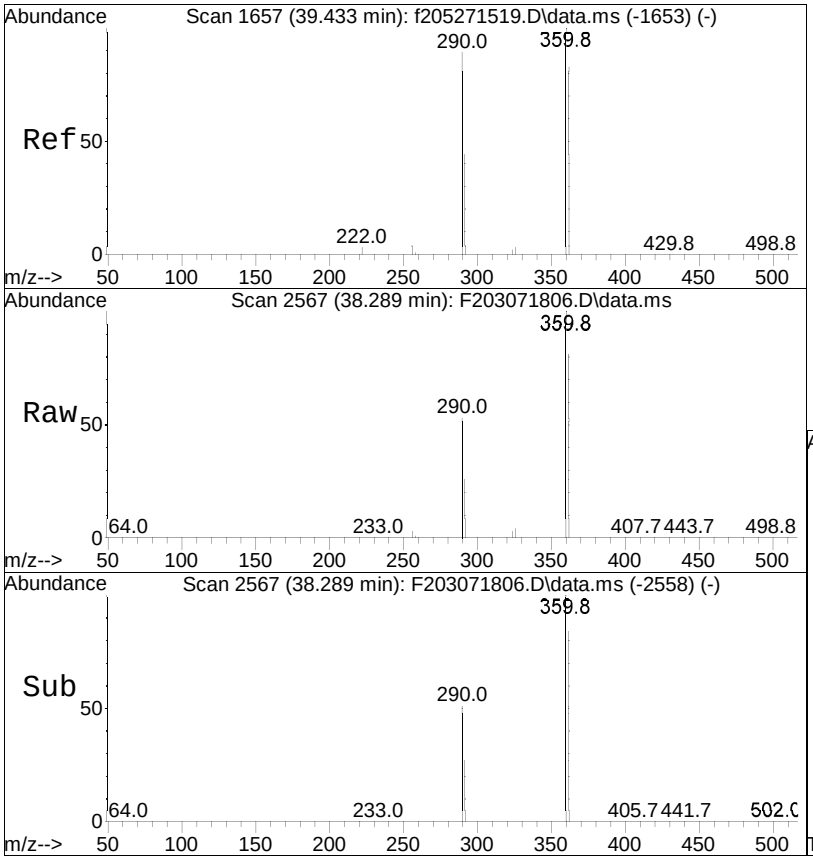


#144
Cl6-BZ#165
Concen: 91.51 ng/mL
RT: 38.173 min Scan# 2560
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 102071

Ion	Ratio	Lower	Upper
360	100		
362	79.7	65.8	98.8

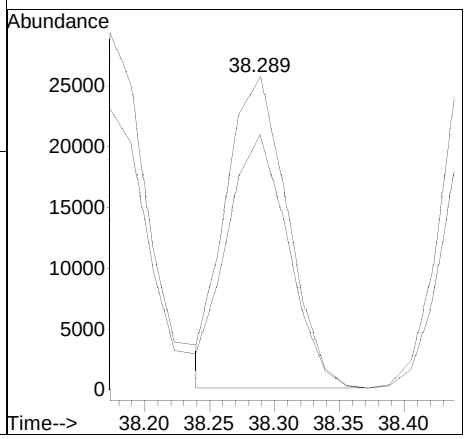


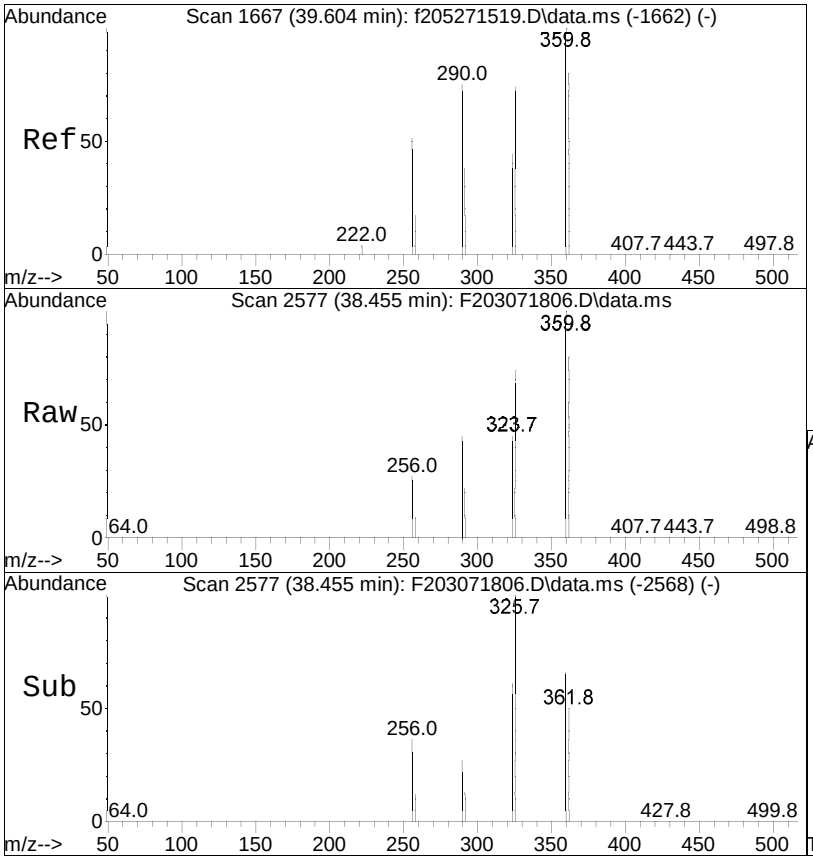


#145
Cl6-BZ#146
Concen: 86.57 ng/mL
RT: 38.289 min Scan# 2567
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 84522

Ion	Ratio	Lower	Upper
360	100		
362	80.7	63.4	95.0

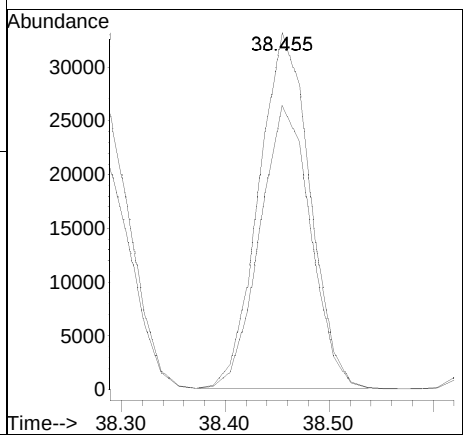


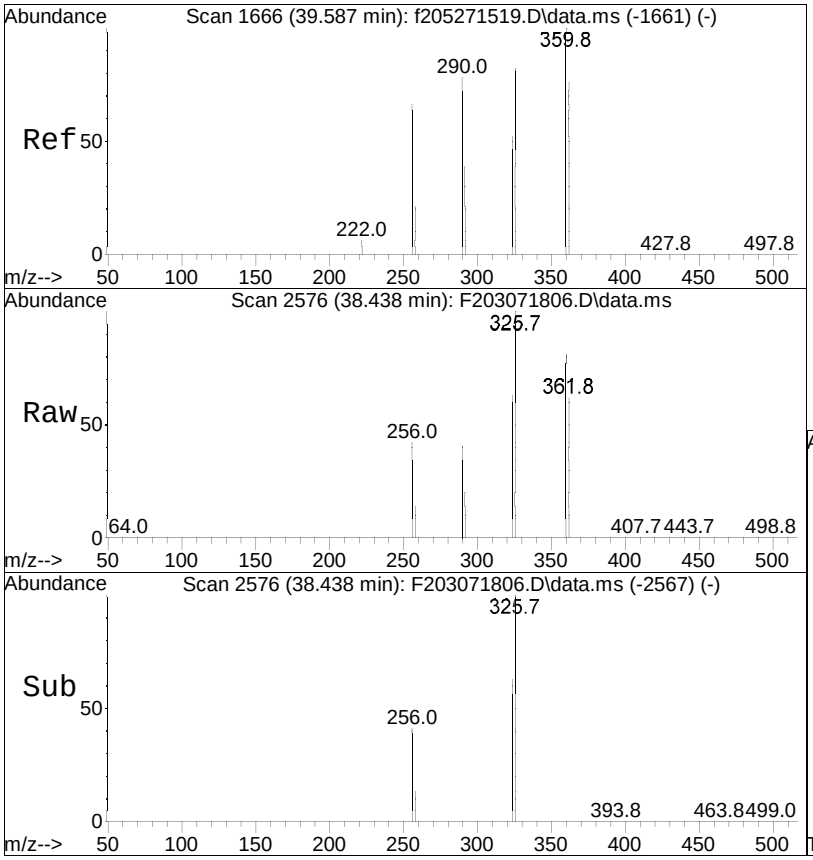


#146
Cl6-BZ#161
Concen: 90.98 ng/mL
RT: 38.455 min Scan# 2577
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 113017

Ion	Ratio	Lower	Upper
360	100		
362	79.1	64.0	96.0

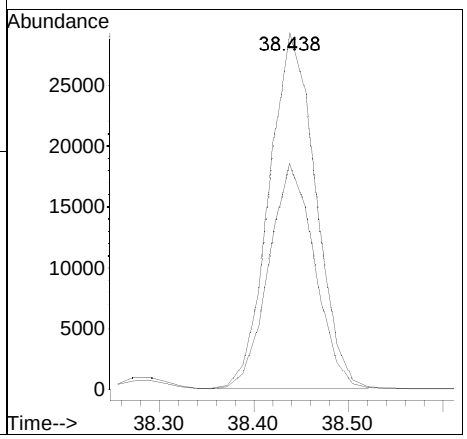


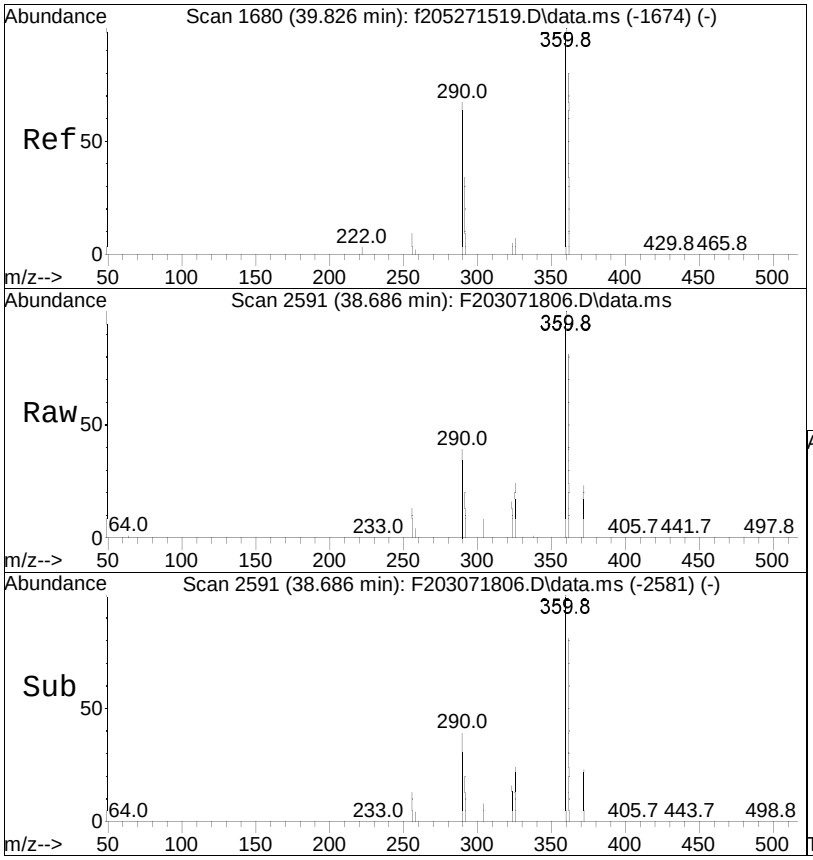


#147
Cl5-BZ#122
Concen: 91.73 ng/mL
RT: 38.438 min Scan# 2576
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 99185

Ion	Ratio	Lower	Upper
326	100		
324	62.8	50.1	75.1

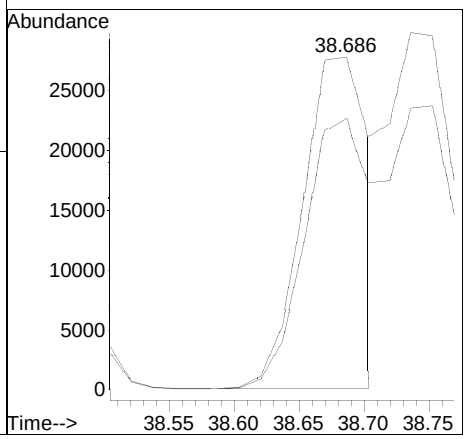


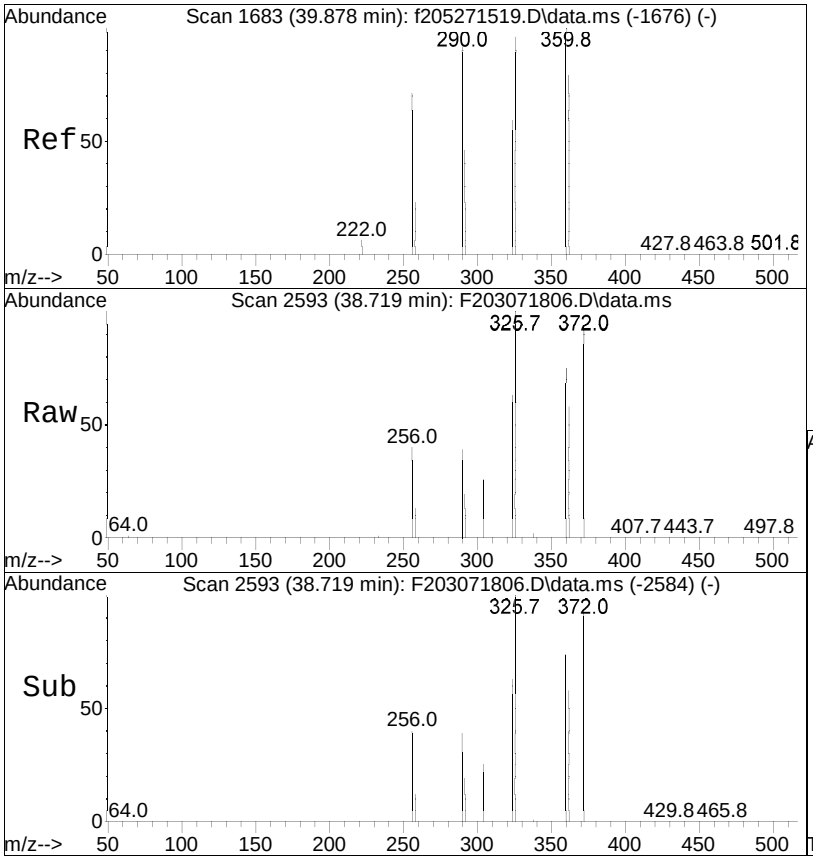


#148
Cl6-BZ#168
Concen: 81.60 ng/mL
RT: 38.686 min Scan# 2591
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 97402

Ion	Ratio	Lower	Upper
360	100		
362	79.7	64.2	96.4

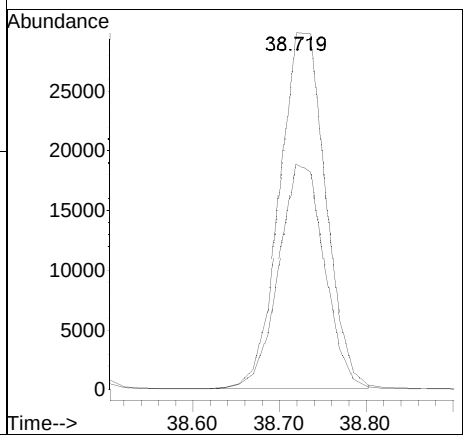


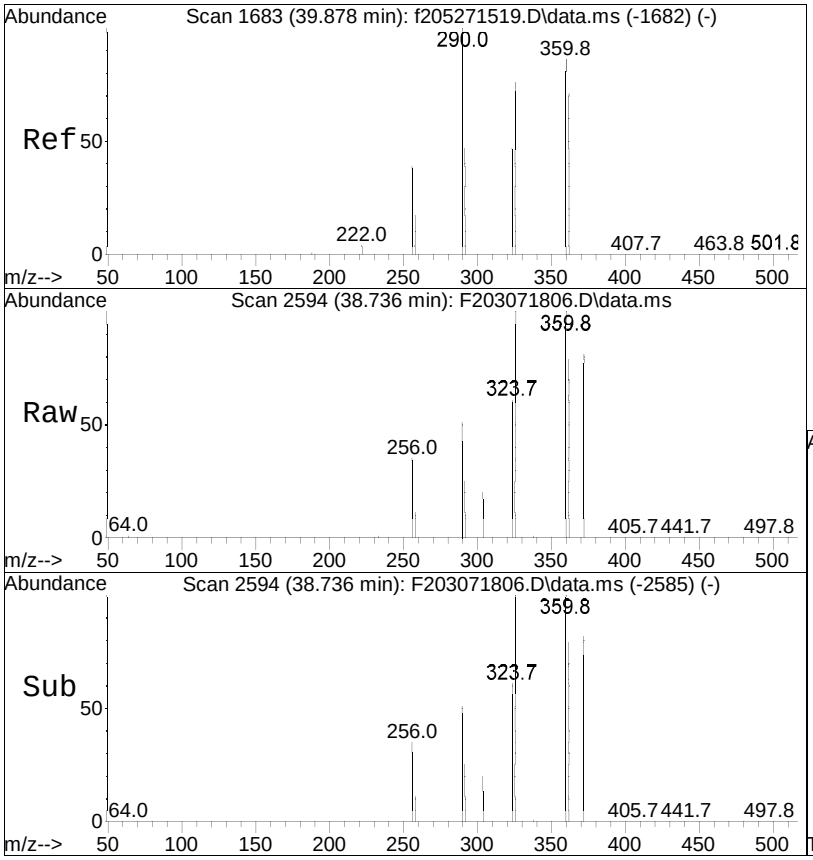


#149
Cl5-BZ#114
Concen: 92.47 ng/mL
RT: 38.719 min Scan# 2593
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 109801

Ion	Ratio	Lower	Upper
326	100		
324	62.8	50.4	75.6

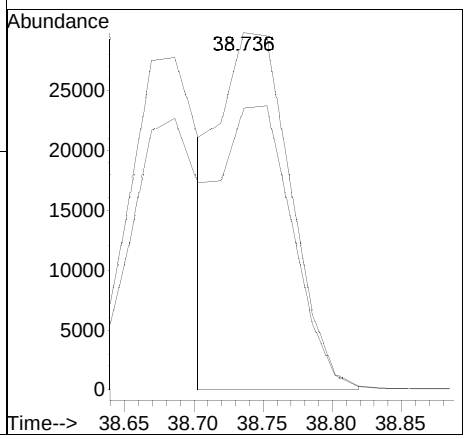


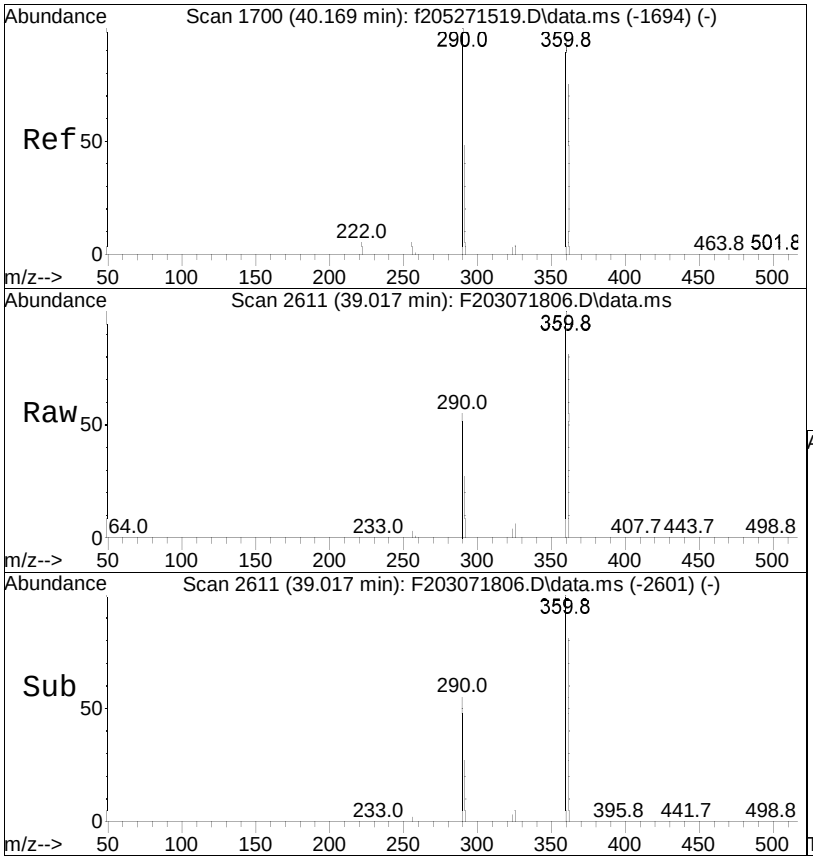


#150
Cl6-BZ#153
Concen: 100.05 ng/mL M4
RT: 38.736 min Scan# 2594
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 106321

Ion	Ratio	Lower	Upper
360	100		
362	69.1	63.0	94.6

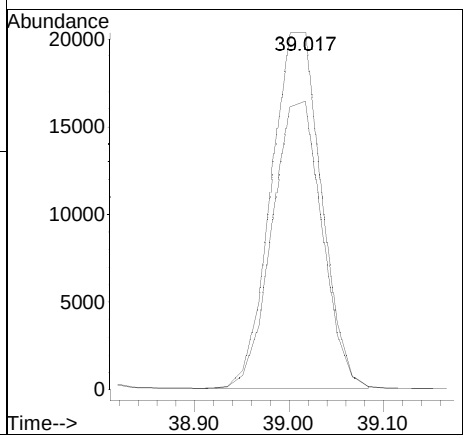


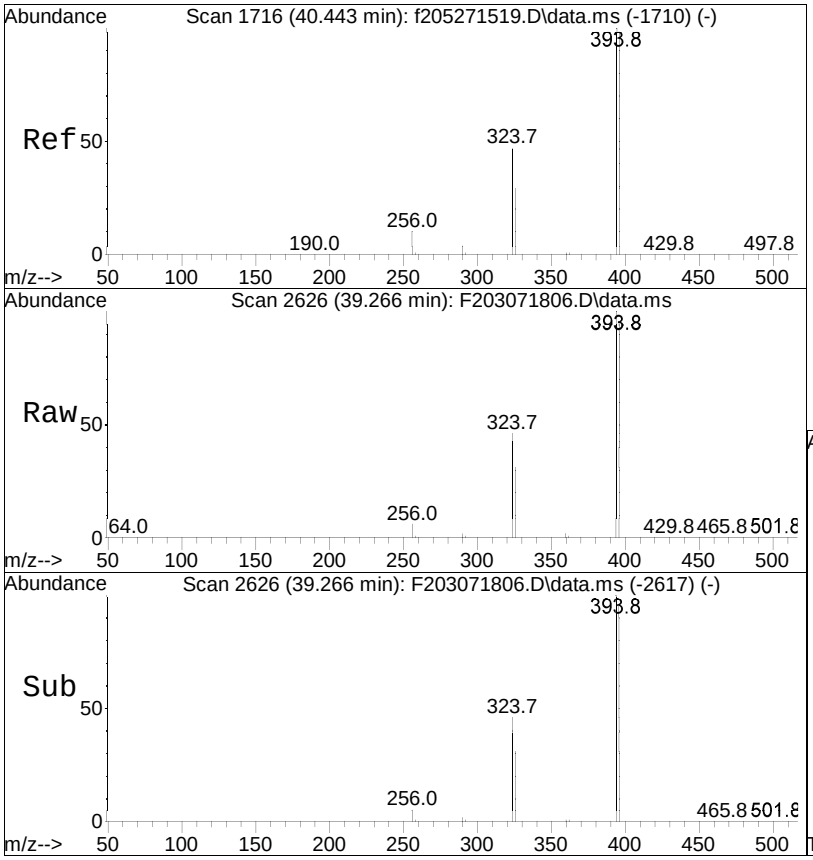


#152
Cl6-BZ#132
Concen: 87.55 ng/mL
RT: 39.017 min Scan# 2611
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 74670

Ion	Ratio	Lower	Upper
360	100		
362	80.4	65.2	97.8

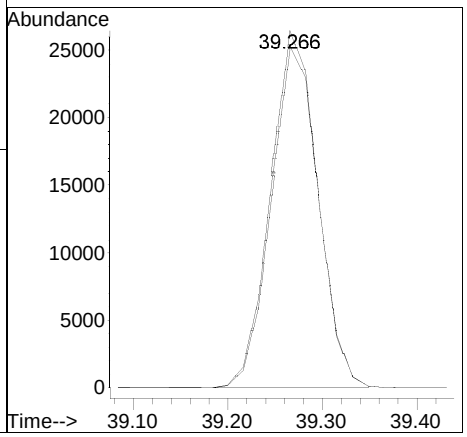


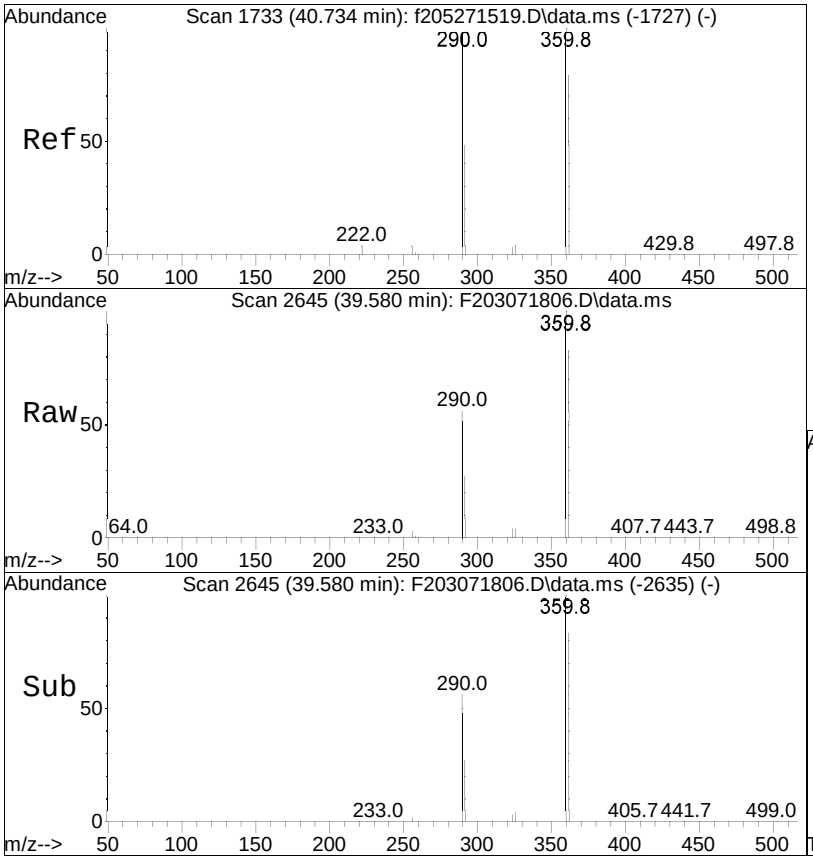


#153
Cl7-BZ#179
Concen: 86.10 ng/mL
RT: 39.266 min Scan# 2626
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 91187

Ion	Ratio	Lower	Upper
394	100		
396	95.9	76.2	114.4

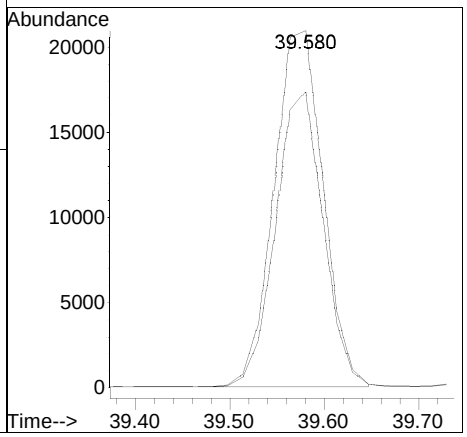


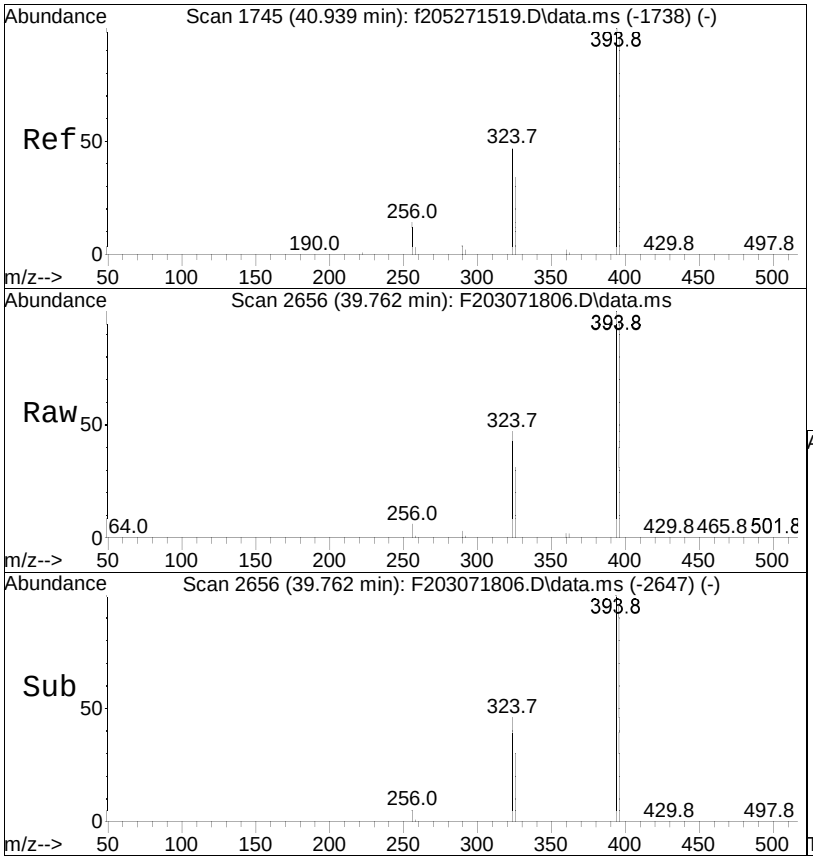


#154
Cl6-BZ#141
Concen: 88.44 ng/mL
RT: 39.580 min Scan# 2645
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 75465

Ion	Ratio	Lower	Upper
360	100		
362	80.3	64.1	96.1

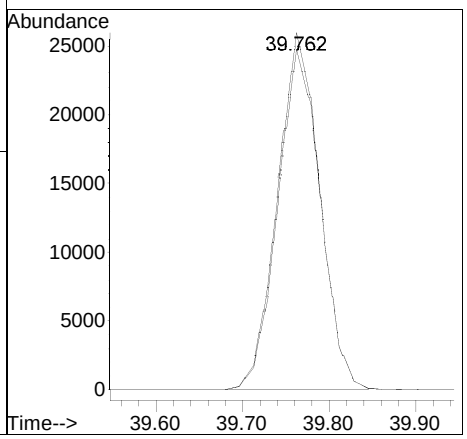


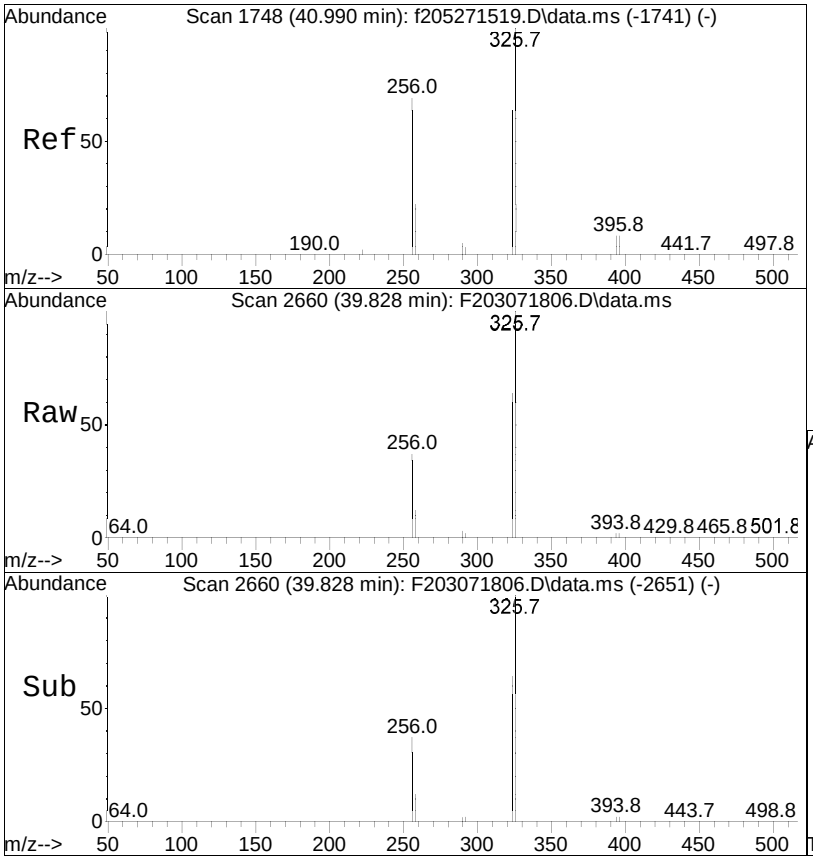


#155
Cl7-BZ#176
Concen: 86.93 ng/mL
RT: 39.762 min Scan# 2656
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 87441

Ion	Ratio	Lower	Upper
394	100		
396	96.0	77.4	116.0

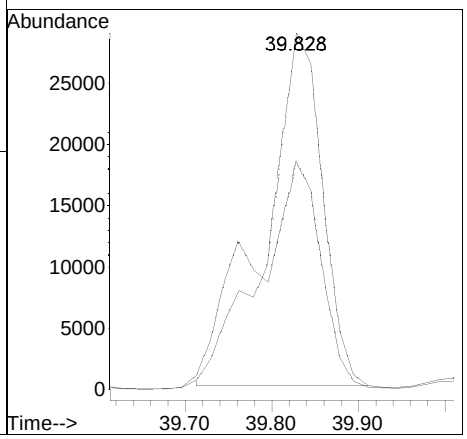


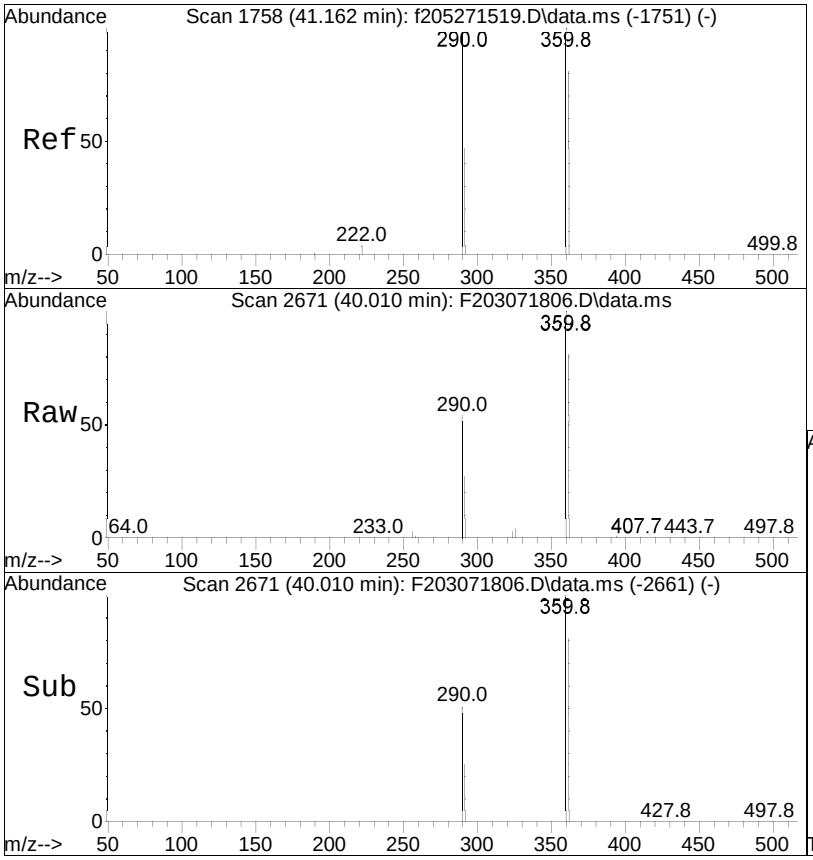


#156
Cl5-BZ#105
Concen: 86.02 ng/mL
RT: 39.828 min Scan# 2660
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 124997

Ion	Ratio	Lower	Upper
326	100		
324	46.6	49.0	73.4#

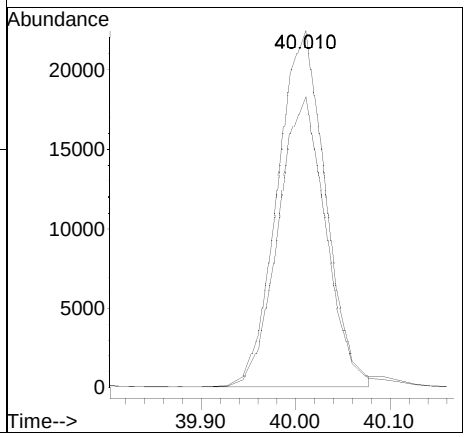


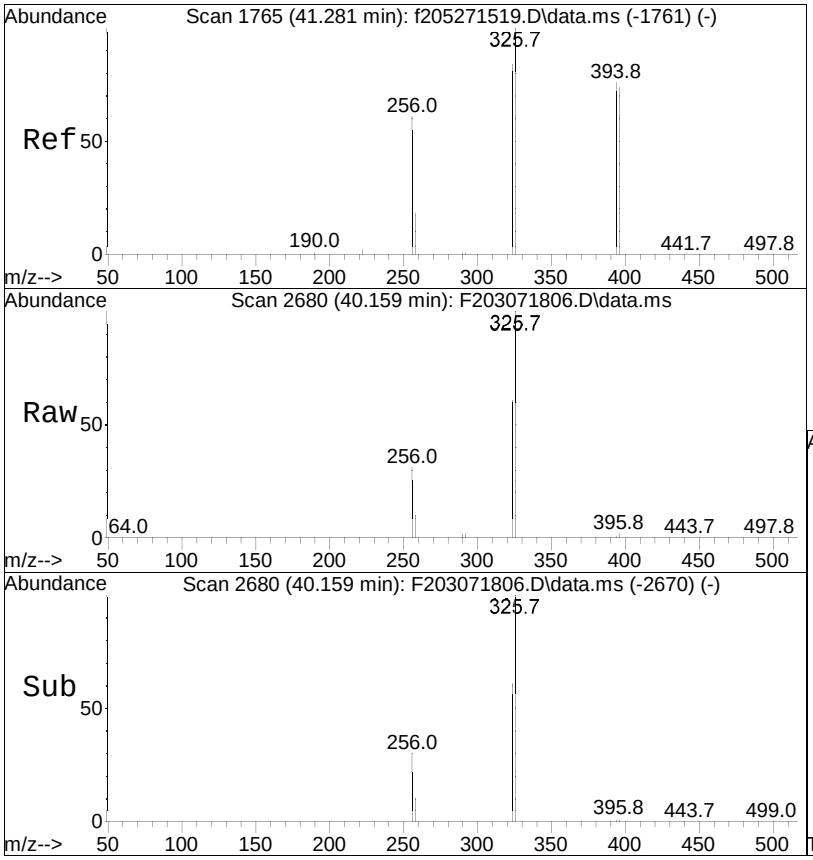


#157
Cl6-BZ#137
Concen: 90.16 ng/mL
RT: 40.010 min Scan# 2671
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 78854

Ion	Ratio	Lower	Upper
360	100		
362	80.8	65.7	98.5

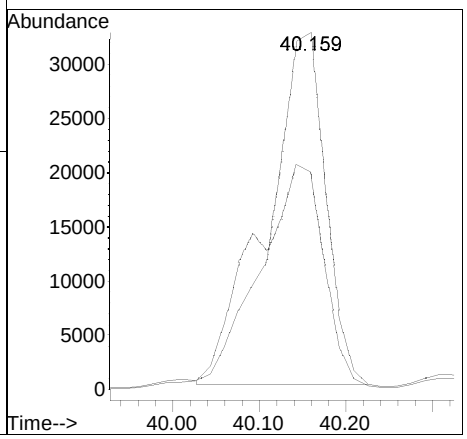


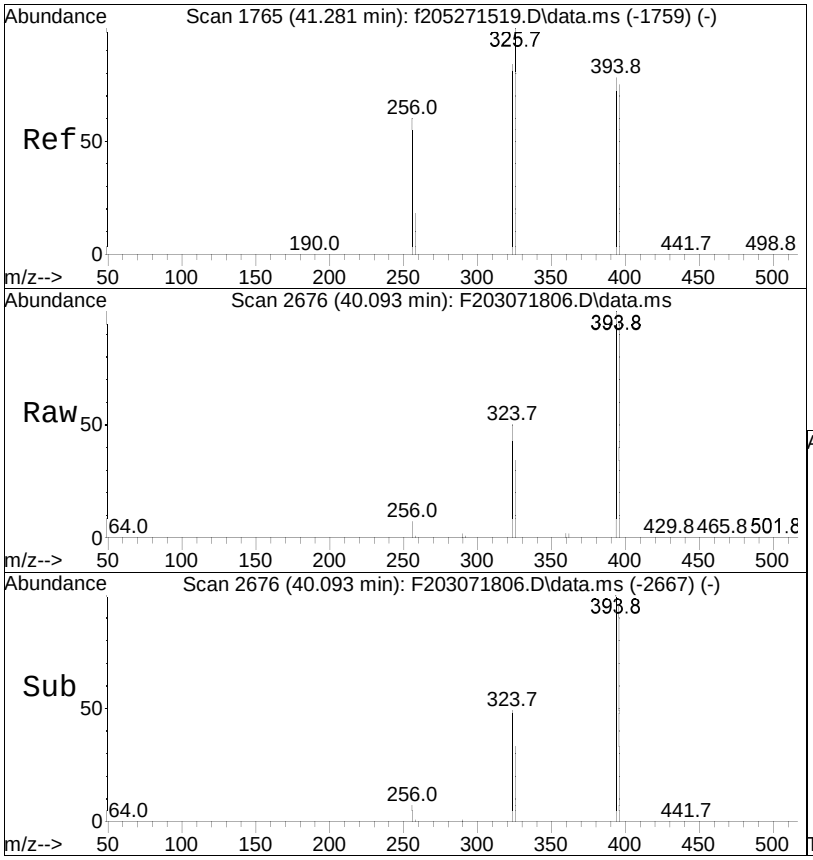


#158
Cl5-BZ#127
Concen: 89.05 ng/mL
RT: 40.159 min Scan# 2680
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 141932

Ion	Ratio	Lower	Upper
326	100		
324	81.1	49.2	73.8#

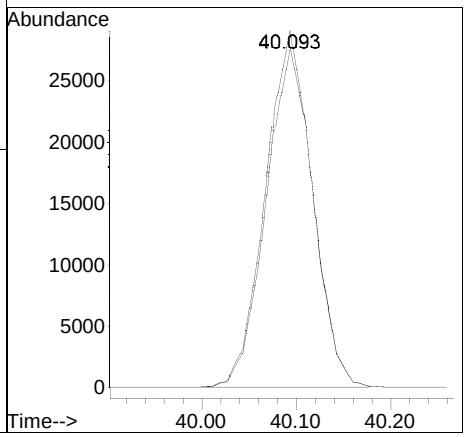


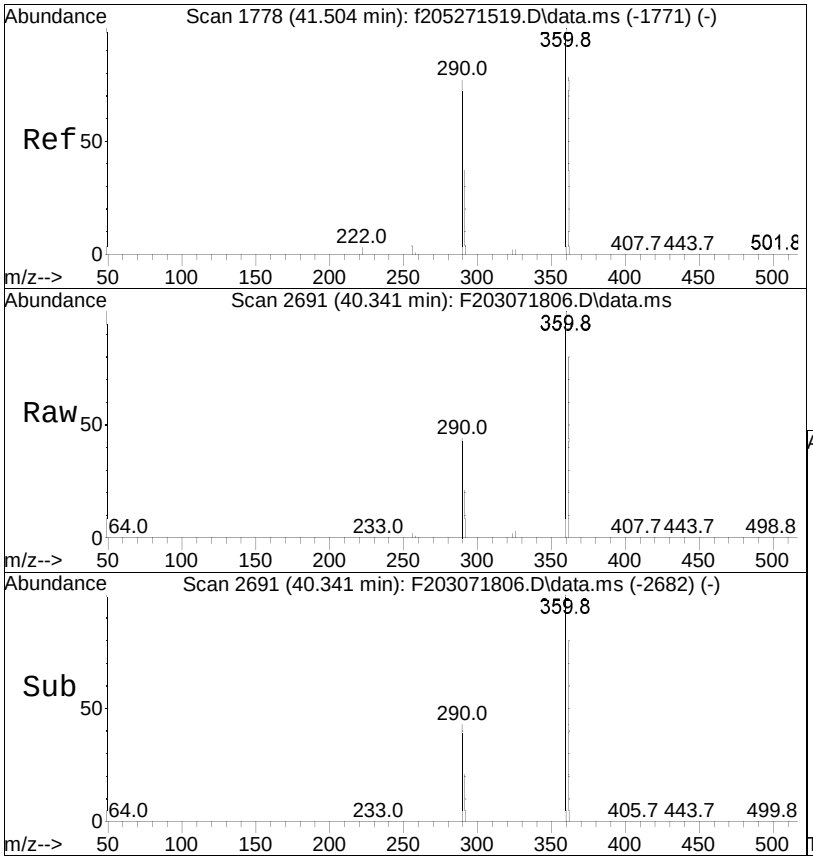


#159
Cl7-BZ#186
Concen: 88.96 ng/mL
RT: 40.093 min Scan# 2676
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 99582

Ion	Ratio	Lower	Upper
394	100		
396	95.8	76.7	115.1

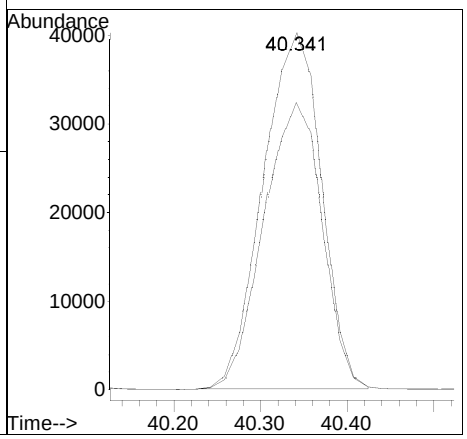


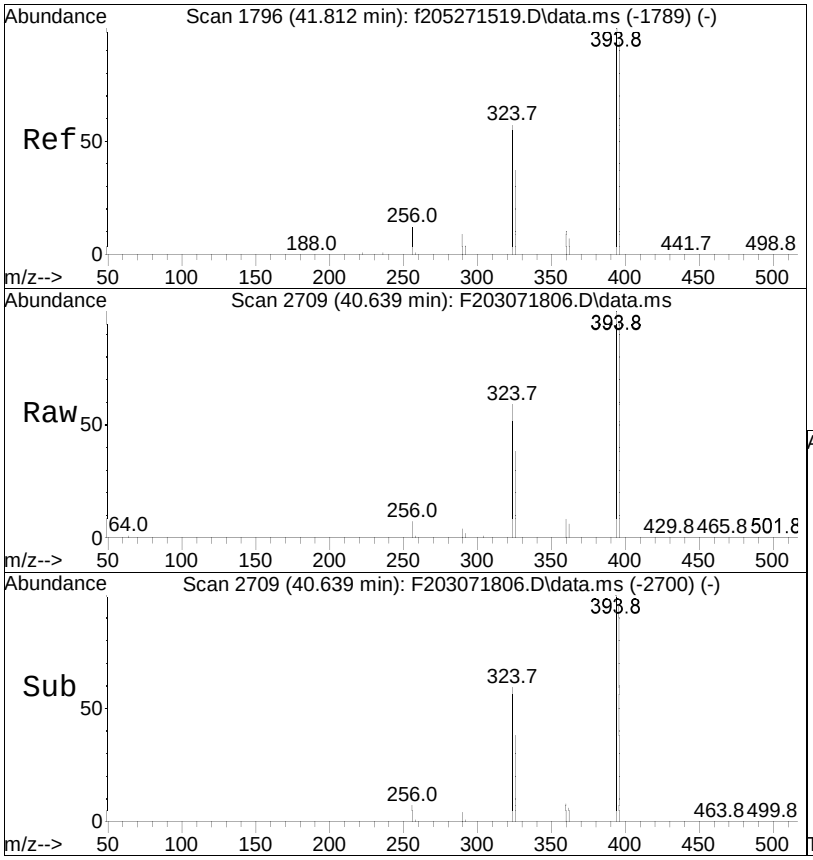


#160
Cl6-BZ#130/#164
Concen: 184.44 ng/mL
RT: 40.341 min Scan# 2691
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 188171

Ion	Ratio	Lower	Upper
360	100		
362	80.5	65.6	98.4

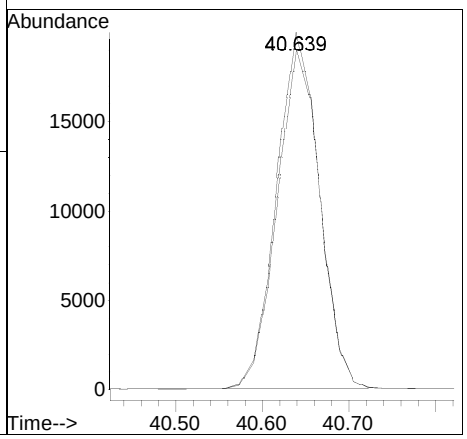


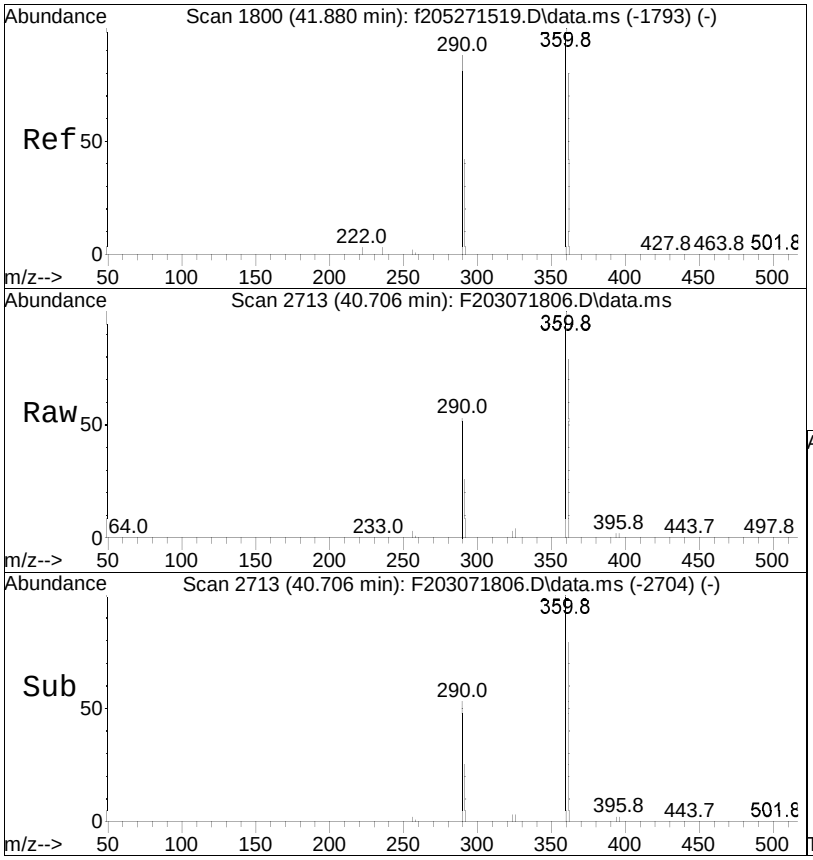


#161
Cl7-BZ#178
Concen: 89.20 ng/mL
RT: 40.639 min Scan# 2709
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 68426

Ion	Ratio	Lower	Upper
394	100		
396	95.6	78.0	117.0

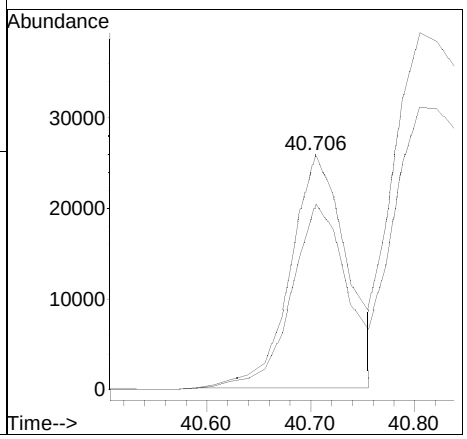


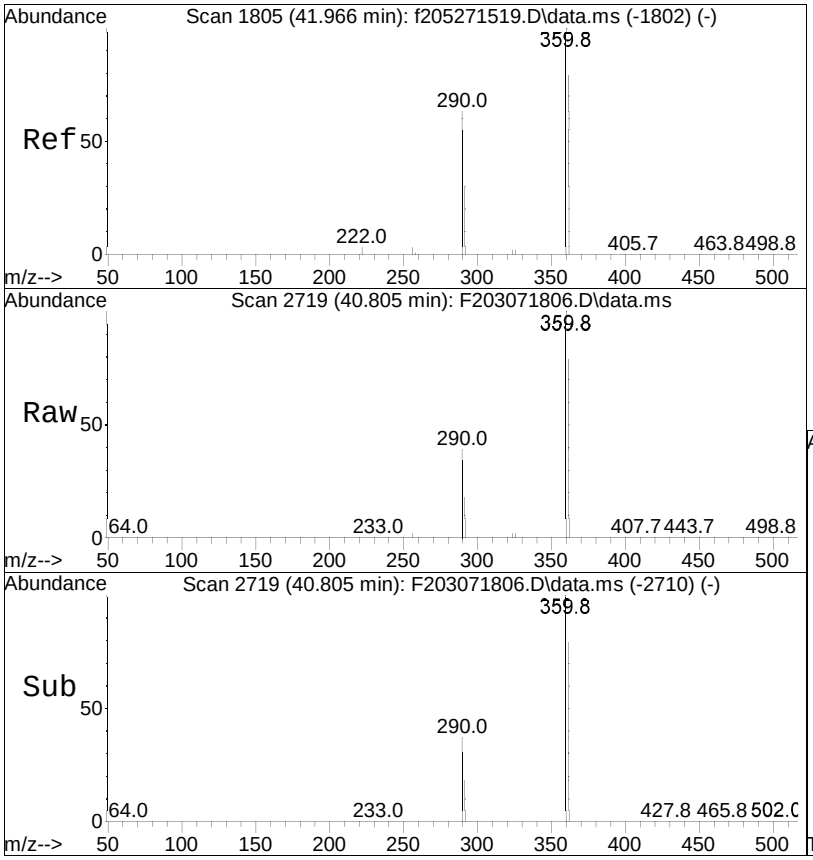


#162
Cl6-BZ#138
Concen: 94.89 ng/mL
RT: 40.706 min Scan# 2713
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 98407

Ion	Ratio	Lower	Upper
360	100		
362	78.8	65.3	97.9

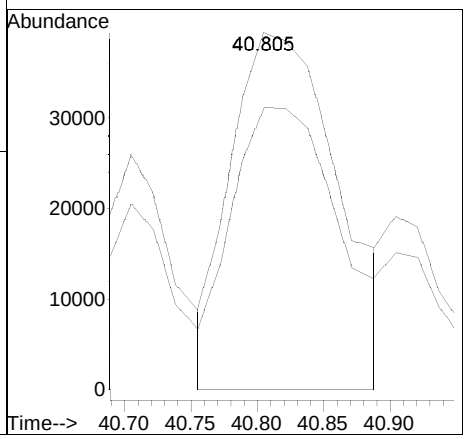


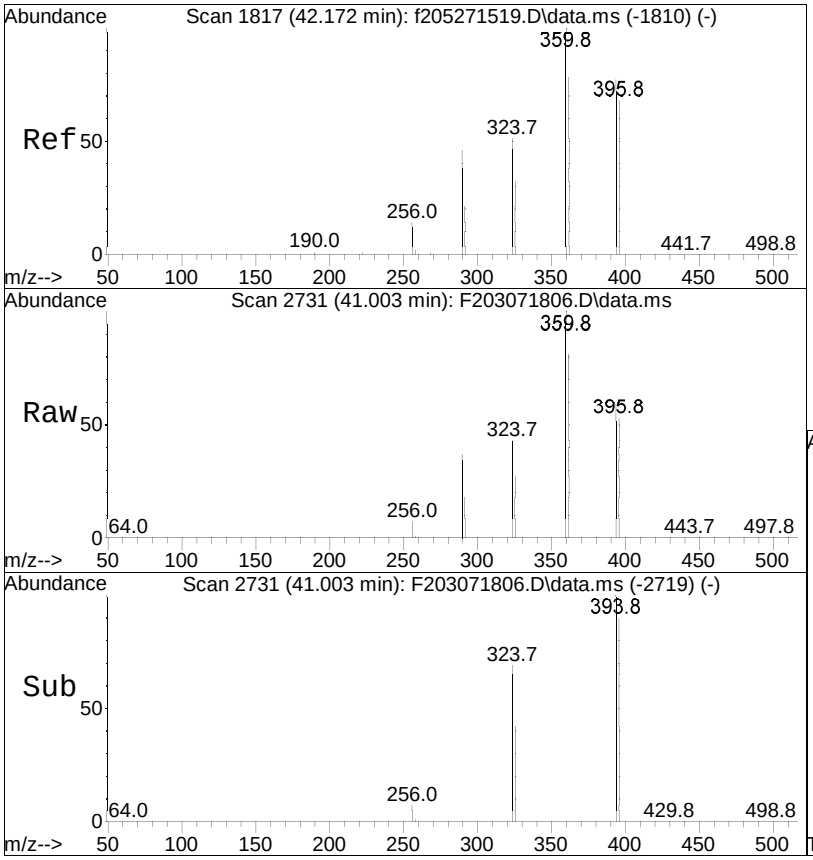


#163
Cl6-BZ#163/#160
Concen: 188.14 ng/mL M4
RT: 40.805 min Scan# 2719
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 220647

Ion	Ratio	Lower	Upper
360	100		
362	55.6	64.6	96.8#

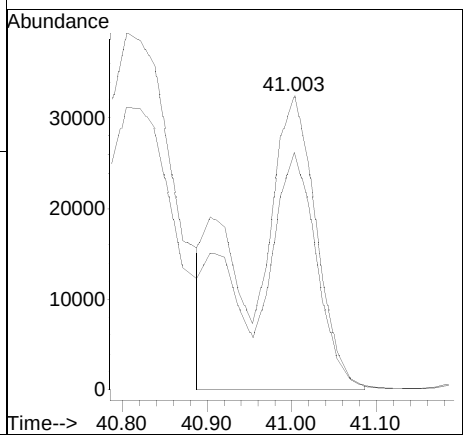


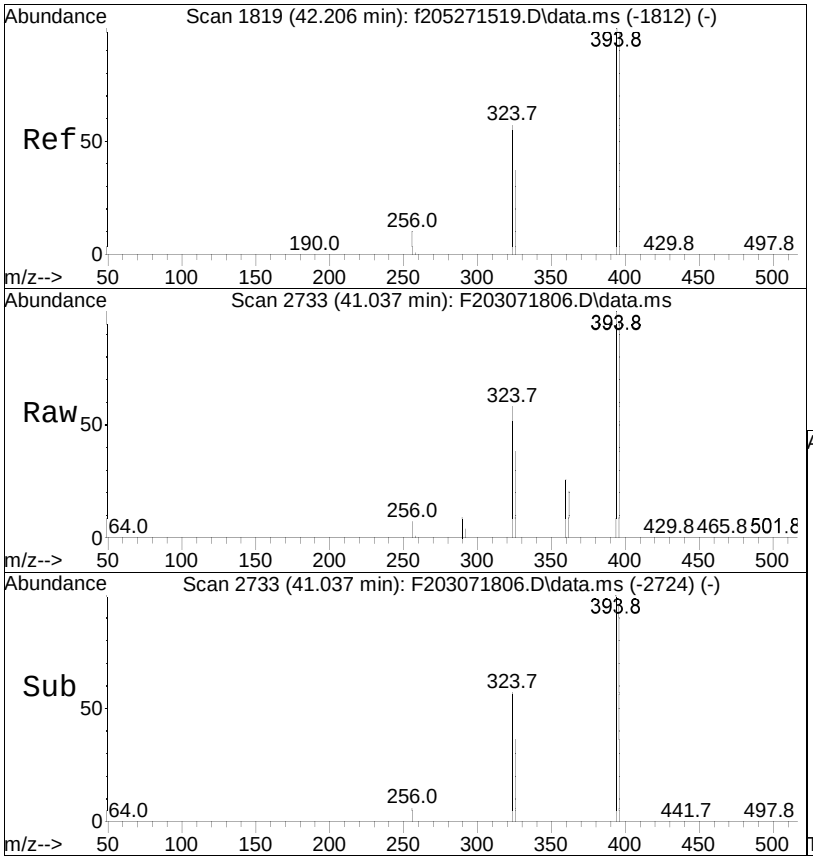


#164
Cl6-BZ#129/#158
Concen: 175.21 ng/mL M4
RT: 41.003 min Scan# 2731
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 171291

Ion	Ratio	Lower	Upper
360	100		
362	52.6	64.0	96.0#

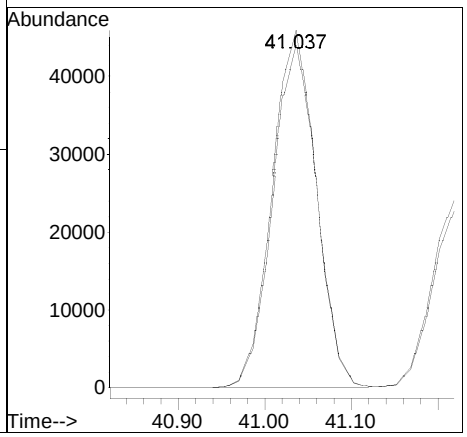


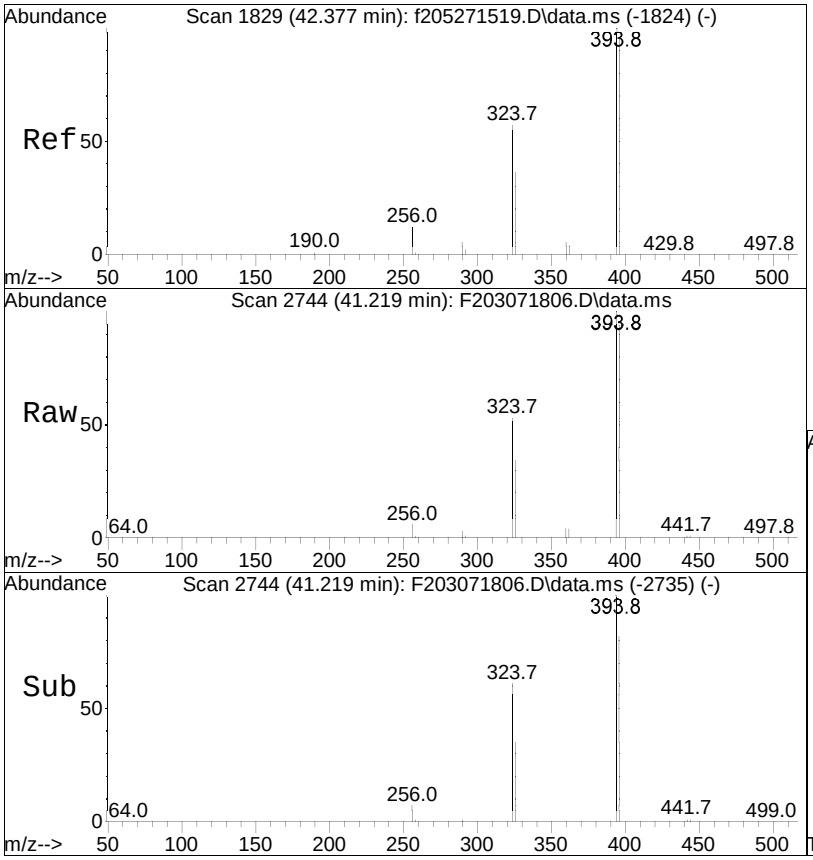


#165
Cl7-BZ#182/#175
Concen: 184.32 ng/mL
RT: 41.037 min Scan# 2733
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 161840

Ion	Ratio	Lower	Upper
394	100		
396	96.2	76.9	115.3

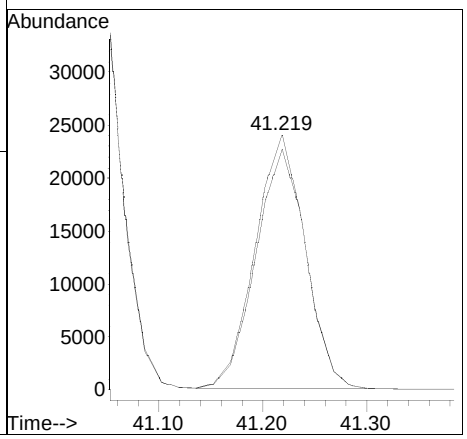


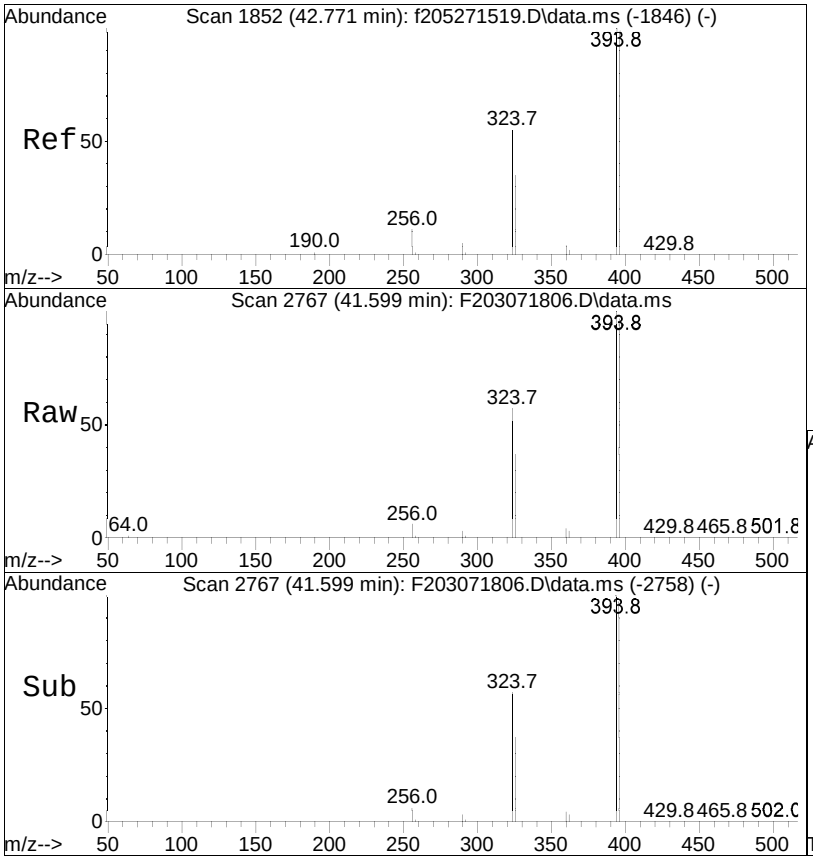


#166
Cl7-BZ#187
Concen: 88.78 ng/mL
RT: 41.219 min Scan# 2744
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 79836

Ion	Ratio	Lower	Upper
394	100		
396	95.4	73.7	110.5

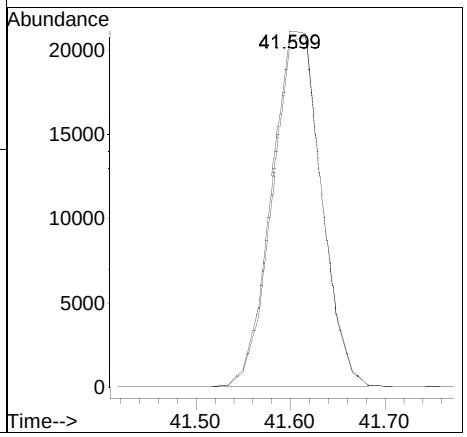


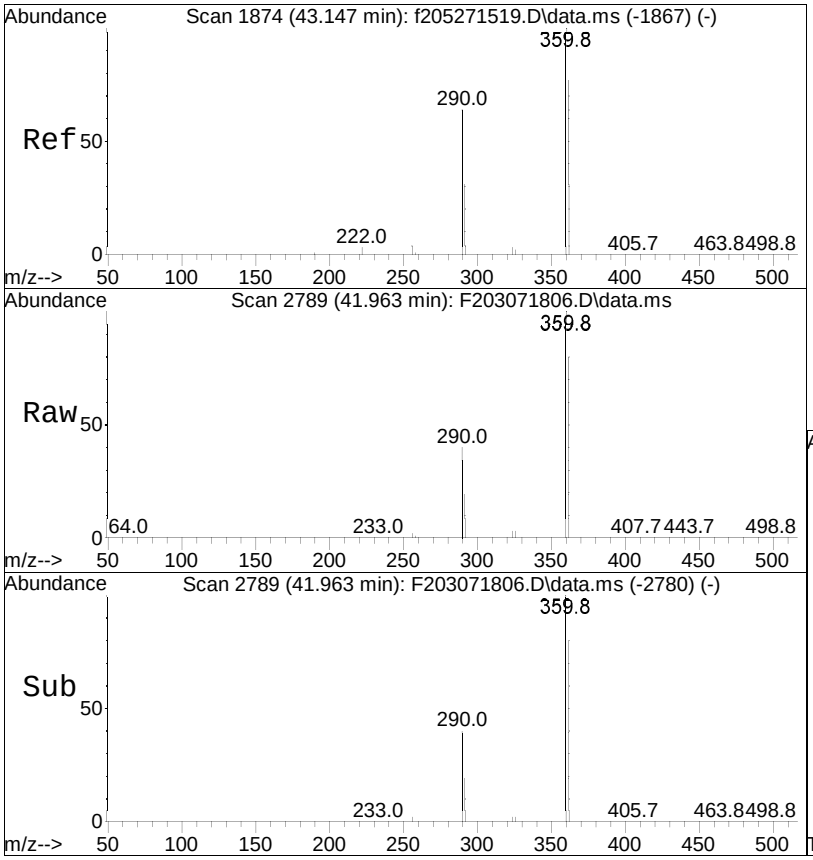


#167
Cl7-BZ#183
Concen: 89.05 ng/mL
RT: 41.599 min Scan# 2767
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 76968

Ion	Ratio	Lower	Upper
394	100		
396	97.2	76.2	114.2

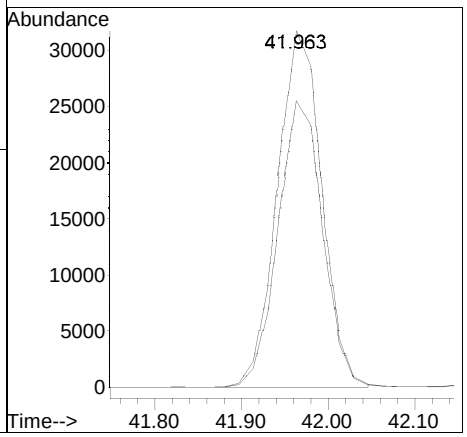


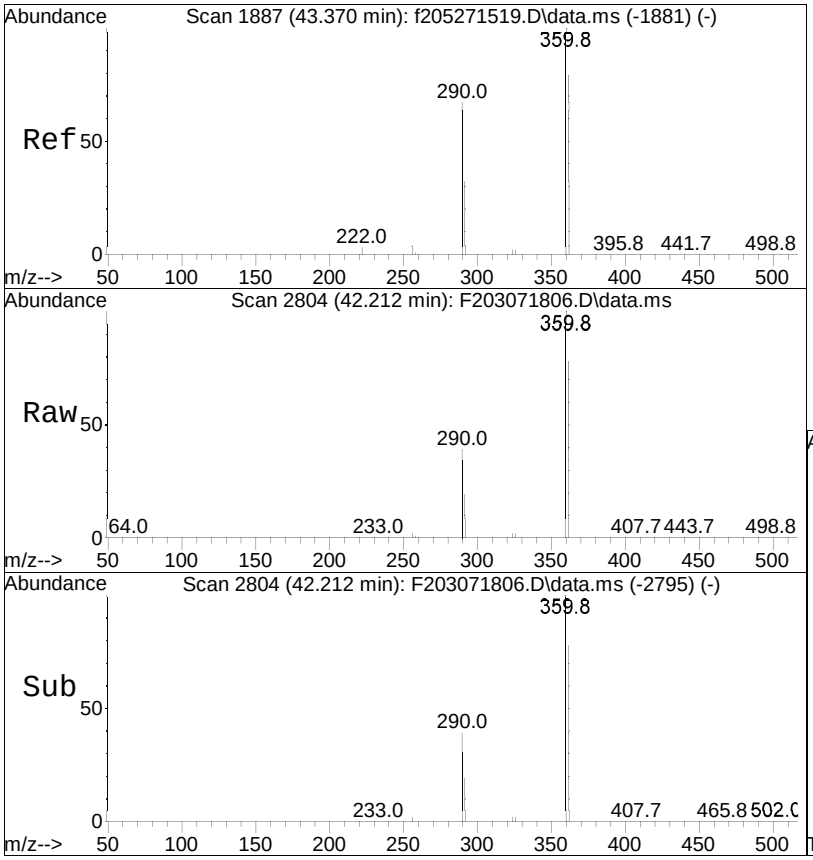


#168
Cl6-BZ#166
Concen: 88.36 ng/mL
RT: 41.963 min Scan# 2789
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 112574

Ion	Ratio	Lower	Upper
360	100		
362	80.5	65.8	98.6

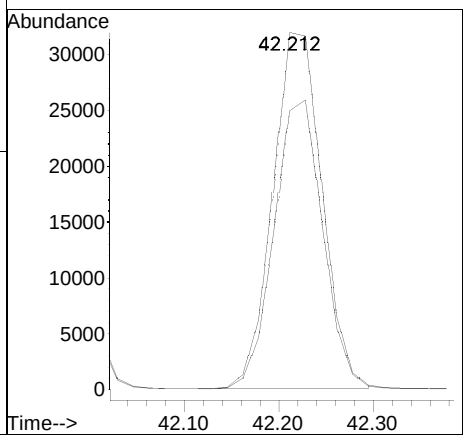


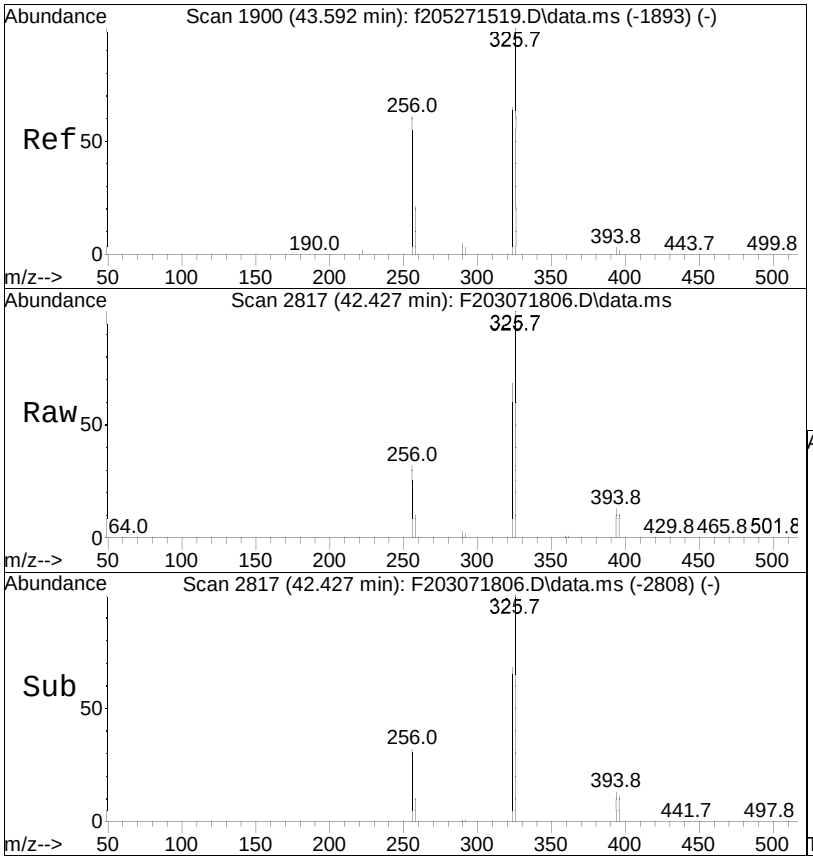


#169
Cl6-BZ#159
Concen: 90.38 ng/mL
RT: 42.212 min Scan# 2804
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 115138

Ion	Ratio	Lower	Upper
360	100		
362	80.0	65.0	97.6

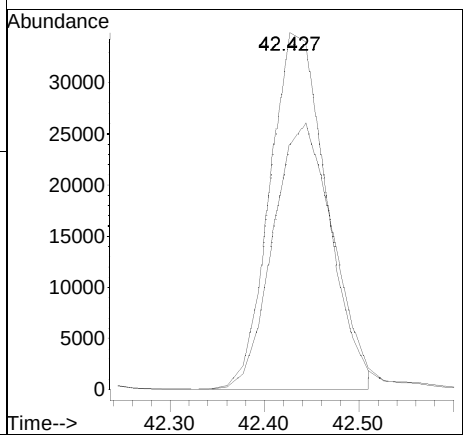


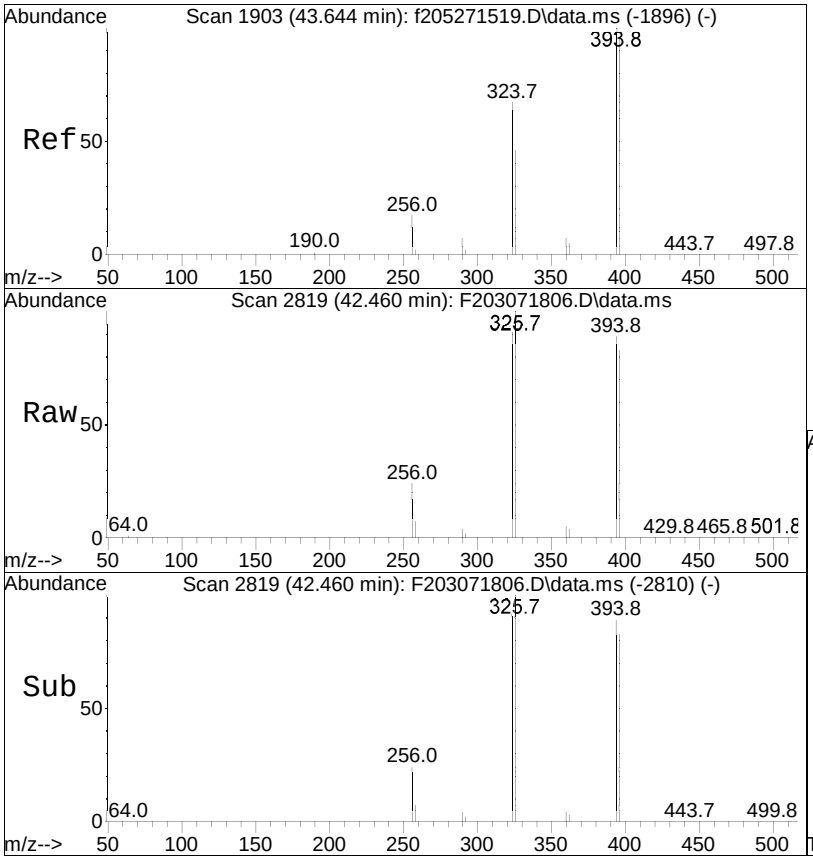


#170
Cl5-BZ#126-RTW
Concen: 92.82 ng/mL
RT: 42.427 min Scan# 2817
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:326 Resp: 144612

Ion	Ratio	Lower	Upper
326	100		
324	79.6	56.5	84.7

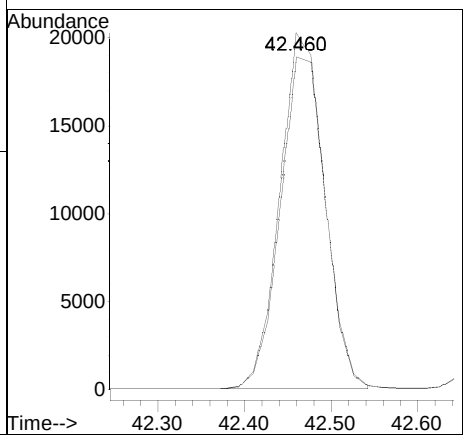


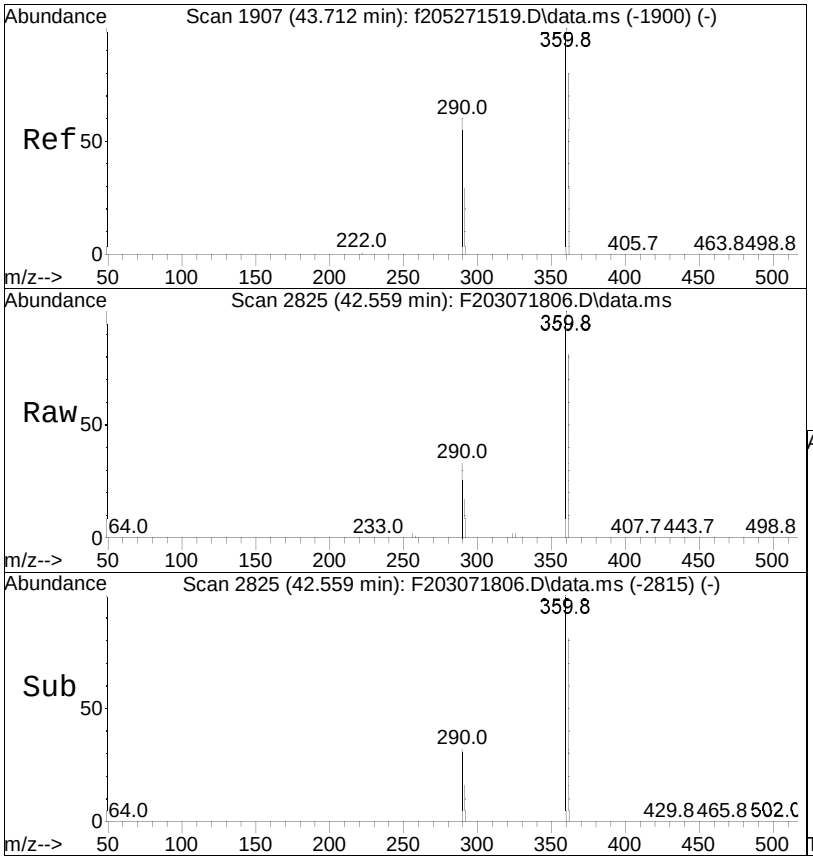


#171
Cl7-BZ#185
Concen: 89.31 ng/mL
RT: 42.460 min Scan# 2819
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 71806

Ion	Ratio	Lower	Upper
394	100		
396	95.4	75.9	113.9

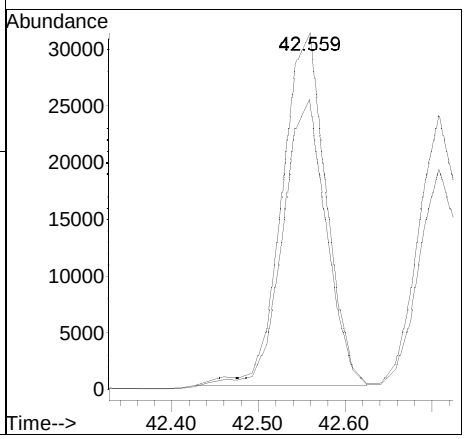


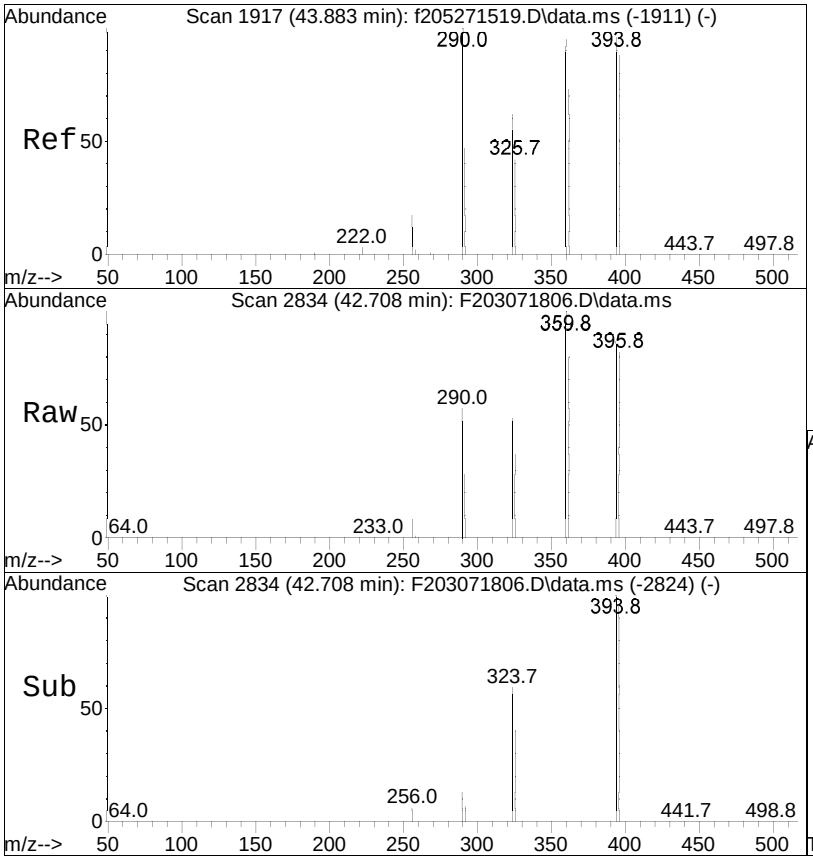


#172
Cl6-BZ#162
Concen: 92.99 ng/mL
RT: 42.559 min Scan# 2825
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 109788

Ion	Ratio	Lower	Upper
360	100		
362	81.3	62.8	94.2

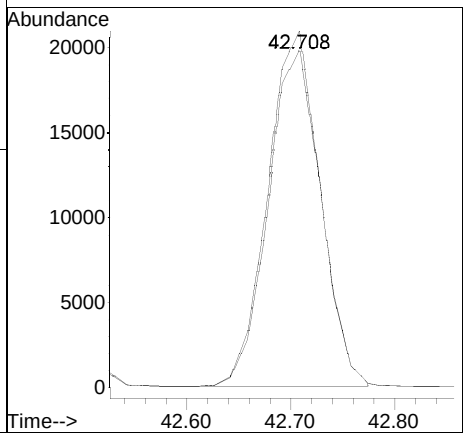


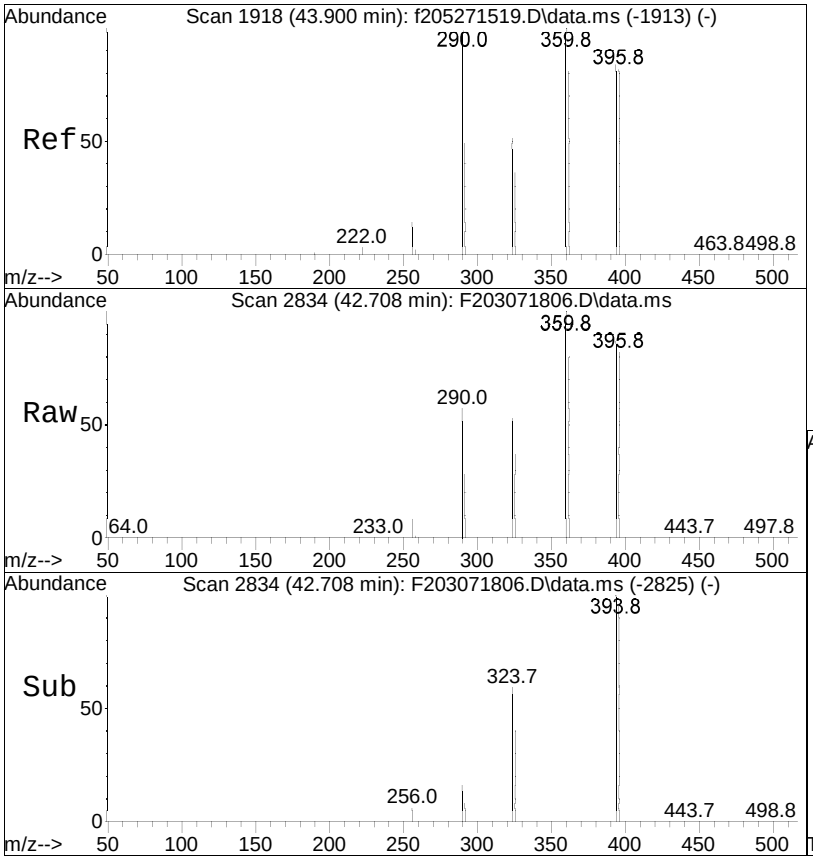


#173
Cl7-BZ#174
Concen: 91.40 ng/mL
RT: 42.708 min Scan# 2834
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 72957

Ion	Ratio	Lower	Upper
394	100		
396	95.5	77.1	115.7

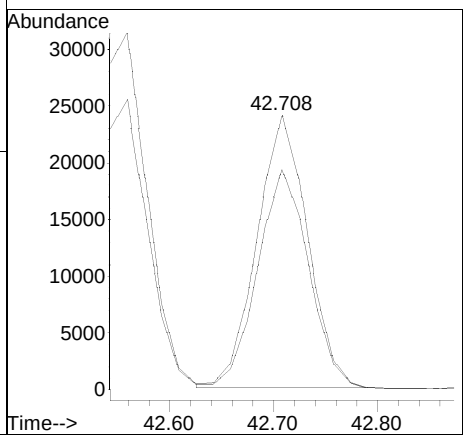


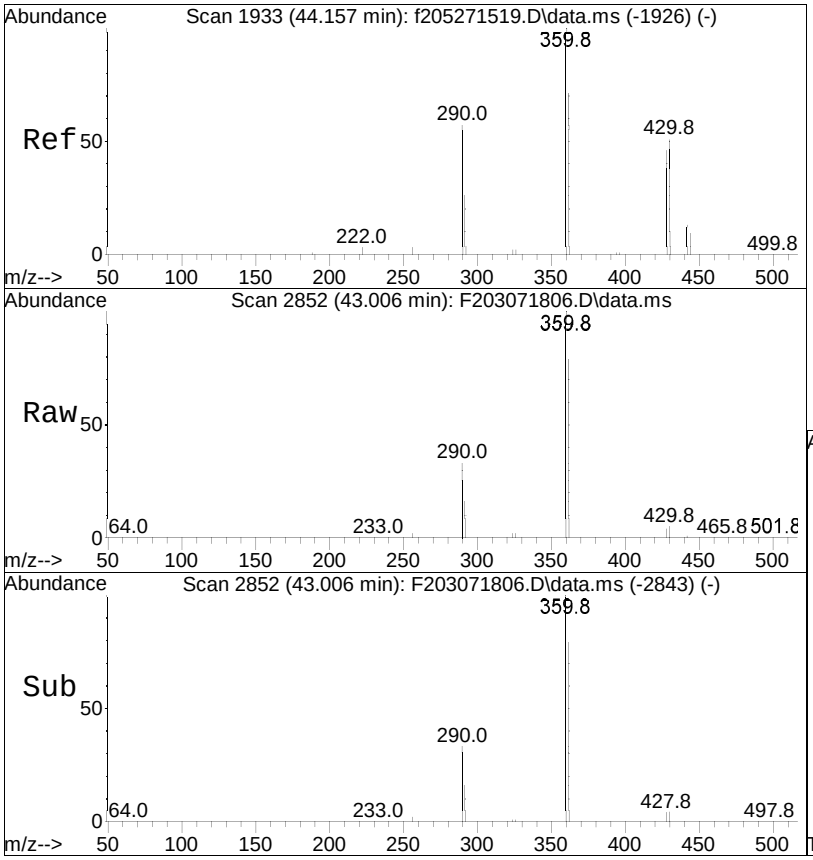


#174
Cl6-BZ#128
Concen: 92.59 ng/mL
RT: 42.708 min Scan# 2834
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 80845

Ion	Ratio	Lower	Upper
360	100		
362	81.0	64.4	96.6

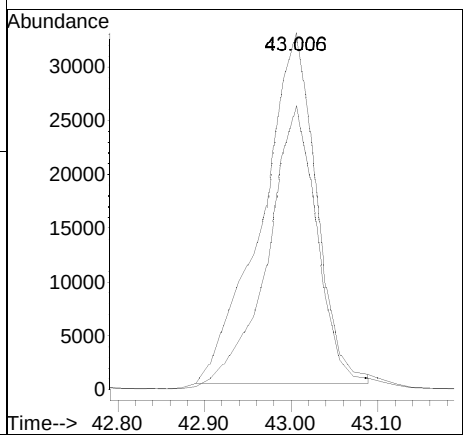


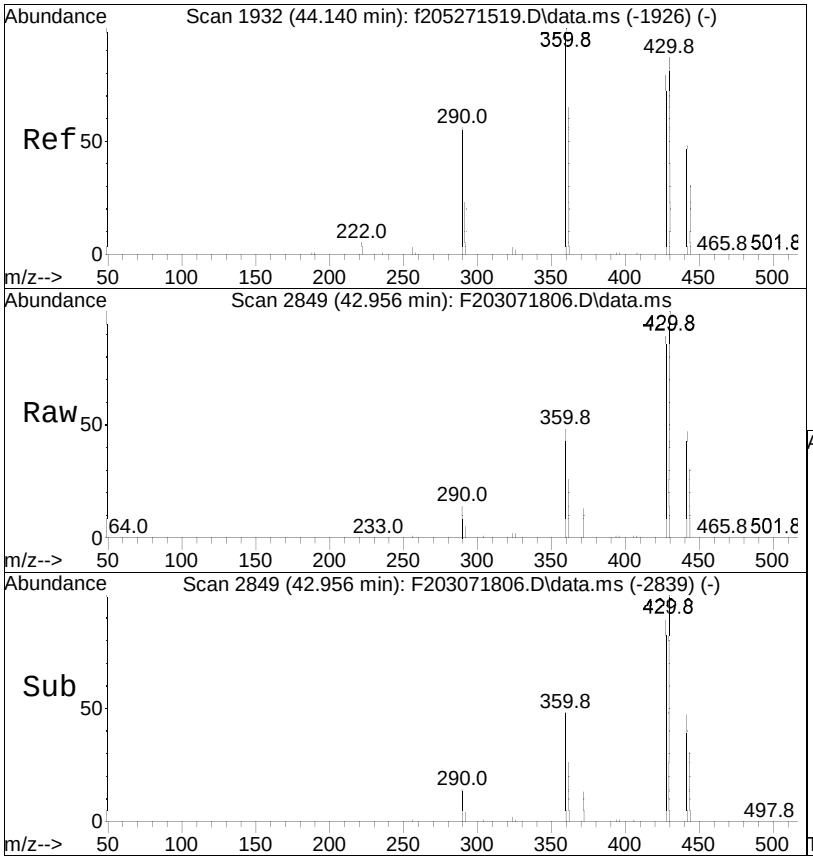


#175
Cl6-BZ#167
Concen: 90.90 ng/mL
RT: 43.006 min Scan# 2852
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 142401

Ion	Ratio	Lower	Upper
360	100		
362	72.6	63.0	94.4

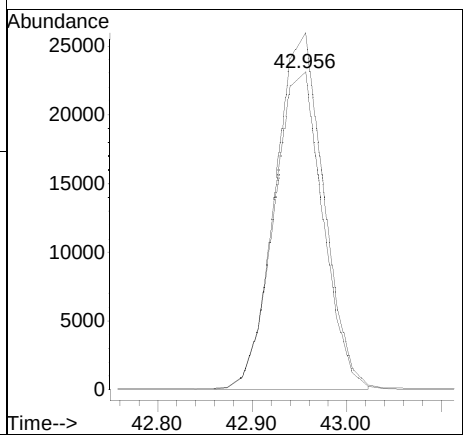


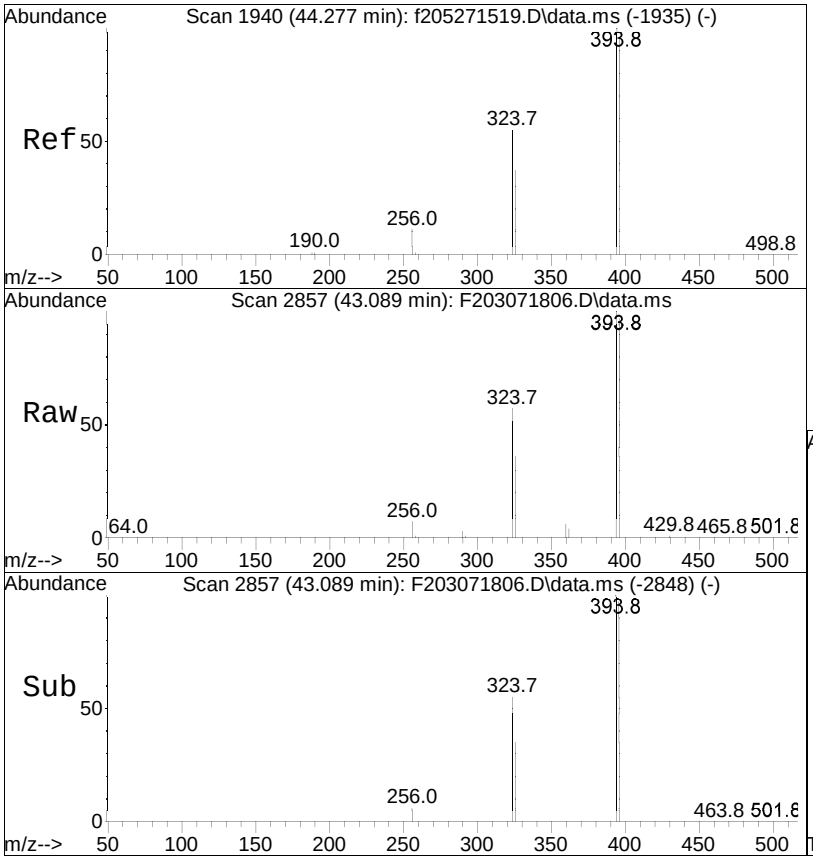


#176
Cl8-BZ#202-RTW
Concen: 91.61 ng/mL
RT: 42.956 min Scan# 2849
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 82749

Ion	Ratio	Lower	Upper
428	100		
430	111.0	89.4	134.2

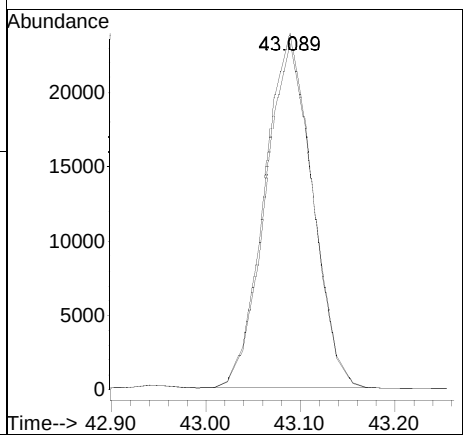


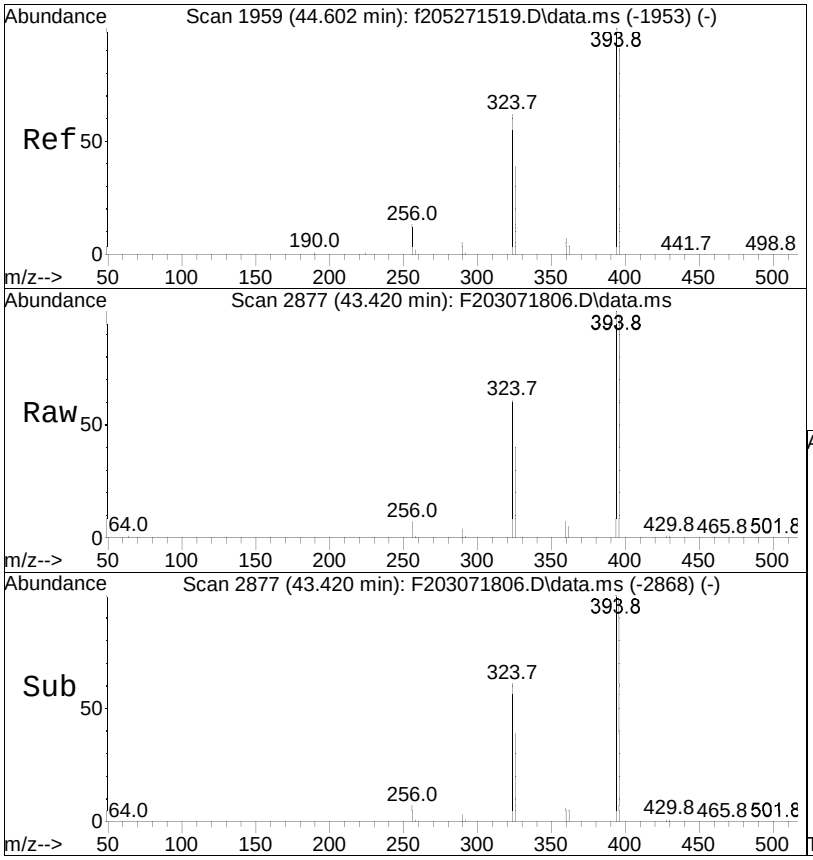


#178
Cl7-BZ#181
Concen: 92.94 ng/mL
RT: 43.089 min Scan# 2857
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 83401

Ion	Ratio	Lower	Upper
394	100		
396	96.9	75.3	112.9

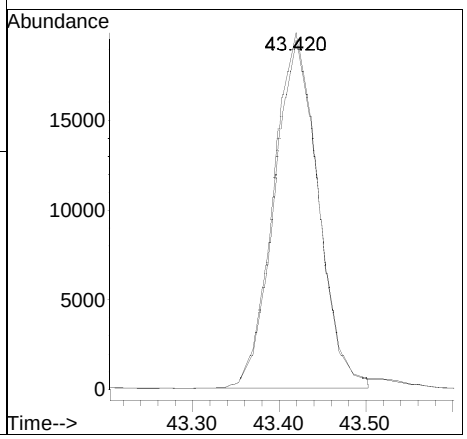


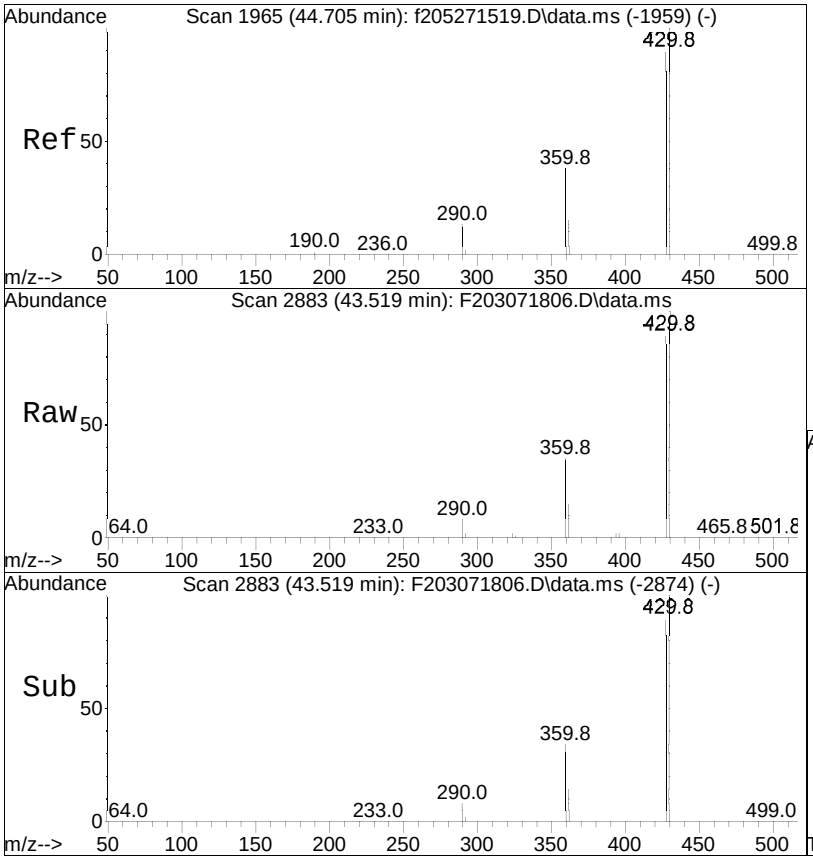


#179
Cl7-BZ#177
Concen: 91.13 ng/mL
RT: 43.420 min Scan# 2877
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 70903

Ion	Ratio	Lower	Upper
394	100		
396	96.6	77.8	116.6

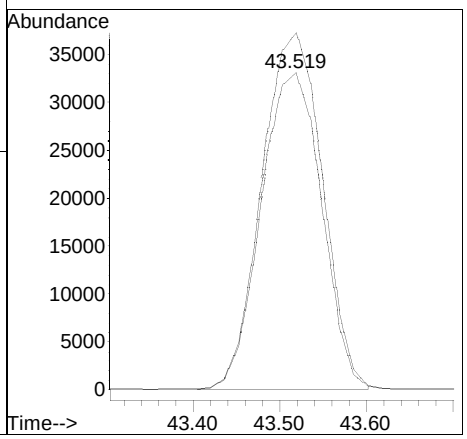


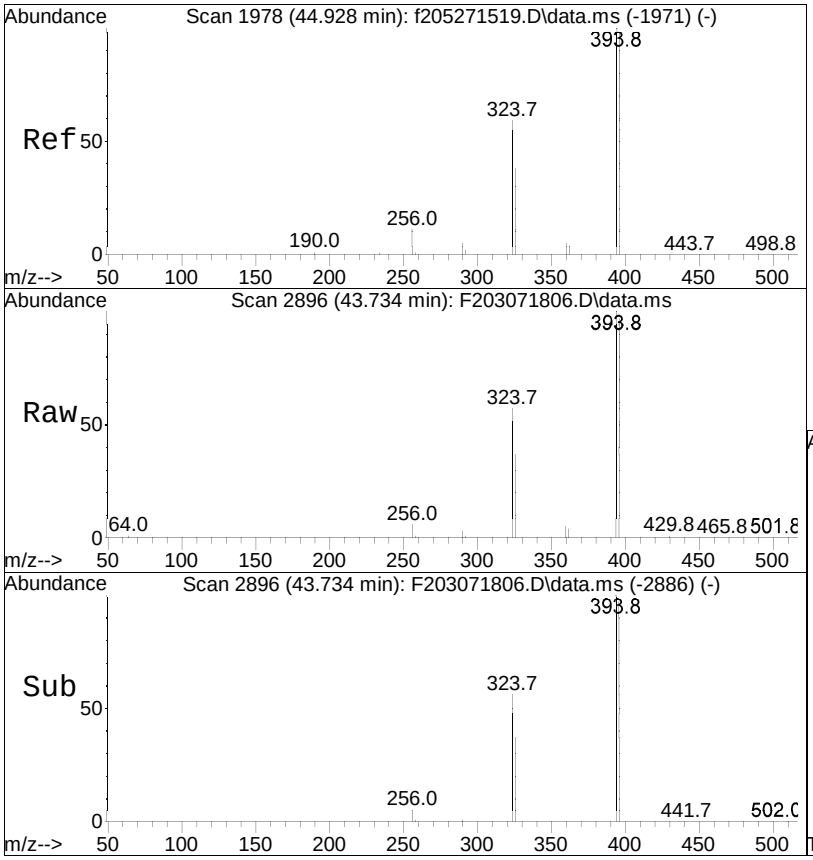


#180
Cl8-BZ#204/#200-Cal
Concen: 180.82 ng/mL
RT: 43.519 min Scan# 2883
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 160392

Ion	Ratio	Lower	Upper
428	100		
430	112.3	89.8	134.6

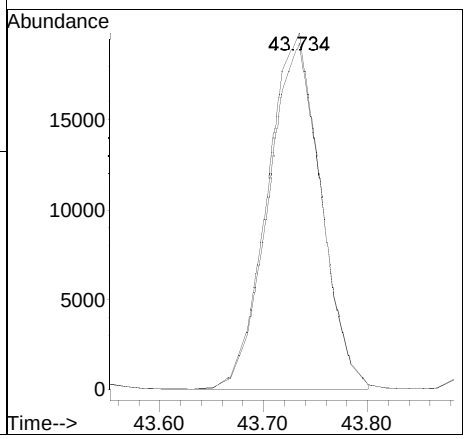


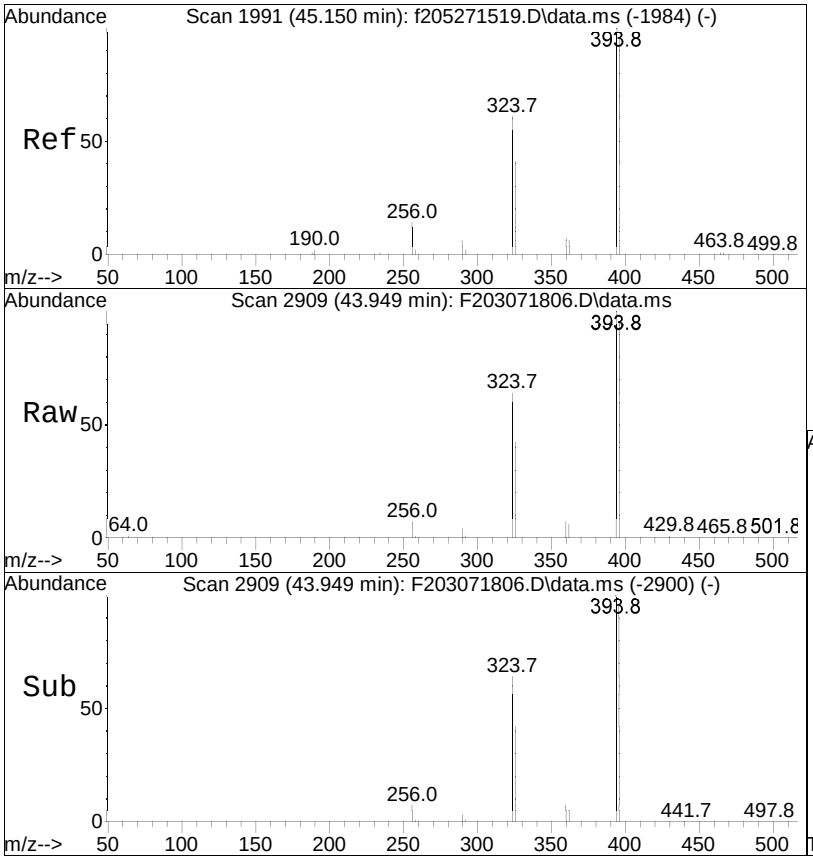


#183
Cl7-BZ#171
Concen: 91.93 ng/mL
RT: 43.734 min Scan# 2896
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 70059

Ion	Ratio	Lower	Upper
394	100		
396	96.5	75.4	113.0

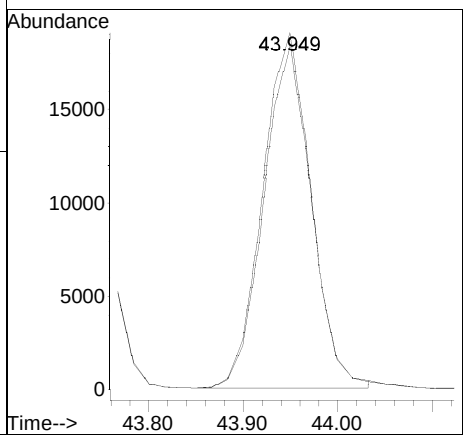


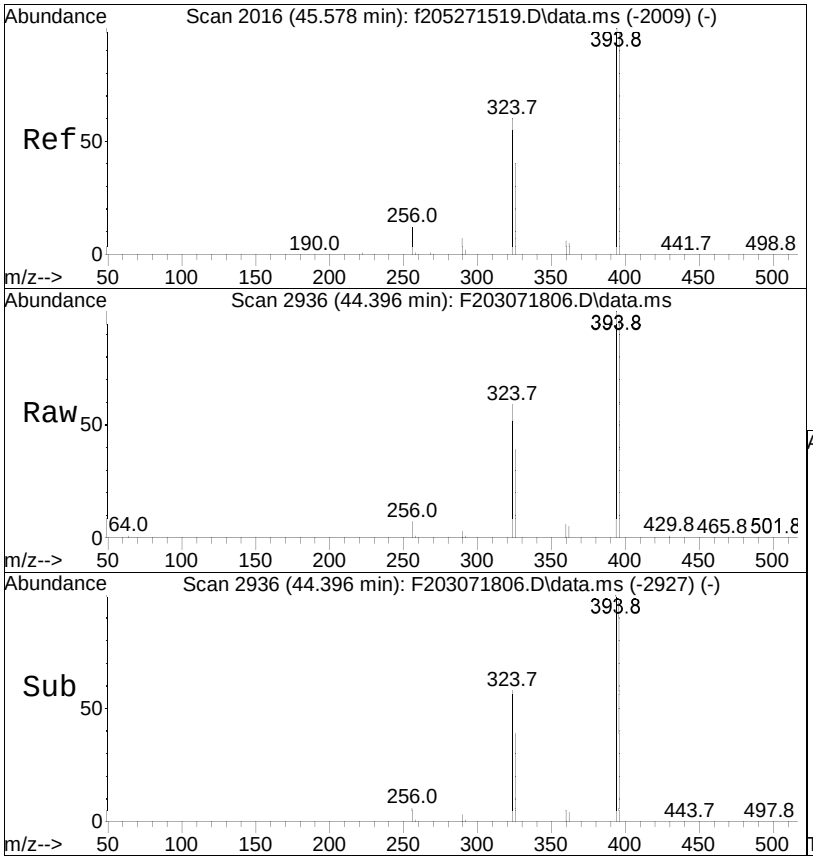


#184
Cl7-BZ#173
Concen: 89.77 ng/mL
RT: 43.949 min Scan# 2909
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 67407

Ion	Ratio	Lower	Upper
394	100		
396	95.1	76.3	114.5

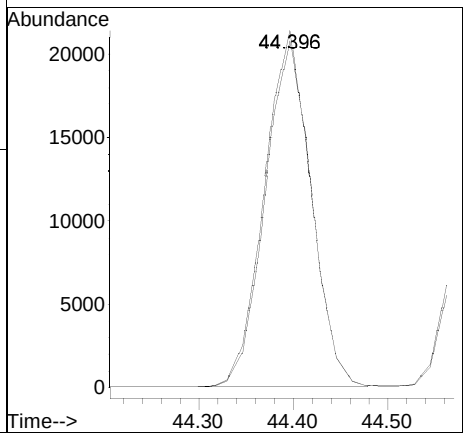


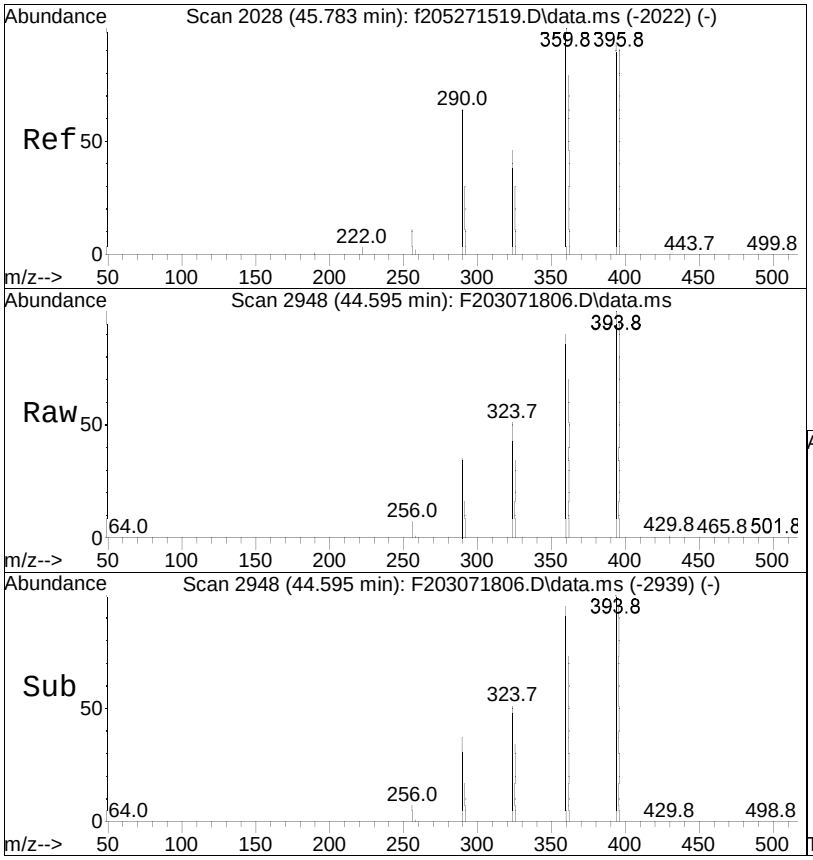


#185
Cl7-BZ#172
Concen: 90.41 ng/mL
RT: 44.396 min Scan# 2936
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 72985

Ion	Ratio	Lower	Upper
394	100		
396	96.8	75.4	113.2

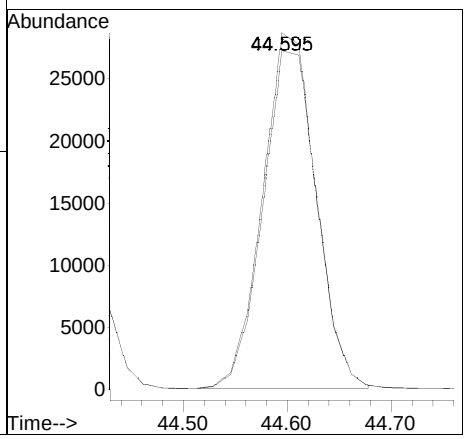


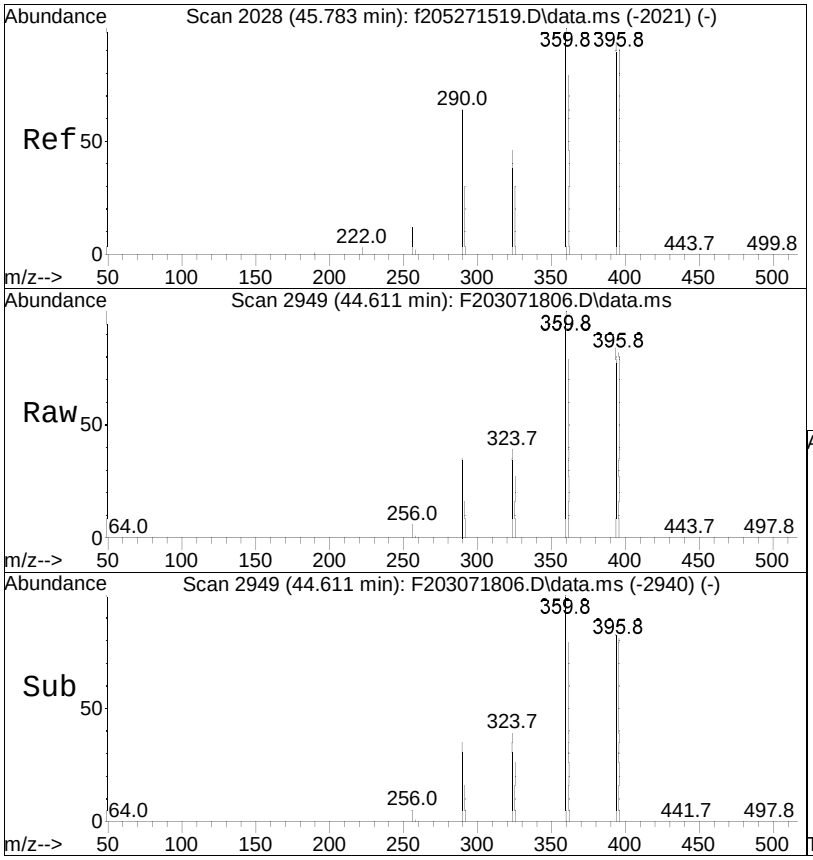


#186
Cl7-BZ#192
Concen: 91.67 ng/mL
RT: 44.595 min Scan# 2948
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 101355

Ion	Ratio	Lower	Upper
394	100		
396	96.7	76.9	115.3

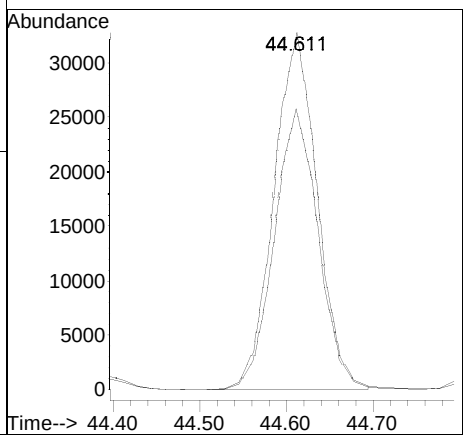


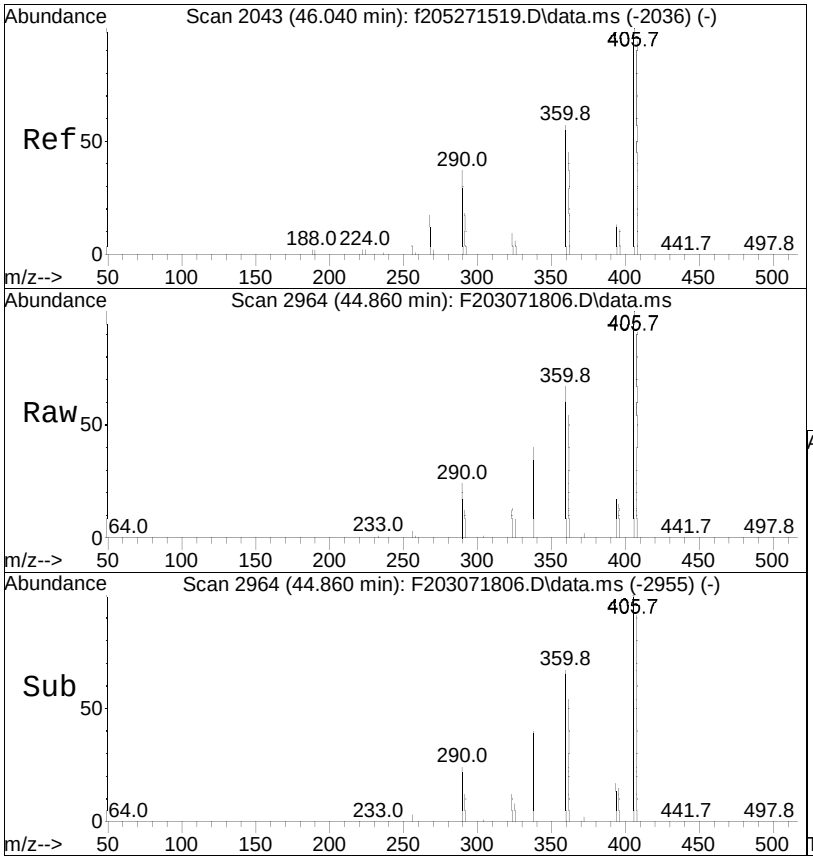


#187
Cl6-BZ#156
Concen: 92.34 ng/mL
RT: 44.611 min Scan# 2949
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 112727

Ion	Ratio	Lower	Upper
360	100		
362	79.7	63.4	95.2

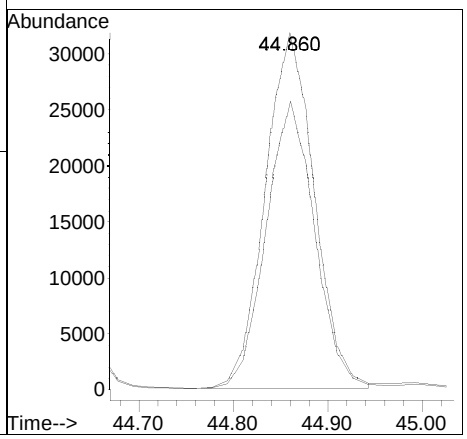


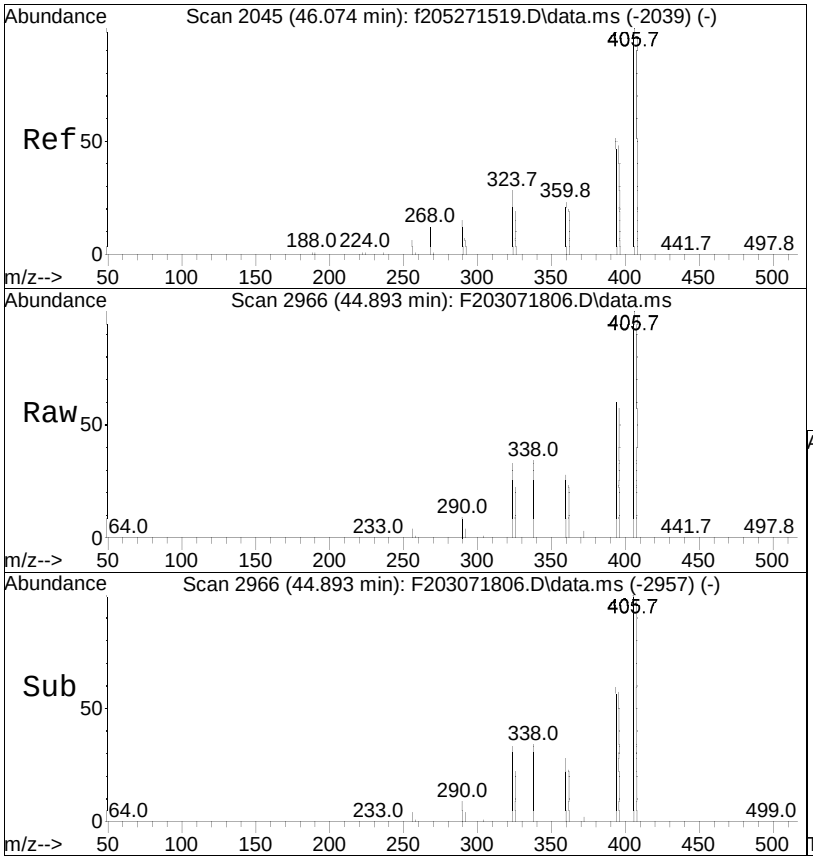


#188
Cl6-BZ#157
Concen: 90.96 ng/mL
RT: 44.860 min Scan# 2964
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 114702

Ion	Ratio	Lower	Upper
360	100		
362	79.7	62.6	93.8

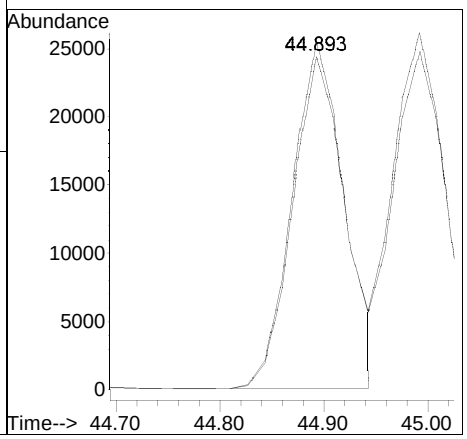


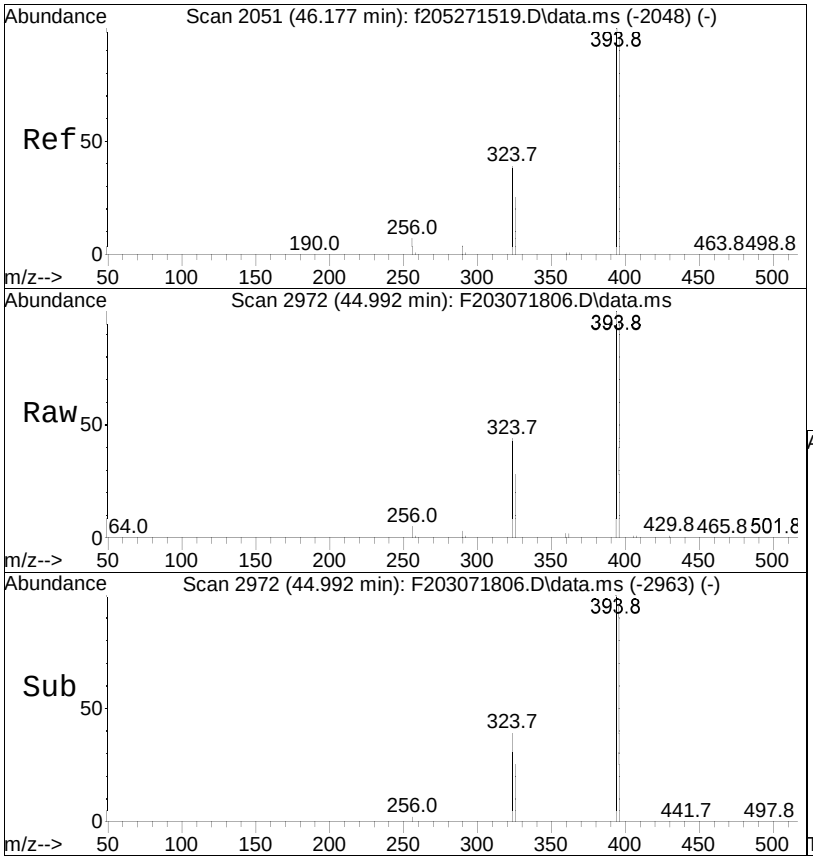


#189
Cl7-BZ#180
Concen: 90.97 ng/mL
RT: 44.893 min Scan# 2966
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 89347

Ion	Ratio	Lower	Upper
394	100		
396	95.9	74.2	111.2

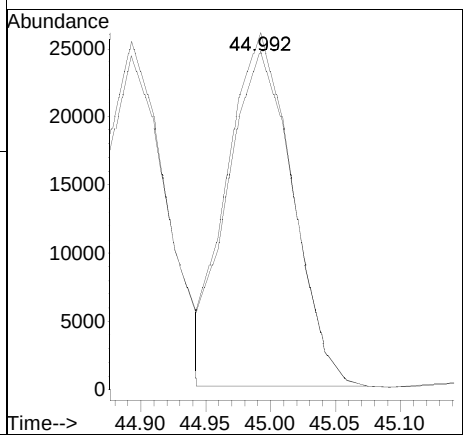


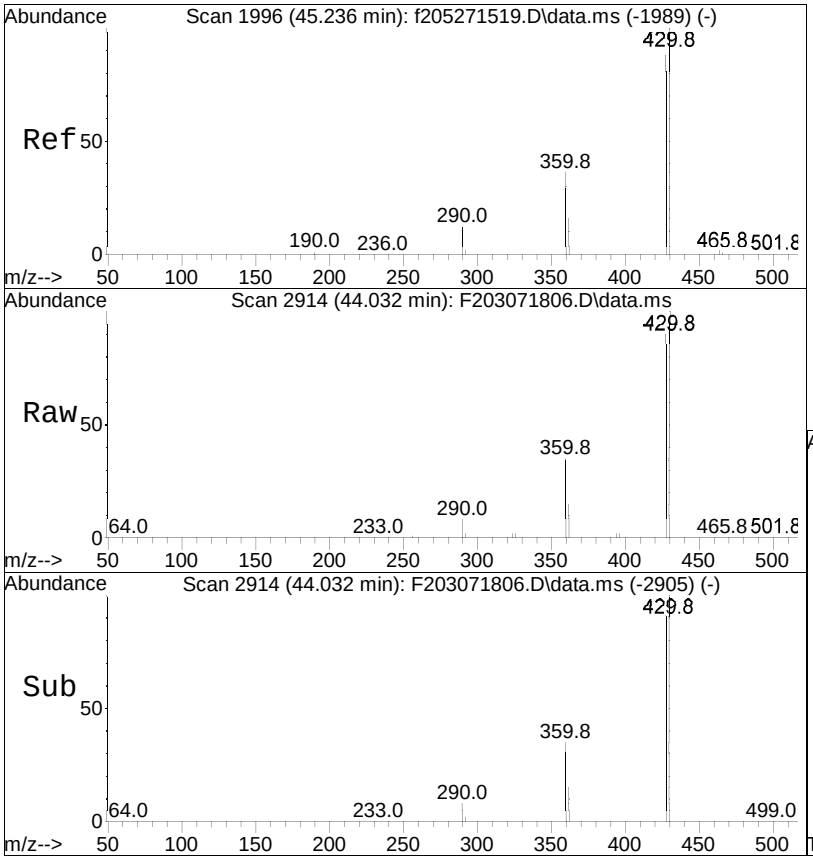


#190
Cl7-BZ#193
Concen: 88.18 ng/mL
RT: 44.992 min Scan# 2972
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 89124

Ion	Ratio	Lower	Upper
394	100		
396	95.8	76.3	114.5

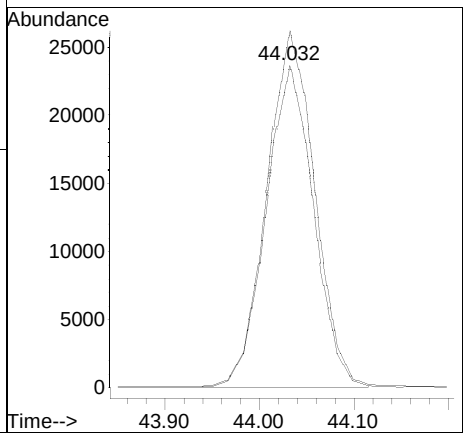


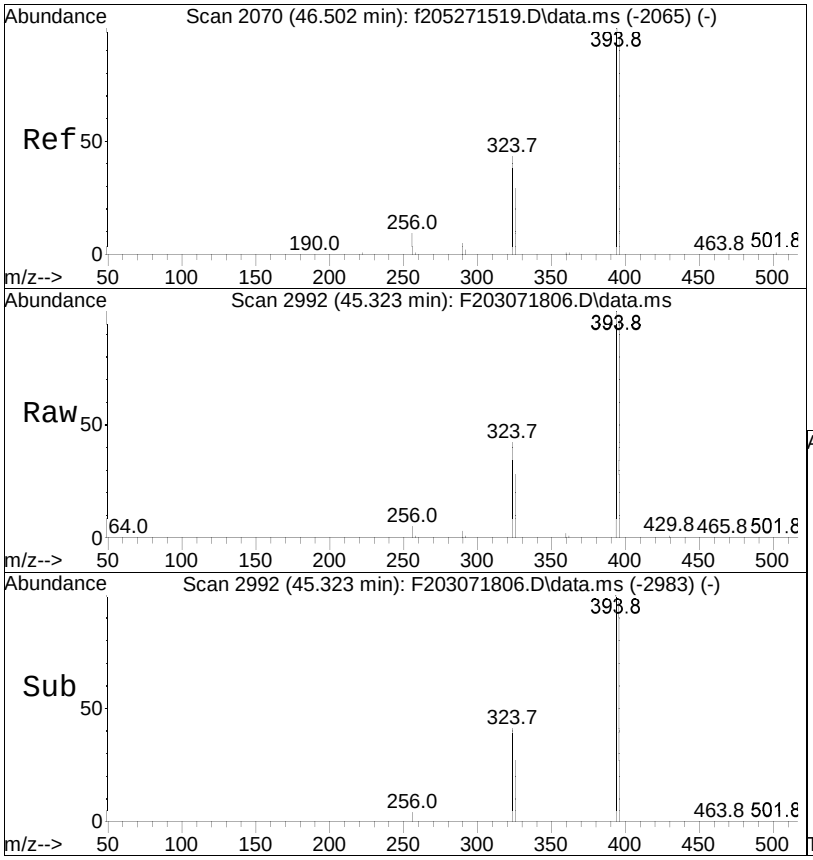


#191
Cl8-BZ#197
Concen: 90.39 ng/mL
RT: 44.032 min Scan# 2914
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 81841

Ion	Ratio	Lower	Upper
428	100		
430	111.7	88.4	132.6

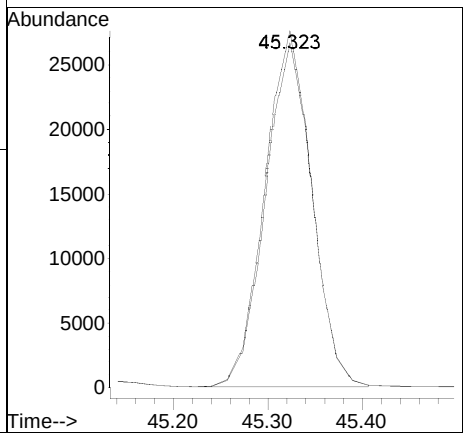


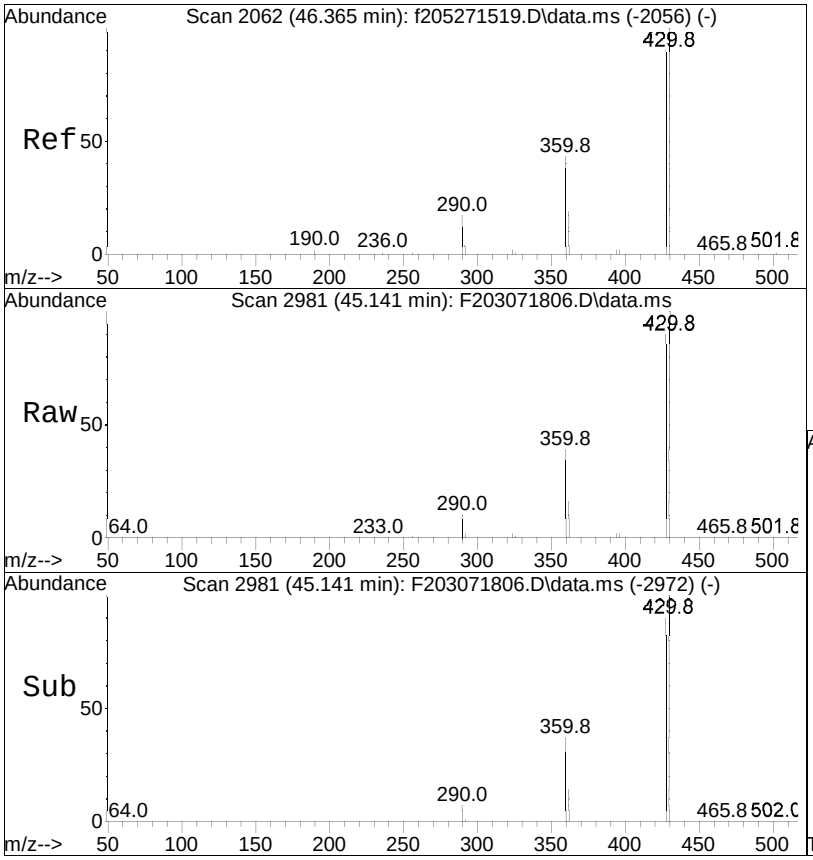


#192
Cl7-BZ#191
Concen: 90.43 ng/mL
RT: 45.323 min Scan# 2992
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 94909

Ion	Ratio	Lower	Upper
394	100		
396	96.1	74.6	111.8

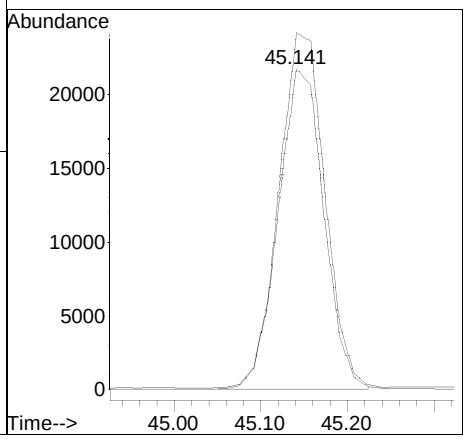


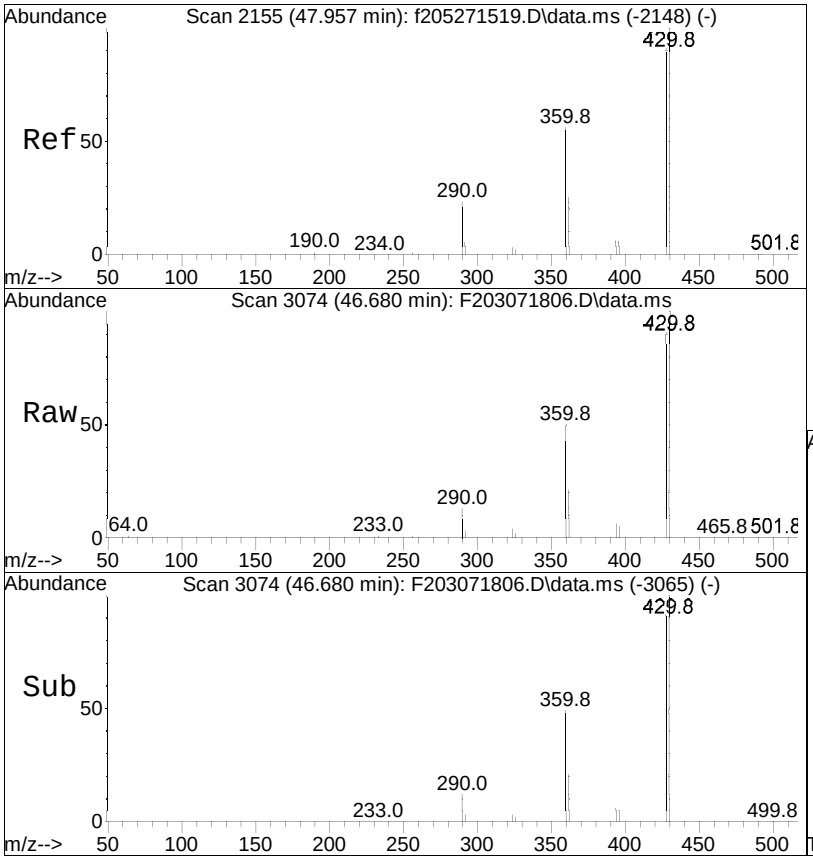


#193
Cl8-BZ#199
Concen: 87.70 ng/mL
RT: 45.141 min Scan# 2981
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 78904

Ion	Ratio	Lower	Upper
428	100		
430	112.3	90.5	135.7

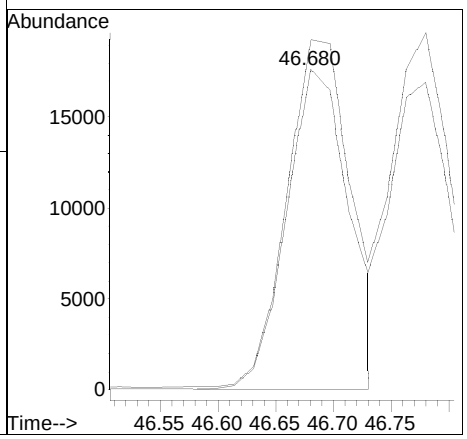


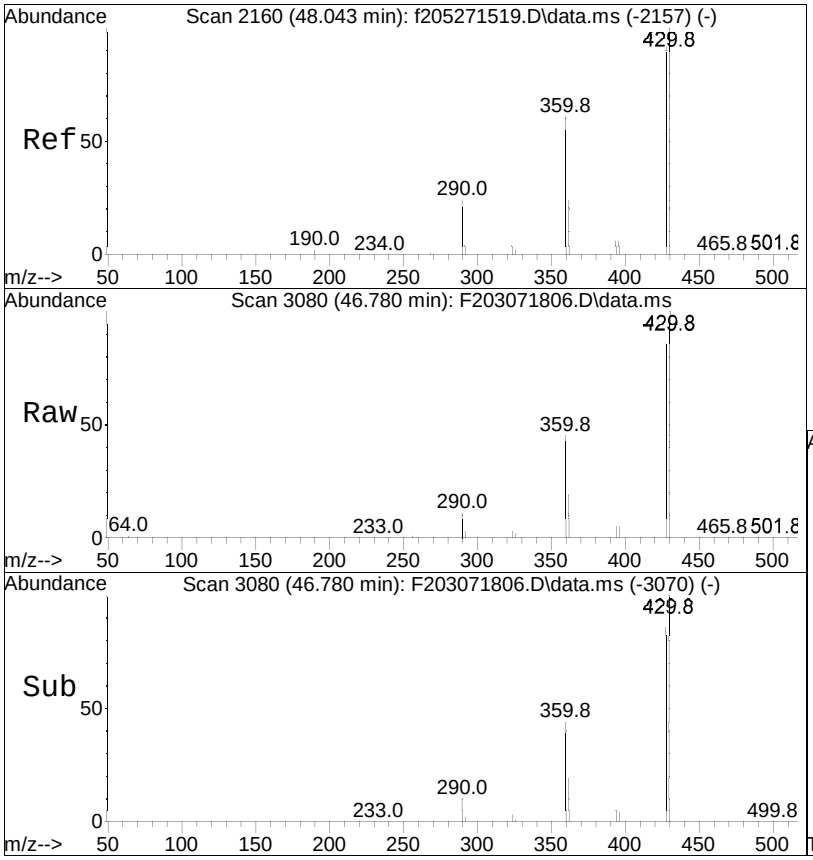


#194
Cl8-BZ#198
Concen: 87.96 ng/mL
RT: 46.680 min Scan# 3074
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 67162

Ion	Ratio	Lower	Upper
428	100		
430	110.5	90.0	135.0

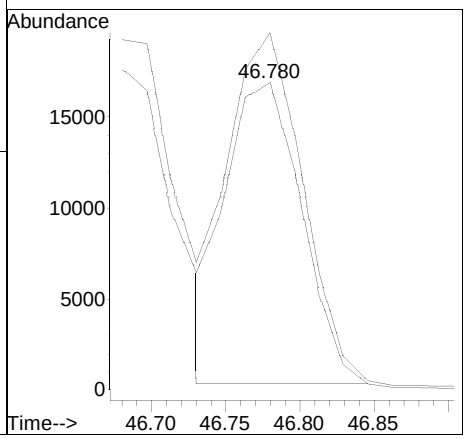


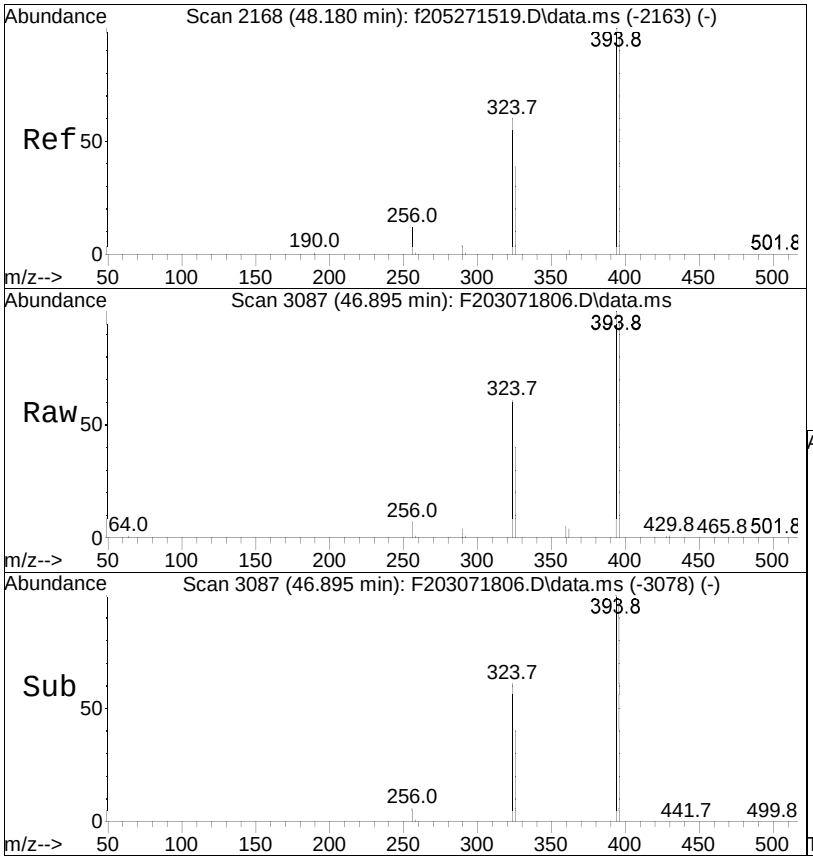


#195
Cl8-BZ#201
Concen: 89.63 ng/mL
RT: 46.780 min Scan# 3080
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 59067

Ion	Ratio	Lower	Upper
428	100		
430	113.2	91.3	136.9

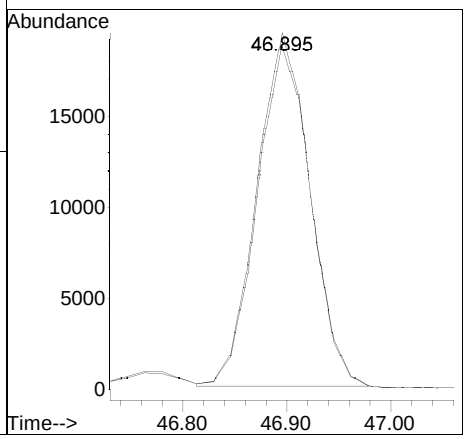


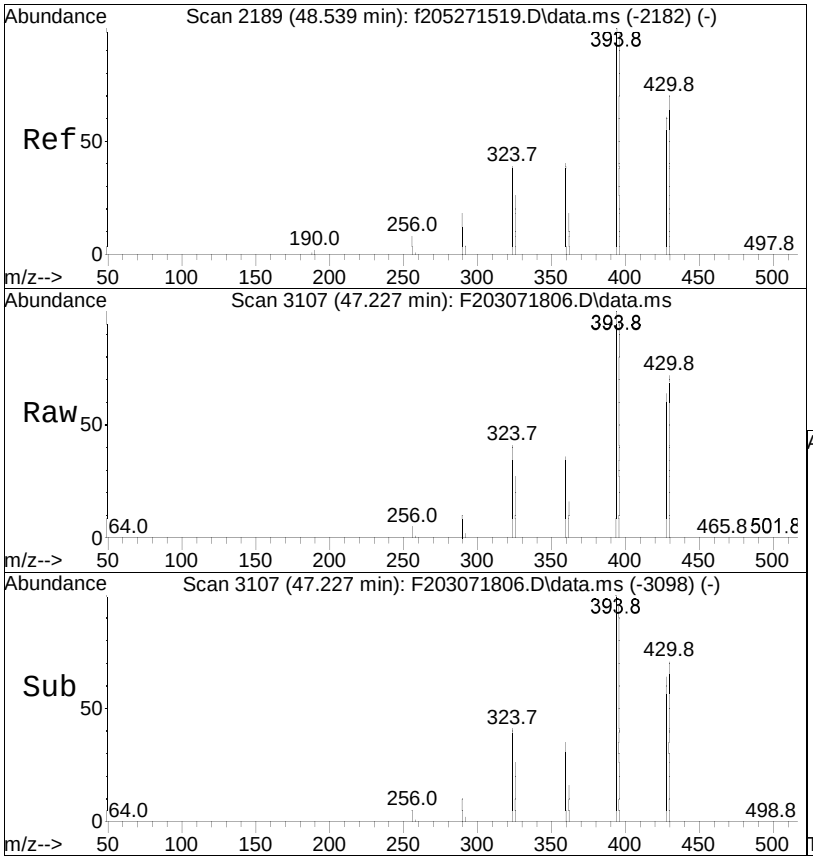


#196
Cl7-BZ#170
Concen: 89.62 ng/mL
RT: 46.895 min Scan# 3087
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 68144

Ion	Ratio	Lower	Upper
394	100		
396	97.0	80.2	120.4

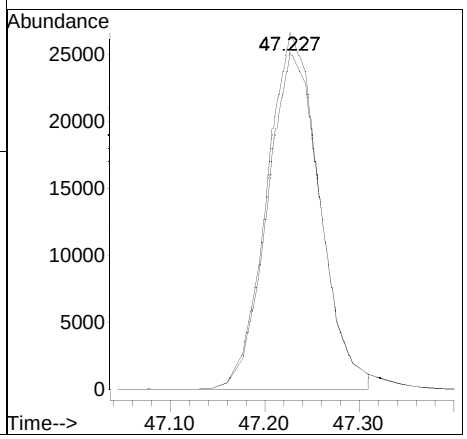


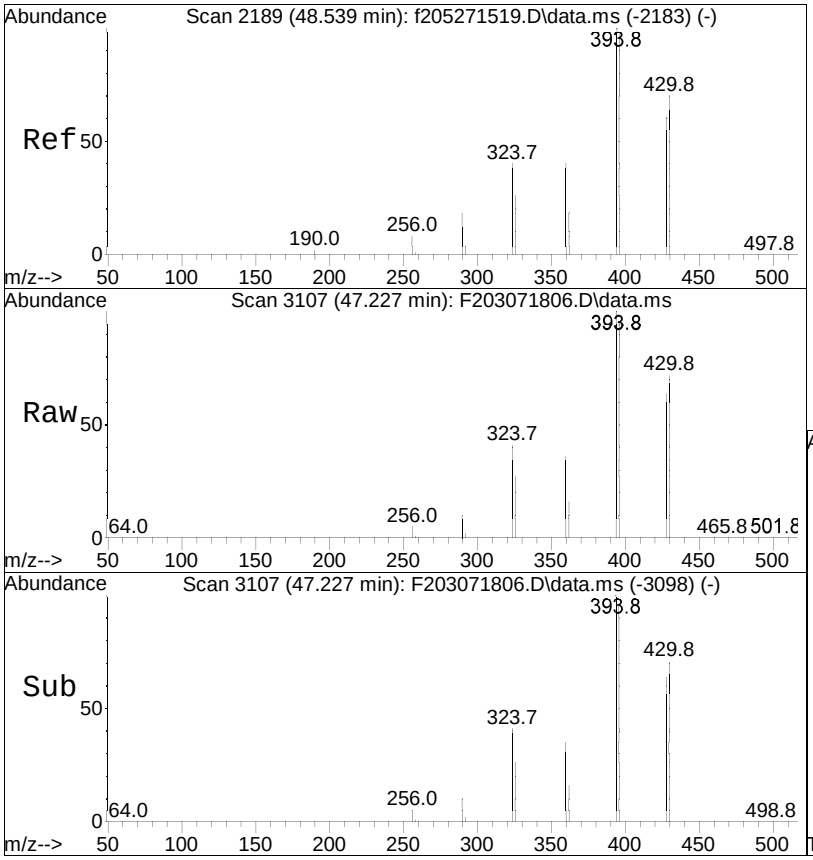


#197
Cl7-BZ#190
Concen: 92.39 ng/mL
RT: 47.227 min Scan# 3107
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 102260

Ion	Ratio	Lower	Upper
394	100		
396	95.0	78.9	118.3

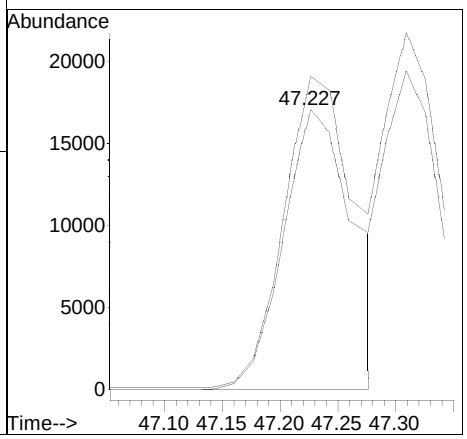


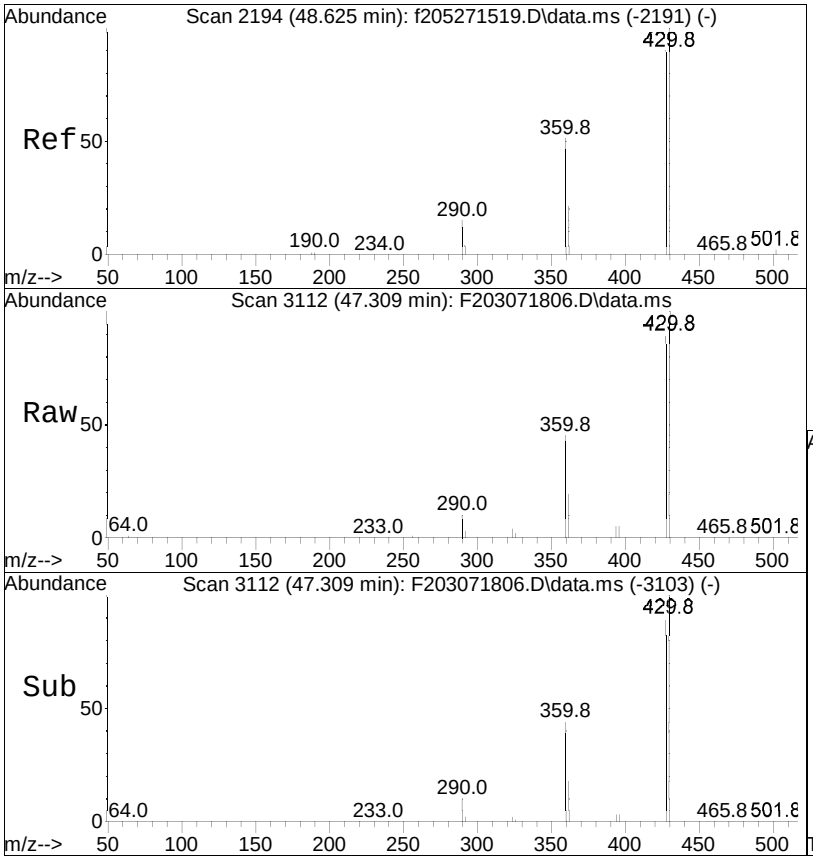


#198
Cl8-BZ#196
Concen: 100.27 ng/mL
RT: 47.227 min Scan# 3107
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 71659

Ion	Ratio	Lower	Upper
428	100		
430	111.8	90.2	135.2

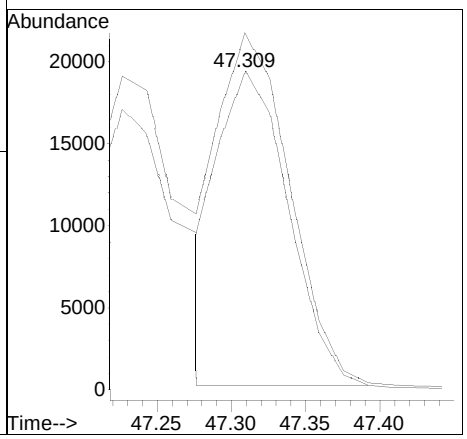


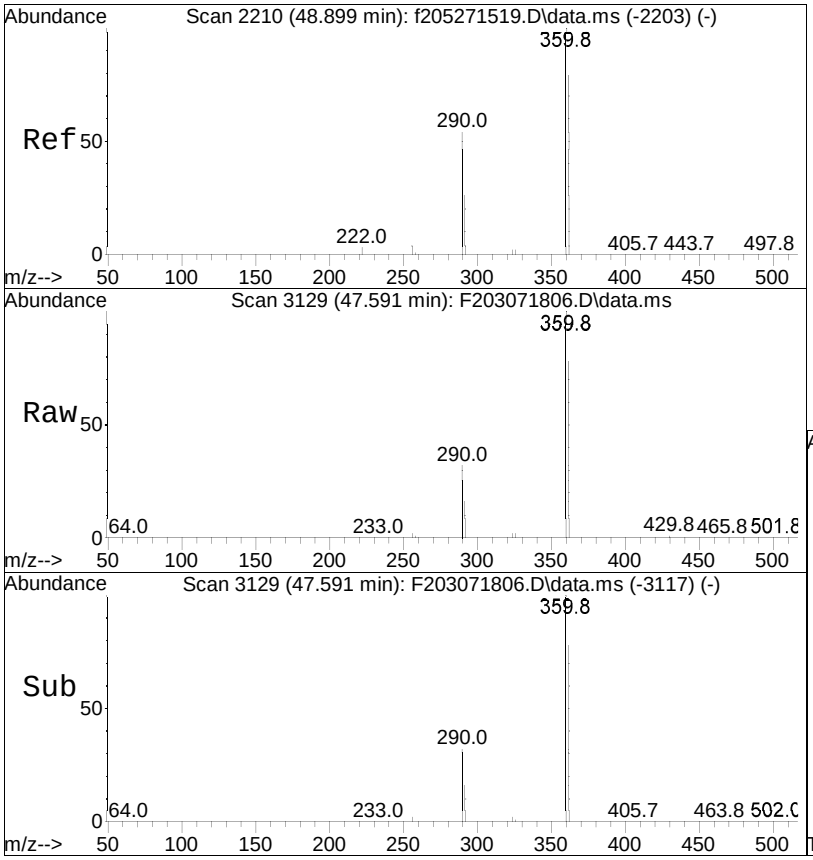


#199
Cl8-BZ#203
Concen: 81.71 ng/mL
RT: 47.309 min Scan# 3112
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 63091

Ion	Ratio	Lower	Upper
428	100		
430	112.5	90.0	135.0

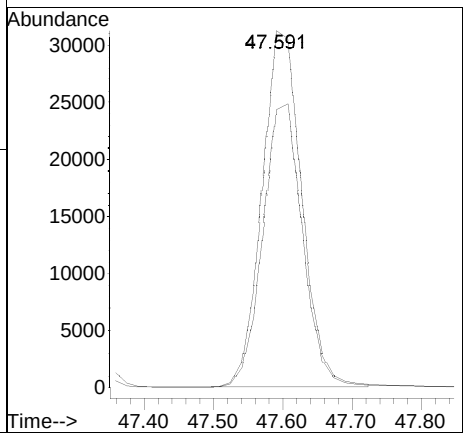


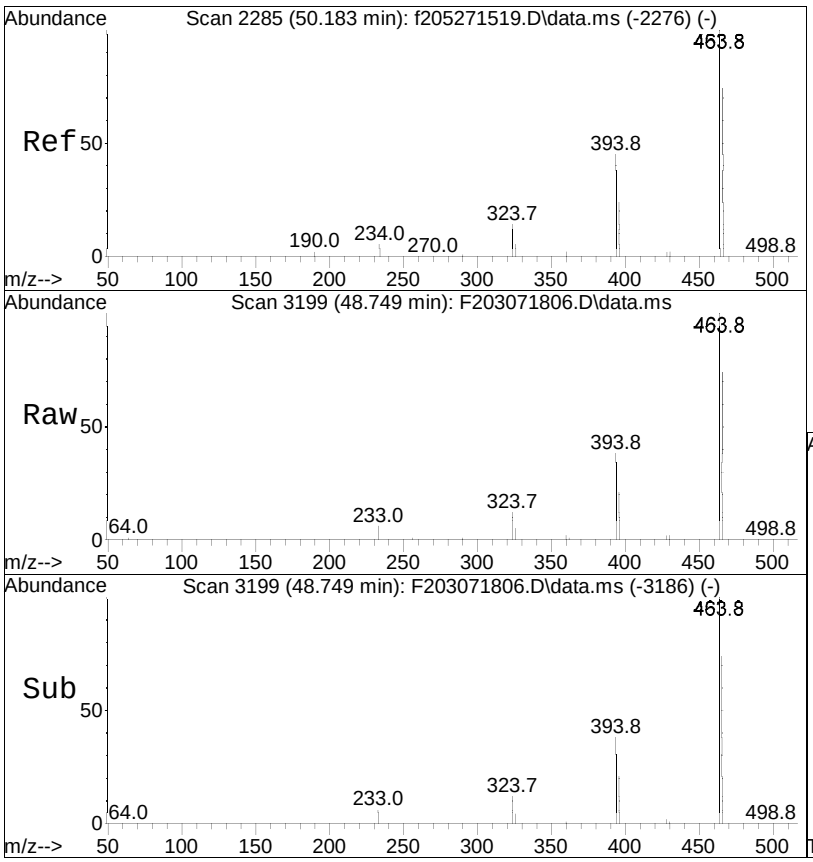


#200
Cl6-BZ#169-RTW
Concen: 91.90 ng/mL
RT: 47.591 min Scan# 3129
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:360 Resp: 123919

Ion	Ratio	Lower	Upper
360	100		
362	79.5	65.0	97.4

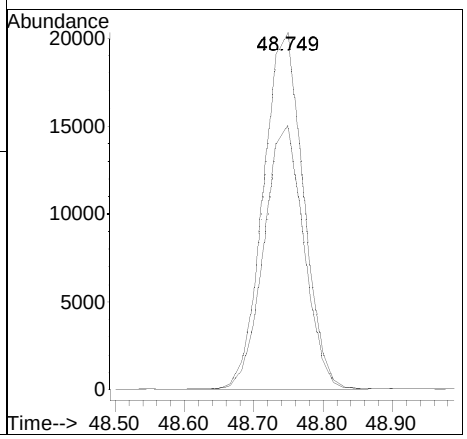


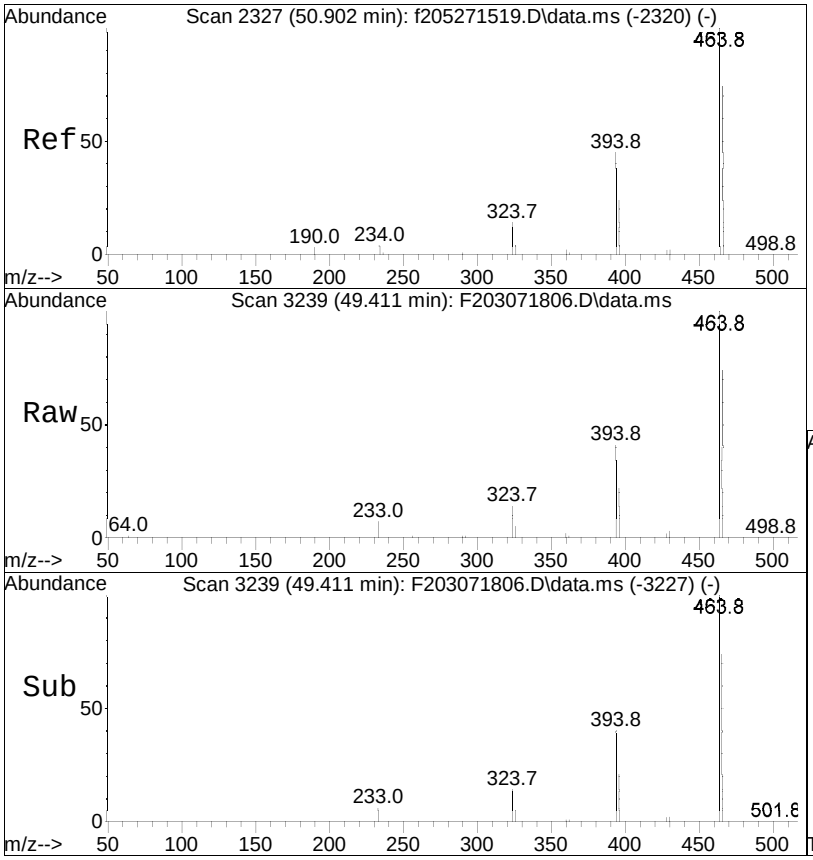


#201
Cl9-BZ#208-RTW
Concen: 85.09 ng/mL
RT: 48.749 min Scan# 3199
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:464 Resp: 81248

Ion	Ratio	Lower	Upper
464	100		
466	73.7	60.3	90.5

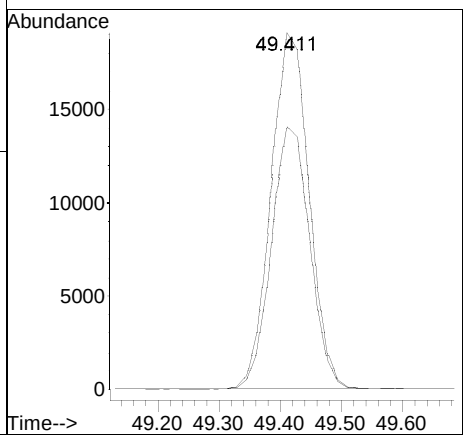


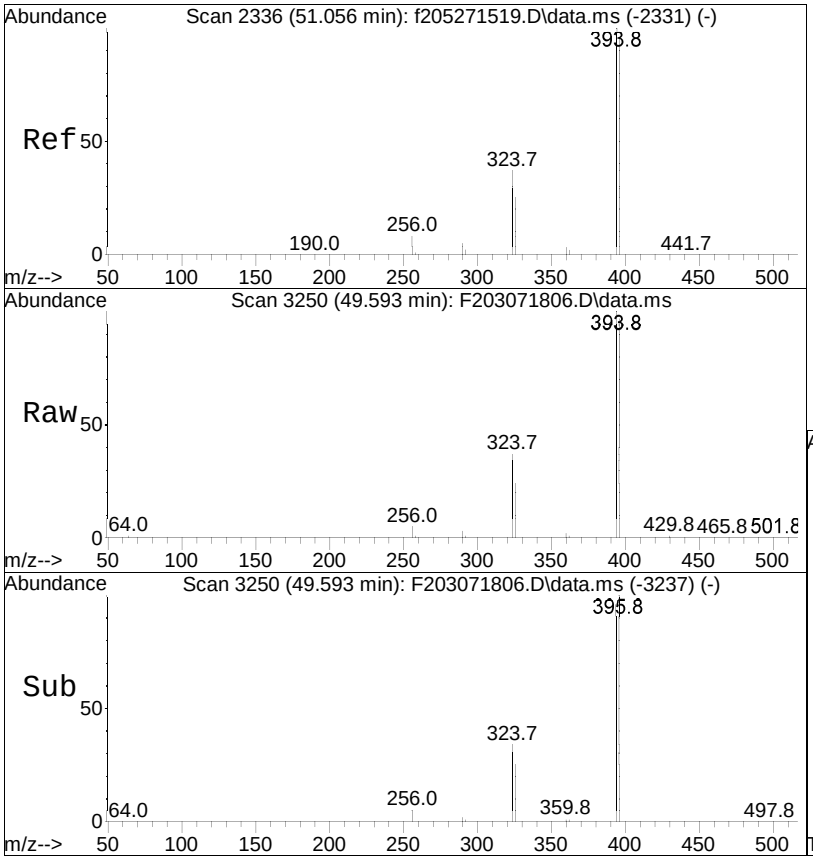


#202
Cl9-BZ#207
Concen: 88.15 ng/mL
RT: 49.411 min Scan# 3239
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:464 Resp: 82145

Ion	Ratio	Lower	Upper
464	100		
466	74.1	61.9	92.9

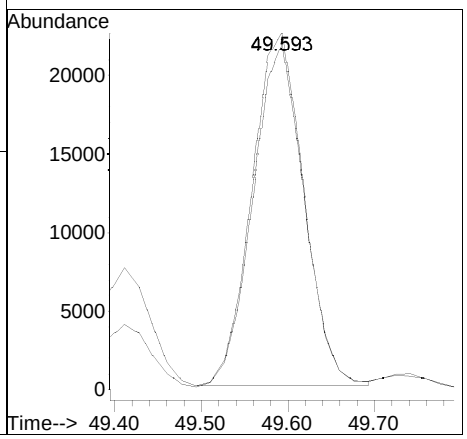


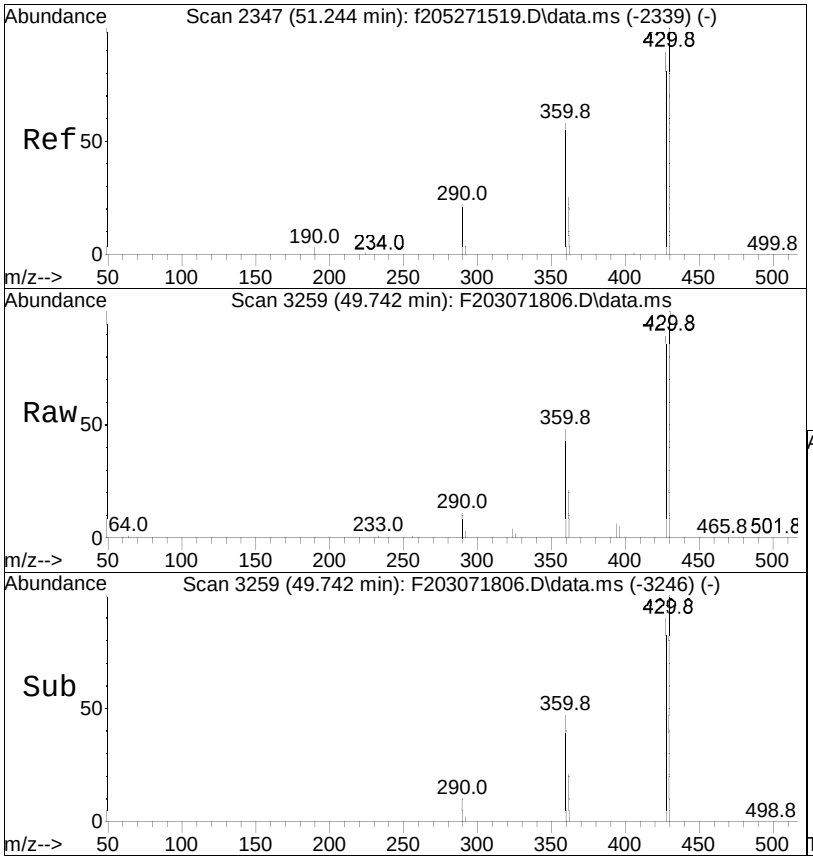


#203
Cl7-BZ#189-RTW
Concen: 92.50 ng/mL
RT: 49.593 min Scan# 3250
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:394 Resp: 93193

Ion	Ratio	Lower	Upper
394	100		
396	96.2	76.4	114.6

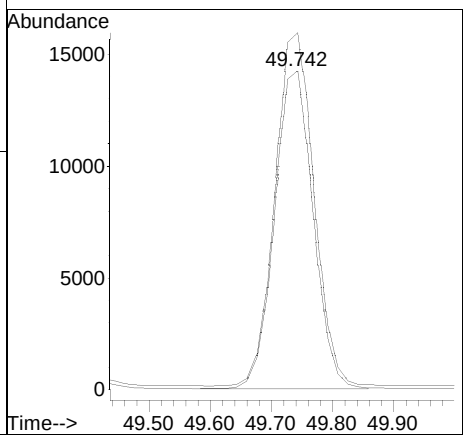


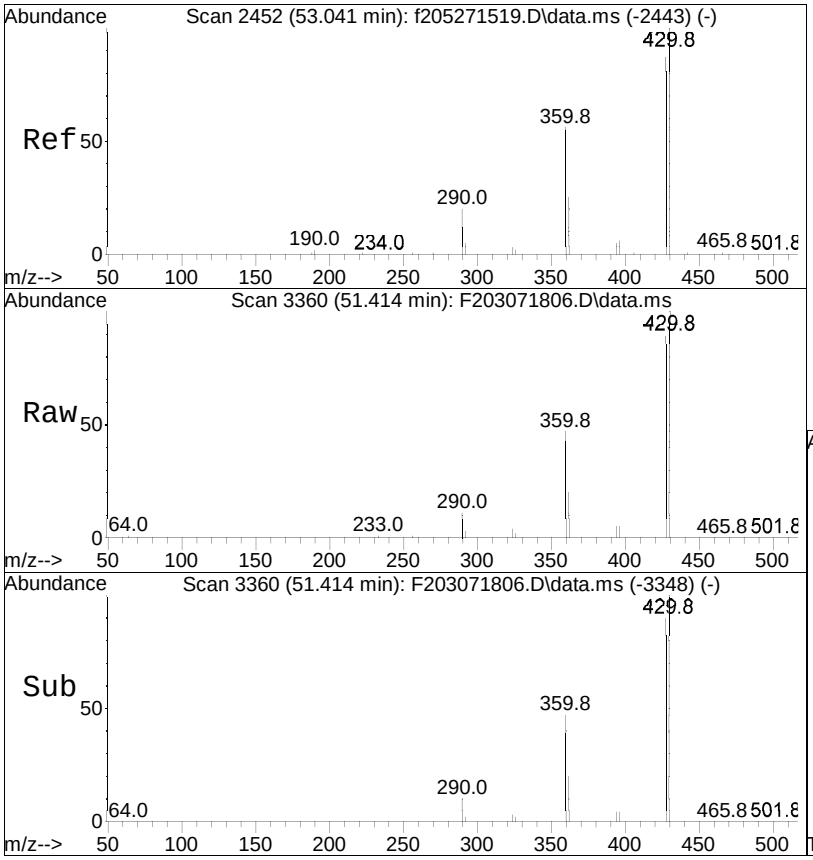


#204
Cl8-BZ#195
Concen: 88.31 ng/mL
RT: 49.742 min Scan# 3259
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 62021

Ion	Ratio	Lower	Upper
428	100		
430	112.1	93.8	140.8

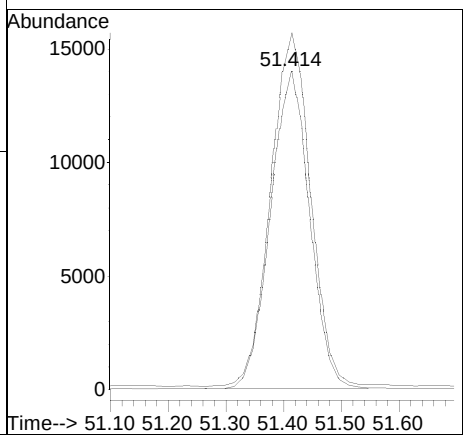


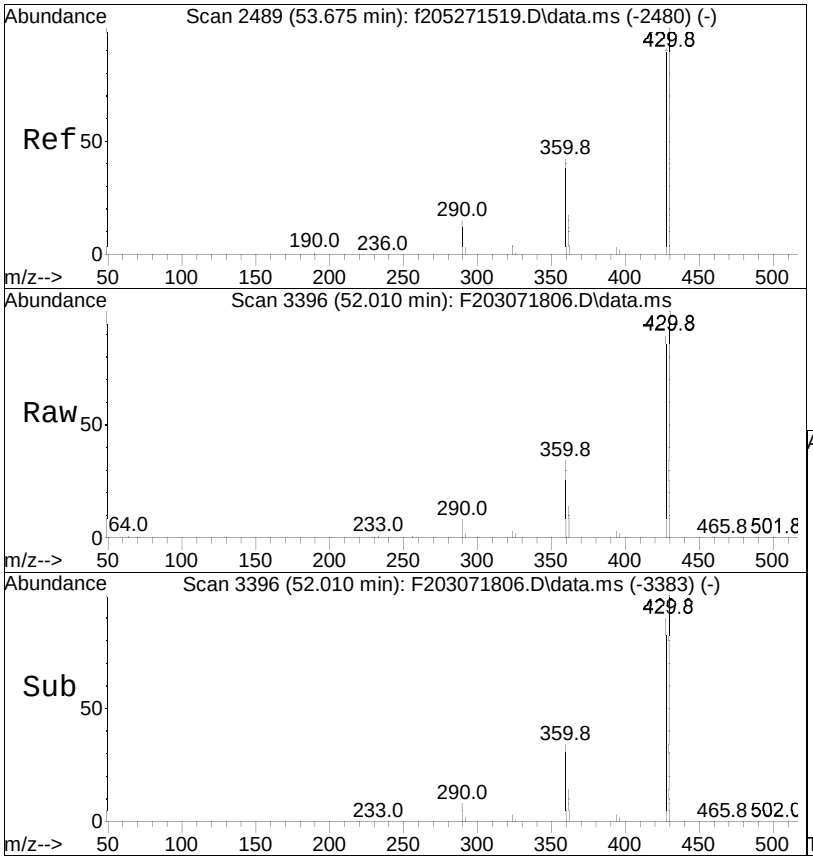


#205
Cl8-BZ#194
Concen: 86.97 ng/mL
RT: 51.414 min Scan# 3360
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 65393

Ion	Ratio	Lower	Upper
428	100		
430	113.4	92.2	138.2

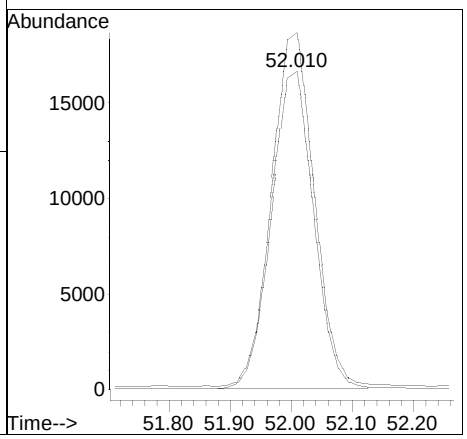


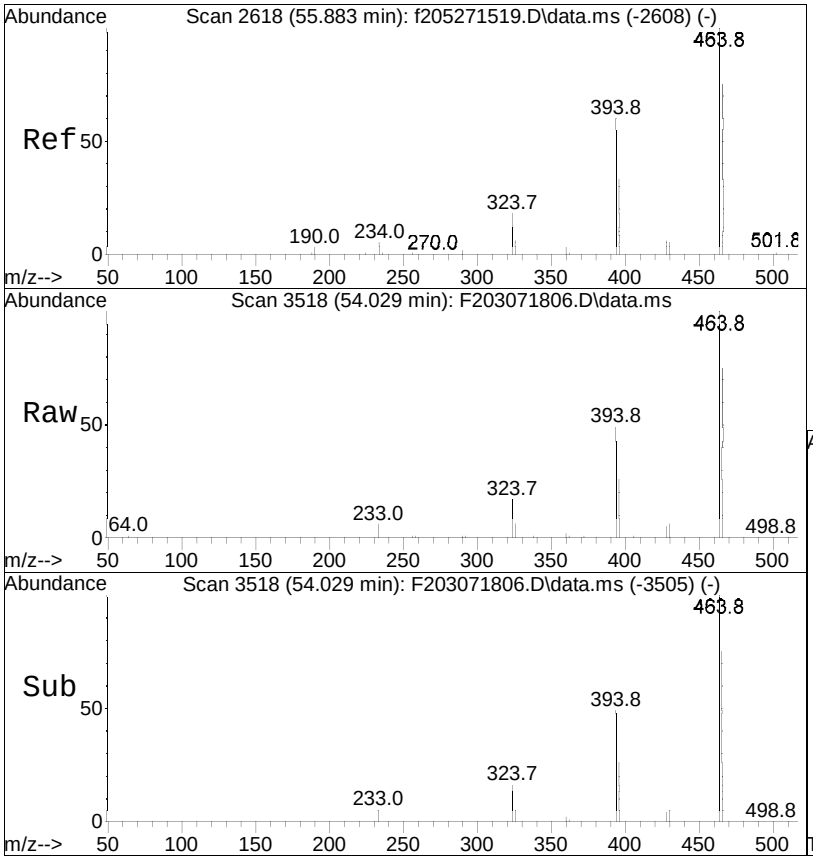


#206
Cl8-BZ#205-RTW
Concen: 86.51 ng/mL
RT: 52.010 min Scan# 3396
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:428 Resp: 79710

Ion	Ratio	Lower	Upper
428	100		
430	112.1	91.3	136.9

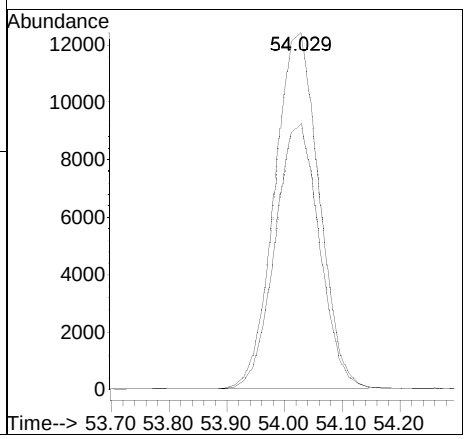


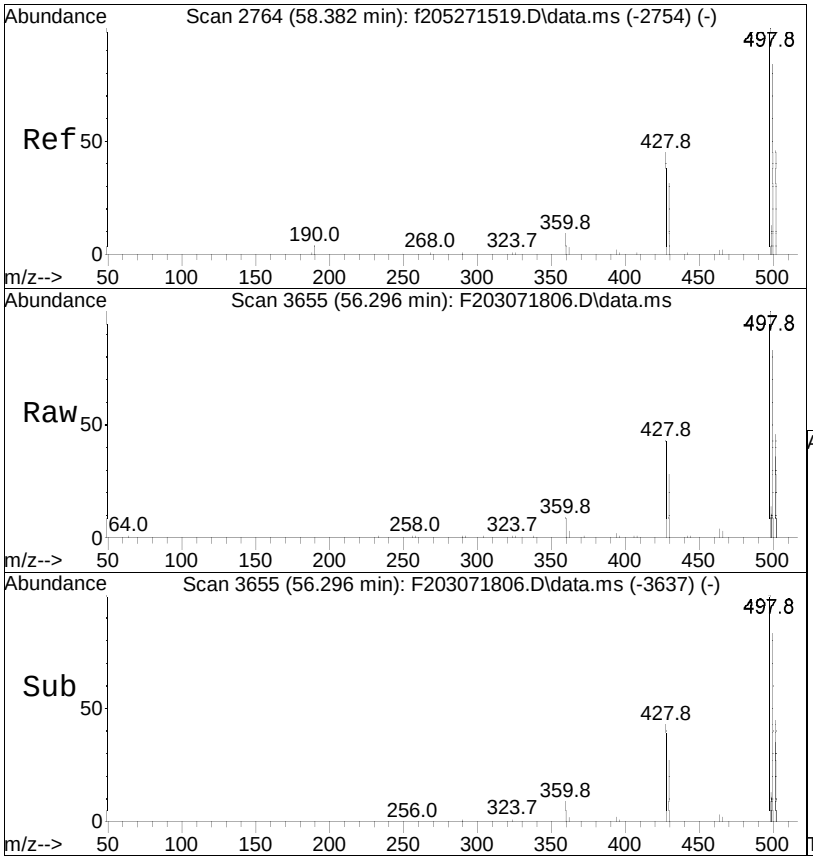


#207
Cl9-BZ#206-Cal/RTW
Concen: 85.63 ng/mL
RT: 54.029 min Scan# 3518
Delta R.T. 0.017 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:464 Resp: 65789

Ion	Ratio	Lower	Upper
464	100		
466	74.2	60.2	90.2

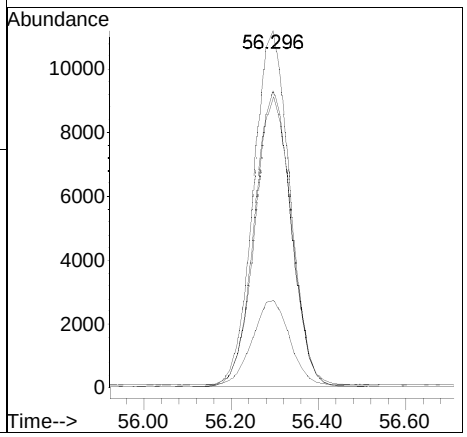




#210
Cl10-BZ#209-Cal/RTW
Concen: 84.68 ng/mL M4
RT: 56.296 min Scan# 3655
Delta R.T. 0.000 min
Lab File: F203071806.D
Acq: 7 Mar 2018 4:27 pm

Tgt Ion:498 Resp: 64528

Ion	Ratio	Lower	Upper
498	100		
500	0.0	66.9	100.3#
499	0.0	10.8	16.2#
502	0.0	38.5	57.7#



Sample Preparation

ORGANIC ELN REPORT

Workgroup: WG1094741

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** DT038
Surrogate Type: A2-CONGENER **Lot #:** MSAT70
Spike Type: A2-CONGENER **Lot #:** MSAT33
Spike Verify by: BA
Lims Spikelot: A2-PCBHOM10

Additional Reagents/Stds

Glass Wool	17216999
Na2SO4	0000187397
H2SO4	OWA103017B

Conc.Method: S-EVAP/N-EVAP
Solvent Type: Hexane
Lot #: 0000188413

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L1806872-01 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
	All samples had pH adjusted to 7 prior to extraction. BA 3/6/18									
L1806872-02 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-03 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-04 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-05 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-06 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5

Reported: 13-MAR-18 12:03 PM

ORGANIC ELN REPORT

Workgroup: WG1094741

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
L1806872-07 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-08 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-09 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-10 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-11 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
L1806872-12 SOIL	03/06/18 06:00	Brian Anderson	1000	10	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
WG1094741-1 BLANK	03/06/18 06:00	Brian Anderson	1000	7	1		03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
	Shared QC with WG1094744 and WG1094743. SPLP Blank. BA 3/6/18									
WG1094741-2 LCS	03/06/18 06:00	Brian Anderson	1000	7	1	1	03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5
WG1094741-3 LCSD	03/06/18 06:00	Brian Anderson	1000	7	1	1	03/06/18 11:22	Kelly Oneill	1	SEVAP 1, NEVAP 5

Reported: 13-MAR-18 12:03 PM

Supporting Documentation

WG#: 1093528

SPLP Fluid Lot #: SPLP022-1813	1:1 HNO3	Temp(°C) Unit ID: 267	SPLP Fluid ID
prep. date: 02-27-18 pH: 4.21	Lot#: 1111-0302018	Max: 23.9 Min: 22.6	(circle one) #1 DI

Sample Type (Check Column) Organic	Metals	Wet Chem	Sample Number	Amt. (g)	SPLP Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
X	X		PBSP (Prep Blank SPLP)	—	2000	13	3/1/18	17:42	23.6	EHA	3/2/18	09:42	23.3	LF	4.65	2.5mL	LF	Aim Rinse should be before filtering
			L1806872-01	100											10.24			Rush
			-02												10.57			
			-03												10.42			
			-04												9.71			
			-05												10.26			
			-06												10.38			
			-07												9.67			
			-08												9.87			
			-09												10.84			
			-10												9.96			
			-11			↓									9.59			
↓			-12			5									10.17			—
			L1806936-02												10.30			
	↓		L1805999-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	10.12	↓	↓	

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Initials: _____

Date: _____

WG#: 1093528

SPLP Fluid Lot #: SPLP022318 BL	1:1 HNO3	Temp(°C) Unit ID: 267	SPLP Fluid ID
prep. date: 02-27-18 pH: 4.21	Lot#: HN030222018	Max: 23.9 Min: 22.6	(circle one) (#1) DI

Sample Type (Check Column)			Sample Number	Amt. (g)	SPLP Fluid Vol. (mL)	Tumbler I.D.	Date On	Time On	Temp. C° On	Initials	Date Off	Time Off	Temp. C° Off	Initials	pH	1:1 HNO_3 (preserved)	Filter Initials	Comments
Organic	Metals	Wet Chem																
X	X		PBSP (Prep Blank SPLP)	—	2000	13	3/1/18	17:42	23.6	EMA	3/2/18	09:42	23.3	LF	4.65	2.5mL	LF	
	↓		L1805999-02	100	↓	5	↓	↓	↓	↓	↓	↓	↓	↓	9.99	↓	↓	
			-03			7									8.93			
			-09			↓									10.27			
	↓		-17	↓	↓		↓	↓	↓	↓	↓	↓	↓	↓	9.88			
	↓		L1807136-01	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	10.34	↓	↓	Rush

03/1/18 EMA

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Initials: _____

Date: _____

Alpha Report

ANALYTICAL REPORT

Lab Number:	L1806872
Client:	AMEC Foster Wheeler E & I, Inc. 511 Congress Street P.O. Box 7050 Portland, ME 04112-7050
ATTN:	Wolfgang Calicchio
Phone:	(207) 828-3466
Project Name:	STRATFORD ARMY ENGINE PLANT
Project Number:	3616176064.08.01
Report Date:	03/14/18

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01

Lab Number: L1806872
Report Date: 03/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1806872-01	SDT-DS-BFT-PC03	SOIL	STRATFORD, CT	02/27/18 11:28	02/28/18
L1806872-02	SDT-DS-BFT-PC06	SOIL	STRATFORD, CT	02/27/18 11:30	02/28/18
L1806872-03	SDT-DS-BFT-PC08	SOIL	STRATFORD, CT	02/27/18 11:32	02/28/18
L1806872-04	SDT-DS-BFT-CC03	SOIL	STRATFORD, CT	02/27/18 11:34	02/28/18
L1806872-05	SDT-DS-BFT-CC06	SOIL	STRATFORD, CT	02/27/18 11:36	02/28/18
L1806872-06	SDT-DS-BFT-CC08	SOIL	STRATFORD, CT	02/27/18 11:38	02/28/18
L1806872-07	SDT-DS-GVT-PC02	SOIL	STRATFORD, CT	02/27/18 11:40	02/28/18
L1806872-08	SDT-DS-GVT-PC04	SOIL	STRATFORD, CT	02/27/18 11:42	02/28/18
L1806872-09	SDT-DS-GVT-PC05	SOIL	STRATFORD, CT	02/27/18 11:44	02/28/18
L1806872-10	SDT-DS-GVT-CC02	SOIL	STRATFORD, CT	02/27/18 11:46	02/28/18
L1806872-11	SDT-DS-GVT-CC04	SOIL	STRATFORD, CT	02/27/18 11:48	02/28/18
L1806872-12	SDT-DS-GVT-CC05	SOIL	STRATFORD, CT	02/27/18 11:50	02/28/18

Project Name:	STRATFORD ARMY ENGINE PLANT	**Lab Number:**	L1806872
Project Number:	3616176064.08.01	**Report Date:**	03/14/18

CT DEP Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents)?	YES
1a	Were the method specified preservation and holding time requirements met?	YES
1b	VPH & EPH Methods Only: Was the VPH or EPH Method conducted without significant modifications (see Section 11.3 of respective Methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature (<6°C)?	YES
4	Were all QA/QC performance criteria specified in the CT DEP Reasonable Confidence Protocol documents achieved?	YES
5a	Were reporting limits specified or referenced on the chain-of-custody?	NO
5b	Were these reporting limits met?	N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or question B is "No", the data package does not meet the requirements for "Reasonable Confidence".

Project Name: STRATFORD ARMY ENGINE PLANT **Lab Number:** L1806872
Project Number: 3616176064.08.01 **Report Date:** 03/14/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	STRATFORD ARMY ENGINE PLANT	**Lab Number:**	L1806872
Project Number:	3616176064.08.01	**Report Date:**	03/14/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

RCP Related Narratives

Report Submission

In reference to question 5a:

Reporting limits were not specified.

TCLP Metals

In reference to question 6:

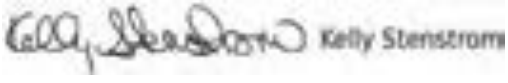
At the client's request, all submitted samples were not analyzed for the full RCP list of constituents identified in the method specific analyte list presented in the RCP documents.

SPLP Metals

In reference to question 6:

At the client's request, all submitted samples were not analyzed for the full RCP list of constituents identified in the method specific analyte list presented in the RCP documents.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative Date: 03/14/18

ORGANICS

PCBS

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-01
Client ID: SDT-DS-BFT-PC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/07/18 22:38
Analyst: MJS

Date Collected: 02/27/18 11:28
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	16.6		ng/l	0.500	0.500	1
Trichlorobiphenyls	35.4		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	44.4		ng/l	0.500	0.500	1
Pentachlorobiphenyls	ND		ng/l	0.500	0.500	1
Hexachlorobiphenyls	ND		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	96.4		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	76		50-125
Cl8-BZ#202-C13	72		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-02
Client ID: SDT-DS-BFT-PC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/07/18 23:52
Analyst: MJS

Date Collected: 02/27/18 11:30
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	25.9		ng/l	0.500	0.500	1
Trichlorobiphenyls	99.2		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	98.2		ng/l	0.500	0.500	1
Pentachlorobiphenyls	7.29		ng/l	0.500	0.500	1
Hexachlorobiphenyls	ND		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	231		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	83		50-125
Cl8-BZ#202-C13	87		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-03
Client ID: SDT-DS-BFT-PC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 03:24
Analyst: MJS

Date Collected: 02/27/18 11:32
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	27.8		ng/l	0.500	0.500	1
Trichlorobiphenyls	104		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	94.8		ng/l	0.500	0.500	1
Pentachlorobiphenyls	8.21		ng/l	0.500	0.500	1
Hexachlorobiphenyls	1.91		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	237		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	80		50-125
Cl8-BZ#202-C13	83		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-04
Client ID: SDT-DS-BFT-CC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 04:39
Analyst: MJS

Date Collected: 02/27/18 11:34
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	22.0		ng/l	0.500	0.500	1
Trichlorobiphenyls	83.9		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	120		ng/l	0.500	0.500	1
Pentachlorobiphenyls	15.3		ng/l	0.500	0.500	1
Hexachlorobiphenyls	5.38		ng/l	0.500	0.500	1
Heptachlorobiphenyls	2.62		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	249		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	88		50-125
Cl8-BZ#202-C13	89		50-125

Project Name: STRATFORD ARMY ENGINE PLANT **Lab Number:** L1806872

Project Number: 3616176064.08.01 **Report Date:** 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-05
Client ID: SDT-DS-BFT-CC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 05:53
Analyst: MJS

Date Collected: 02/27/18 11:36
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	23.3		ng/l	0.500	0.500	1
Trichlorobiphenyls	92.8		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	81.2		ng/l	0.500	0.500	1
Pentachlorobiphenyls	7.24		ng/l	0.500	0.500	1
Hexachlorobiphenyls	1.50		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	206		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	77		50-125
Cl8-BZ#202-C13	78		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-06
Client ID: SDT-DS-BFT-CC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 07:07
Analyst: MJS

Date Collected: 02/27/18 11:38
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	24.9		ng/l	0.500	0.500	1
Trichlorobiphenyls	84.3		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	78.7		ng/l	0.500	0.500	1
Pentachlorobiphenyls	7.44		ng/l	0.500	0.500	1
Hexachlorobiphenyls	1.29		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	197		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	81		50-125
Cl8-BZ#202-C13	80		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-07
Client ID: SDT-DS-GVT-PC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 08:21
Analyst: MJS

Date Collected: 02/27/18 11:40
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	27.0		ng/l	0.500	0.500	1
Trichlorobiphenyls	166		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	118		ng/l	0.500	0.500	1
Pentachlorobiphenyls	15.8		ng/l	0.500	0.500	1
Hexachlorobiphenyls	4.42		ng/l	0.500	0.500	1
Heptachlorobiphenyls	1.48		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	333		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	84		50-125
Cl8-BZ#202-C13	86		50-125

Project Name: STRATFORD ARMY ENGINE PLANT **Lab Number:** L1806872

Project Number: 3616176064.08.01 **Report Date:** 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-08
Client ID: SDT-DS-GVT-PC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 09:35
Analyst: MJS

Date Collected: 02/27/18 11:42
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	25.2		ng/l	0.500	0.500	1
Trichlorobiphenyls	123		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	84.4		ng/l	0.500	0.500	1
Pentachlorobiphenyls	8.90		ng/l	0.500	0.500	1
Hexachlorobiphenyls	1.51		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	243		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	80		50-125
Cl8-BZ#202-C13	80		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-09
Client ID: SDT-DS-GVT-PC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 10:49
Analyst: MJS

Date Collected: 02/27/18 11:44
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	28.5		ng/l	0.500	0.500	1
Trichlorobiphenyls	144		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	108		ng/l	0.500	0.500	1
Pentachlorobiphenyls	11.9		ng/l	0.500	0.500	1
Hexachlorobiphenyls	1.98		ng/l	0.500	0.500	1
Heptachlorobiphenyls	ND		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	294		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	85		50-125
Cl8-BZ#202-C13	87		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-10
Client ID: SDT-DS-GVT-CC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 12:03
Analyst: MJS

Date Collected: 02/27/18 11:46
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	23.9		ng/l	0.500	0.500	1
Trichlorobiphenyls	102		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	159		ng/l	0.500	0.500	1
Pentachlorobiphenyls	23.3		ng/l	0.500	0.500	1
Hexachlorobiphenyls	5.68		ng/l	0.500	0.500	1
Heptachlorobiphenyls	3.17		ng/l	0.500	0.500	1
Octachlorobiphenyls	3.71		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	321		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	79		50-125
Cl8-BZ#202-C13	88		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-11
Client ID: SDT-DS-GVT-CC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 13:18
Analyst: MJS

Date Collected: 02/27/18 11:48
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	24.0		ng/l	0.500	0.500	1
Trichlorobiphenyls	103		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	115		ng/l	0.500	0.500	1
Pentachlorobiphenyls	13.8		ng/l	0.500	0.500	1
Hexachlorobiphenyls	2.92		ng/l	0.500	0.500	1
Heptachlorobiphenyls	1.76		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	260		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	77		50-125
Cl8-BZ#202-C13	85		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-12
Client ID: SDT-DS-GVT-CC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil
Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/08/18 14:32
Analyst: MJS

Date Collected: 02/27/18 11:50
Date Received: 02/28/18
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab						
Monochlorobiphenyls	ND		ng/l	0.500	0.500	1
Dichlorobiphenyls	27.2		ng/l	0.500	0.500	1
Trichlorobiphenyls	102		ng/l	0.500	0.500	1
Tetrachlorobiphenyls	118		ng/l	0.500	0.500	1
Pentachlorobiphenyls	11.4		ng/l	0.500	0.500	1
Hexachlorobiphenyls	2.75		ng/l	0.500	0.500	1
Heptachlorobiphenyls	1.03		ng/l	0.500	0.500	1
Octachlorobiphenyls	ND		ng/l	0.500	0.500	1
Nonachlorobiphenyls	ND		ng/l	0.500	0.500	1
Decachlorobiphenyl	ND		ng/l	0.500	0.500	1
Total Homologs	262		ng/l	0.500	0.500	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	84		50-125
Cl8-BZ#202-C13	86		50-125

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 105,8270D-SIM/680(M)
Analytical Date: 03/07/18 12:31
Analyst: MJS
TCLP/SPLP Extraction Date: 03/01/18 17:42

Extraction Method: EPA 3510C
Extraction Date: 03/06/18 06:00

Parameter	Result	Qualifier	Units	RL	MDL
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab for sample(s): 01-12 Batch: WG1094741-1					
Monochlorobiphenyls	ND		ng/l	0.500	0.500
Dichlorobiphenyls	ND		ng/l	0.500	0.500
Trichlorobiphenyls	ND		ng/l	0.500	0.500
Tetrachlorobiphenyls	ND		ng/l	0.500	0.500
Pentachlorobiphenyls	ND		ng/l	0.500	0.500
Hexachlorobiphenyls	ND		ng/l	0.500	0.500
Heptachlorobiphenyls	ND		ng/l	0.500	0.500
Octachlorobiphenyls	ND		ng/l	0.500	0.500
Nonachlorobiphenyls	ND		ng/l	0.500	0.500
Decachlorobiphenyl	ND		ng/l	0.500	0.500
Total Homologs	ND		ng/l	0.500	0.500

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	87		50-125
Cl8-BZ#202-C13	83		50-125

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl1-BZ#1	86		78		40-140	10		30
Cl1-BZ#2	83		76		40-140	9		30
CL1-BZ#3	83		77		40-140	8		30
Cl2-BZ#4/#10	86		78		40-140	10		30
Cl2-BZ#9	84		76		40-140	10		30
Cl2-BZ#7	85		78		40-140	9		30
Cl2-BZ#6	83		76		40-140	9		30
Cl2-BZ#5	83		76		40-140	9		30
Cl2-BZ#8	84		77		40-140	9		30
Cl3-BZ#19	84		75		40-140	11		30
Cl2-BZ#14	83		76		40-140	9		30
Cl3-BZ#30	84		76		40-140	10		30
Cl3-BZ#18	82		74		40-140	10		30
Cl2-BZ#11	84		78		40-140	7		30
Cl3-BZ#17	84		76		40-140	10		30
Cl2-BZ#12	84		77		40-140	9		30
Cl3-BZ#27	84		76		40-140	10		30
Cl2-BZ#13	83		76		40-140	9		30
Cl3-BZ#24	85		77		40-140	10		30
Cl3-BZ#16	82		75		40-140	9		30
Cl3-BZ#32	83		76		40-140	9		30
Cl2-BZ#15	80		75		40-140	6		30
Cl3-BZ#34	84		76		40-140	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl3-BZ#23	86		78		40-140	10		30
Cl4-BZ#54	86		77		40-140	11		30
Cl3-BZ#29	84		76		40-140	10		30
Cl4-BZ#50	84		76		40-140	10		30
Cl3-BZ#26	84		76		40-140	10		30
Cl3-BZ#25	83		76		40-140	9		30
Cl4-BZ#53	84		76		40-140	10		30
Cl3-BZ#-31	82		75		40-140	9		30
Cl3-BZ#28	84		71		40-140	17		30
Cl3-BZ#33	88		91		40-140	3		30
Cl4-BZ#51	86		79		40-140	8		30
Cl3-BZ#21/#20	86		77		40-140	11		30
Cl4-BZ#45	85		77		40-140	10		30
Cl3-BZ#22	85		78		40-140	9		30
Cl4-BZ#73/#46	86		79		40-140	8		30
Cl4-BZ#69	86		75		40-140	14		30
Cl4-BZ#43	84		81		40-140	4		30
Cl3-BZ#36	89		81		40-140	9		30
Cl4-BZ#52	84		76		40-140	10		30
Cl4-BZ#48	87		79		40-140	10		30
Cl4-BZ#49	84		76		40-140	10		30
Cl5-BZ#104	86		78		40-140	10		30
Cl4-BZ#47	81		75		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl4-BZ#65/#75/#62	88		79		40-140	11		30
Cl3-BZ#39	85		79		40-140	7		30
Cl3-BZ#38	89		82		40-140	8		30
Cl4-BZ#44	85		76		40-140	11		30
Cl4-BZ#59	83		76		40-140	9		30
Cl4-BZ#42	88		79		40-140	11		30
Cl4-BZ#71	85		78		40-140	9		30
Cl3-BZ#35	86		80		40-140	7		30
Cl4-BZ#41	88		80		40-140	10		30
Cl4-BZ#72	89		82		40-140	8		30
Cl5-BZ#96	88		80		40-140	10		30
Cl5-BZ#103	90		82		40-140	9		30
Cl4-BZ#68/#64	89		81		40-140	9		30
Cl4-BZ#40	87		79		40-140	10		30
Cl3-BZ#37	86		80		40-140	7		30
Cl5-BZ#100	88		82		40-140	7		30
Cl5-BZ#94	92		85		40-140	8		30
Cl4-BZ#57	87		79		40-140	10		30
Cl4-BZ#67/#58	89		82		40-140	8		30
Cl5-BZ#102	90		83		40-140	8		30
Cl4-BZ#61	87		80		40-140	8		30
Cl5-BZ#98	89		81		40-140	9		30
Cl4-BZ#76	92		85		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl5-BZ#93	89		82		40-140	8		30
Cl4-BZ#63	85		78		40-140	9		30
Cl5-BZ#121/#95/#88	92		84		40-140	9		30
Cl4-BZ#74	87		81		40-140	7		30
Cl6-BZ#155	88		81		40-140	8		30
Cl4-BZ#70	89		81		40-140	9		30
Cl5-BZ#91	88		81		40-140	8		30
Cl4-BZ#66	88		82		40-140	7		30
Cl4-BZ#80	88		82		40-140	7		30
Cl4-BZ#55	89		82		40-140	8		30
Cl5-BZ#92	90		83		40-140	8		30
Cl5-BZ#89/#84	90		81		40-140	11		30
Cl5-BZ#101/#90	87		82		40-140	6		30
Cl4-BZ#56	90		83		40-140	8		30
Cl5-BZ#113	97		89		40-140	9		30
Cl5-BZ#99	88		83		40-140	6		30
Cl6-BZ#150	89		83		40-140	7		30
Cl4-BZ#60	89		83		40-140	7		30
Cl6-BZ#152	88		82		40-140	7		30
Cl5-BZ#119	94		89		40-140	5		30
Cl5-BZ#83/#125/#112	93		86		40-140	8		30
Cl5-BZ#86/#109	87		81		40-140	7		30
Cl6-BZ#145	90		83		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl5-BZ#97	94		87		40-140	8		30
Cl6-BZ#148	90		84		40-140	7		30
Cl4-BZ#79	89		85		40-140	5		30
Cl5-BZ#116	89		83		40-140	7		30
Cl6-BZ#154	90		84		40-140	7		30
Cl4-BZ#78	89		86		40-140	3		30
Cl5-BZ#87/#111	94		89		40-140	5		30
Cl6-BZ#136	91		84		40-140	8		30
Cl5-BZ#117	84		79		40-140	6		30
Cl5-BZ#115	101		96		40-140	5		30
Cl5-BZ#85	84		79		40-140	6		30
Cl5-BZ#120	92		87		40-140	6		30
Cl5-BZ#110	88		84		40-140	5		30
Cl4-BZ#81	87		84		40-140	4		30
Cl6-BZ#151	87		85		40-140	2		30
Cl6-BZ#135	90		88		40-140	2		30
Cl5-BZ#82	91		90		40-140	1		30
Cl6-BZ#144	89		87		40-140	2		30
Cl6-BZ#147/#149	89		88		40-140	1		30
Cl4-BZ#77	86		88		40-140	2		30
Cl6-BZ#143/#139	90		90		40-140	0		30
Cl5-BZ#124	91		90		40-140	1		30
Cl6-BZ#140	91		89		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl5-BZ#108	99		98		40-140	1		30
Cl5-BZ#107/#123	89		88		40-140	1		30
Cl7-BZ#188	92		89		40-140	3		30
Cl6-BZ#134	90		88		40-140	2		30
Cl5-BZ#106	97		83		40-140	16		30
Cl6-BZ#133	103		102		40-140	1		30
Cl6-BZ#142	72		68		40-140	6		30
Cl5-BZ#118	91		91		40-140	0		30
Cl6-BZ#131	91		90		40-140	1		30
Cl7-BZ#184	90		88		40-140	2		30
Cl6-BZ#165	92		92		40-140	0		30
Cl6-BZ#146	87		86		40-140	1		30
Cl6-BZ#161	92		91		40-140	1		30
Cl5-BZ#122	92		92		40-140	0		30
Cl6-BZ#168	100		82		40-140	20		30
Cl5-BZ#114	91		92		40-140	1		30
Cl6-BZ#153	78		100		40-140	25		30
Cl6-BZ#132	88		88		40-140	0		30
Cl7-BZ#179	86		86		40-140	0		30
Cl6-BZ#141	89		88		40-140	1		30
Cl7-BZ#176	87		87		40-140	0		30
Cl5-BZ#105	86		86		40-140	0		30
Cl6-BZ#137	91		90		40-140	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl5-BZ#127	88		89		40-140	1		30
Cl7-BZ#186	90		89		40-140	1		30
Cl6-BZ#130/#164	92		92		40-140	0		30
Cl7-BZ#178	88		89		40-140	1		30
Cl6-BZ#138	94		95		40-140	1		30
Cl6-BZ#163/#160	93		94		40-140	1		30
Cl6-BZ#129/#158	88		88		40-140	0		30
Cl7-BZ#182/#175	93		92		40-140	1		30
Cl7-BZ#187	88		89		40-140	1		30
Cl7-BZ#183	89		89		40-140	0		30
Cl6-BZ#166	88		88		40-140	0		30
Cl6-BZ#159	90		90		40-140	0		30
Cl5-BZ#126	90		93		40-140	3		30
Cl7-BZ#185	90		89		40-140	1		30
Cl6-BZ#162	93		93		40-140	0		30
Cl7-BZ#174	90		91		40-140	1		30
Cl6-BZ#128	92		92		40-140	0		30
Cl8-BZ#202	91		92		40-140	1		30
Cl6-BZ#167	90		91		40-140	1		30
Cl7-BZ#181	93		93		40-140	0		30
Cl7-BZ#177	91		91		40-140	0		30
Cl8-BZ#204/#200-CAL	91		90		40-140	1		30
Cl7-BZ#171	90		92		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl7-BZ#173	89		90		40-140	1		30
Cl8-BZ#197	90		90		40-140	0		30
Cl7-BZ#172	89		90		40-140	1		30
Cl7-BZ#192	90		92		40-140	2		30
Cl6-BZ#156	90		92		40-140	2		30
Cl6-BZ#157	88		91		40-140	3		30
Cl7-BZ#180	90		91		40-140	1		30
Cl7-BZ#193	87		88		40-140	1		30
Cl8-BZ#199	88		88		40-140	0		30
Cl7-BZ#191	89		90		40-140	1		30
Cl8-BZ#198	86		88		40-140	2		30
Cl8-BZ#201	89		90		40-140	1		30
Cl7-BZ#170	87		90		40-140	3		30
Cl7-BZ#190	90		92		40-140	2		30
Cl8-BZ#196	98		100		40-140	2		30
Cl8-BZ#203	82		82		40-140	0		30
Cl6-BZ#169	87		92		40-140	6		30
Cl9-BZ#208	83		85		40-140	2		30
Cl9-BZ#207	87		88		40-140	1		30
Cl7-BZ#189	88		92		40-140	4		30
Cl8-BZ#195	86		88		40-140	2		30
Cl8-BZ#194	84		87		40-140	4		30
Cl8-BZ#205	84		86		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
SPLP PCB Homologs by GC/MS-SIM - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094741-2 WG1094741-3								
Cl9-BZ#206	83		86		40-140	4		30
Cl10-BZ#209	82		85		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Cl3-BZ#19-C13	88		79		50-125
Cl8-BZ#202-C13	90		89		50-125

METALS

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-01
Client ID: SDT-DS-BFT-PC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:28
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Barium, TCLP	0.178	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.054	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Chromium, TCLP	0.147	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:19	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 09:16	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-01
Client ID: SDT-DS-BFT-PC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:28
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.0090		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.020		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Copper, SPLP	0.460		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 15:46	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.018	J	mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:22	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-02
Client ID: SDT-DS-BFT-PC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:30
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	0.042	J	mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Barium, TCLP	0.139	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:21	EPA 7470A	79,7470A	MG
Selenium, TCLP	0.035	J	mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:23	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-02
Client ID: SDT-DS-BFT-PC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:30
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.0046	J	mg/l	0.0050	0.0017	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.046		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Copper, SPLP	0.432		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 15:48	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.028		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:33	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-03
Client ID: SDT-DS-BFT-PC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:32
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	0.045	J	mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Barium, TCLP	0.116	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Chromium, TCLP	0.024	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:22	EPA 7470A	79,7470A	MG
Selenium, TCLP	0.037	J	mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:27	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-03
Client ID: SDT-DS-BFT-PC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:32
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.003	J	mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.086		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Copper, SPLP	0.638		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 15:50	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.053		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:37	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-04
Client ID: SDT-DS-BFT-CC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:34
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Barium, TCLP	0.089	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.043	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Chromium, TCLP	0.073	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:24	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:32	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-04
Client ID: SDT-DS-BFT-CC03
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:34
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.011		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.021		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Copper, SPLP	0.175		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 15:52	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.011	J	mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:41	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-05
Client ID: SDT-DS-BFT-CC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:36
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Barium, TCLP	0.115	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Chromium, TCLP	0.040	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:26	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:37	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-05
Client ID: SDT-DS-BFT-CC06
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:36
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.006		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.054		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Copper, SPLP	0.860		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:12	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.039		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:45	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-06
Client ID: SDT-DS-BFT-CC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:38
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Barium, TCLP	0.092	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Chromium, TCLP	0.033	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:27	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:42	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-06
Client ID: SDT-DS-BFT-CC08
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:38
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.006		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.053		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Copper, SPLP	0.824		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:13	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.043		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:49	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-07
Client ID: SDT-DS-GVT-PC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:40
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Barium, TCLP	0.146	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.042	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Chromium, TCLP	0.144	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Lead, TCLP	0.045	J	mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:29	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:46	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-07
Client ID: SDT-DS-GVT-PC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:40
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.013		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.011		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Copper, SPLP	0.159		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:15	EPA 7470A	79,7470A	MG
Nickel, SPLP	ND		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:53	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-08
Client ID: SDT-DS-GVT-PC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:42
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	0.033	J	mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Barium, TCLP	0.157	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Chromium, TCLP	0.111	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:31	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:51	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-08
Client ID: SDT-DS-GVT-PC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:42
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.005		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.029		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Copper, SPLP	0.277		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:17	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.015	J	mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 16:57	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-09
Client ID: SDT-DS-GVT-PC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:44
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Barium, TCLP	0.134	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:36	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 13:56	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-09
Client ID: SDT-DS-GVT-PC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:44
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.003	J	mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.058		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Copper, SPLP	0.357		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:18	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.031		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 17:01	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-10
Client ID: SDT-DS-GVT-CC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:46
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	0.022	J	mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Barium, TCLP	0.080	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.026	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Chromium, TCLP	0.068	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:38	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 14:01	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-10
Client ID: SDT-DS-GVT-CC02
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:46
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.016		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.018		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Copper, SPLP	0.087		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:20	EPA 7470A	79,7470A	MG
Nickel, SPLP	ND		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 17:05	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-11
Client ID: SDT-DS-GVT-CC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:48
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Barium, TCLP	0.093	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.026	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Chromium, TCLP	0.103	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Lead, TCLP	0.028	J	mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:40	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 14:05	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-11
Client ID: SDT-DS-GVT-CC04
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:48
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.011		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.022		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Copper, SPLP	0.258		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:22	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.010	J	mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM
Zinc, SPLP	0.185		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 17:08	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-12
Client ID: SDT-DS-GVT-CC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:50
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Barium, TCLP	0.105	J	mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Cadmium, TCLP	0.019	J	mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Chromium, TCLP	0.139	J	mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Lead, TCLP	0.053	J	mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:41	EPA 7470A	79,7470A	MG
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 14:19	EPA 3015	79,6010C	AB

Project Name: STRATFORD ARMY ENGINE PLANT
Lab Number: L1806872
Project Number: 3616176064.08.01
Report Date: 03/14/18

SAMPLE RESULTS

Lab ID: L1806872-12
Client ID: SDT-DS-GVT-CC05
Sample Location: STRATFORD, CT
Sample Depth:
Matrix: Soil

Date Collected: 02/27/18 11:50
Date Received: 02/28/18
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab											
Arsenic, SPLP	0.0090		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Chromium, SPLP	0.026		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Copper, SPLP	0.345		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Lead, SPLP	ND		mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 16:24	EPA 7470A	79,7470A	MG
Nickel, SPLP	0.015	J	mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 17:55	EPA 3005A	79,6020A	AM

Project Name: STRATFORD ARMY ENGINE PLANT **Lab Number:** L1806872

Project Number: 3616176064.08.01 **Report Date:** 03/14/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1094000-1										
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Barium, TCLP	ND		mg/l	0.500	0.021	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Chromium, TCLP	ND		mg/l	0.200	0.021	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/02/18 16:33	03/10/18 09:07	79,6010C	AB

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 03/01/18 05:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1094297-1										
Arsenic, SPLP	ND		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Cadmium, SPLP	ND		mg/l	0.002	0.001	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Chromium, SPLP	ND		mg/l	0.005	0.002	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Copper, SPLP	ND		mg/l	0.010	0.004	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Lead, SPLP	0.005	J	mg/l	0.010	0.003	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Nickel, SPLP	ND		mg/l	0.020	0.006	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Silver, SPLP	ND		mg/l	0.004	0.002	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM
Zinc, SPLP	ND		mg/l	0.100	0.034	10	03/03/18 17:00	03/07/18 15:47	79,6020A	AM

Prep Information

Digestion Method: EPA 3005A

TCLP/SPLP Extraction Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP SPLP Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1095393-1										
Mercury, SPLP	ND		mg/l	0.0010	0.0001	1	03/07/18 15:40	03/08/18 15:43	79,7470A	MG

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01
Lab Number: L1806872
Report Date: 03/14/18

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 03/01/18 17:42

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
CT RCP TCLP Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1095394-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0002	1	03/07/18 15:40	03/08/18 15:15	79,7470A	MG

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 03/01/18 05:08

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CT RCP TCLP Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094000-2								
Arsenic, TCLP	105		-		80-120	-		20
Barium, TCLP	96		-		80-120	-		20
Cadmium, TCLP	102		-		80-120	-		20
Chromium, TCLP	98		-		80-120	-		20
Lead, TCLP	97		-		80-120	-		20
Selenium, TCLP	105		-		80-120	-		20
Silver, TCLP	94		-		80-120	-		20
CT RCP SPLP Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1094297-2								
Arsenic, SPLP	109		-		80-120	-		20
Cadmium, SPLP	107		-		80-120	-		20
Chromium, SPLP	114		-		80-120	-		20
Copper, SPLP	108		-		80-120	-		20
Lead, SPLP	101		-		80-120	-		20
Nickel, SPLP	106		-		80-120	-		20
Silver, SPLP	97		-		80-120	-		20
Zinc, SPLP	106		-		80-120	-		20
CT RCP SPLP Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1095393-2								
Mercury, SPLP	86		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: STRATFORD ARMY ENGINE PLANT

Project Number: 3616176064.08.01

Lab Number: L1806872

Report Date: 03/14/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
CT RCP TCLP Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1095394-2					
Mercury, TCLP	102	-	80-120	-	20

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01

Lab Number: L1806872
Report Date: 03/14/18

Sample Receipt and Container Information

Were project specific reporting limits specified? NO

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1806872-01A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-01X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-01X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-01Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-01Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-02A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-02X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-02X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-02Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-02Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-03A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-03X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-03X9	Tumble Vessel	A	NA		4.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01

Lab Number: L1806872
Report Date: 03/14/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1806872-03Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-03Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-04A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-04X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-04X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-04Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-04Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-05A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-05X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-05X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-05Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-05Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-06A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-06X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-06X9	Tumble Vessel	A	NA		4.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01

Lab Number: L1806872
Report Date: 03/14/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1806872-06Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-06Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-07A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-07X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-07X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-07Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-07Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-08A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-08X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-08X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-08Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-08Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-09A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-09X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-09X9	Tumble Vessel	A	NA		4.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name: STRATFORD ARMY ENGINE PLANT
Project Number: 3616176064.08.01

Lab Number: L1806872
Report Date: 03/14/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1806872-09Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-09Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-10A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-10X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-10X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-10Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-10Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-11A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-11X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-11X9	Tumble Vessel	A	NA		4.6	Y	Absent		-
L1806872-11Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-11Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)
L1806872-12A	Glass 500ml/16oz unpreserved	A	NA		4.6	Y	Absent		-
L1806872-12X	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-SPLP-HG(28),CT-SPLP-AG-6020(180),CT-SPLP-CR-6020(180),CT-SPLP-PB-6020(180),CT-SPLP-NI-6020(180),CT-SPLP-CU-6020(180),CT-SPLP-CD-6020(180),CT-SPLP-ZN-6020(180),CT-SPLP-AS-6020(180)
L1806872-12X9	Tumble Vessel	A	NA		4.6	Y	Absent		-

*Values in parentheses indicate holding time in days

Project Name: STRATFORD ARMY ENGINE PLANT
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Lab Number: L1806872
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Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L1806872-12Y	Plastic 250ml HNO3 preserved Extracts	A	NA		4.6	Y	Absent		CT-TCLP-CR(180),CT-TCLP-AS(180),CT-TCLP-AG(180),CT-TCLP-CD(180),CT-TCLP-HG(28),CT-TCLP-PB(180),CT-TCLP-BA(180),CT-TCLP-SE(180)
L1806872-12Z	Amber 1000ml unpreserved Extracts	A	NA		4.6	Y	Absent		A2-PCBHOMS-SPLP(14)

*Values in parentheses indicate holding time in days

Project Name:	STRATFORD ARMY ENGINE PLANT	**Lab Number:**	L1806872
Project Number:	3616176064.08.01	**Report Date:**	03/14/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	STRATFORD ARMY ENGINE PLANT	**Lab Number:**	L1806872
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

79 Connecticut DEP Quality Assurance and Quality Control Requirements for SW-846 Methods. CTDEP Reasonable Confidence Protocols (RCPs). Versions 2.0 and 3.0, July and December 2006.

105 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997 in conjunction with NOAA Technical Memorandum NMFS-NWFSC-59: Extraction, Cleanup and GC/MS Analysis of Sediments and Tissues for Organic Contaminants, March 2004 and the Determination of Pesticides and PCBs in Water and Oil/Sediment by GC/MS: Method 680, EPA 01A0005295, November 1985.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 02/28/19

ALPHA Job #: L1906872

Client Information

Client: Wood
Address: 271 Mill Rd, 3rd Floor
Chelmsford, MA 01824
Phone: 978-392-5319
Fax:
Email: tony.delano@woodplc.com
☐ Those samples have been Previously analyzed by Alpha

Project Information

Project Name: SAEP Sediment Study
Project Location:
Project #:
Project Manager: Tony Delano
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)
Due Date: Critical Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program: Criteria:

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	STLP PCBs	STLP solvent metals (Hg)	TCLP metals (RCRA 8)	TOTAL # BOTTLES
06872-01	SD1-DS-BFT-R005	2/27/19	1128	S	TMD	☒	☒	☒	
02	SD1-DS-BFT-R004		1130			☒	☒	☒	
03	SD1-DS-BFT-R003		1132			☒	☒	☒	
04	SD1-DS-BFT-R005		1134			☒	☒	☒	
05	SD1-DS-BWT-R004		1136			☒	☒	☒	
06	SD1-DS-BWT-R003		1138			☒	☒	☒	
07	SD1-DS-BWT-R002		1140			☒	☒	☒	
08	SD1-DS-BWT-R004		1142			☒	☒	☒	
09	SD1-DS-BWT-R005		1144			☒	☒	☒	
10	SD1-DS-BWT-R002	↓	1146	↓	↓	☒	☒	☒	
	Container Type					A	A	A	
	Preservative					A	A	A	

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

Relinquished By	Date/Time	Received By	Date/Time
Jacqueline Brindley	2/27/19 1505	[signature] AHC	2/28/19 0957

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

CHAIN OF CUSTODY

page 2 of 2

Date Rec'd in Lab: 02/28/18

ALPHA Job #: L1806872

Project Information

Project Name: SAEP Sediment Study

Project Location:

Project #:

Project Manager: Tony Delano

ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

*Points out

Due Date: 2/28/18 Time:

☐ These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

Report Information: Data Deliverables

☐ FAX ☐ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program: Criteria:

Alpha Analytical
Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Wood

Address: 271 Mill Rd, 3rd Floor

Chelmsford, MA 01824

Phone: 978-392-5319

Fax:

Email: tony.delano@woodplc.com

☐ These samples have been Previously analyzed by Alpha

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	SPLP PCBs	SPLP site metals plus Hg	TCLP metals (RCRA 8)	
06872-11	SDS-DS-BNT-0004	2/27/18	1148	S	TMS	☒	☒	☒	
12	SDS-DS-BNT-0005	"	1150	S	TMS	☒	☒	☒	

SAMPLE ANALYSIS
All selected
☐ Done
☒ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

TOTAL # BOTTLES

Sample Specific Comments

Container Type	A	A	A																
Preservative	A	A	A																

Relinquished By:	Date/Time	Received By:	Date/Time
Jessica Bunting	2/27/18 1805		2/28/18 0812

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

ORIGIN ID:ORFA (404) 518-3172
TOMMY JORDEN
KEMRON ENVIRONMENTAL SERVICES
1359-A ELLSWORTH INDUSTRIAL BLVD

ATLANTA, GA 30318
UNITED STATES US

SHIP DATE: 27FEB18
ACTWGT: 15.00 LB
CAD: 5231866/INET3060
DIMS: 16x14x18 IN

BILL SENDER

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ALPHA ANALYTICAL
8 WALKUP DRIVE

WESTBOROUGH MA 01581
(508) 898-9220
REF: 12NOV-0953-CHOBA
TV:
PO: DEPT:

FedEx Express

WED - 28 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 7716 1407 9708
0201

01581
MA-US BOS

01 BBFA

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2/27/2018

Alpha
Summary Forms

Inorganic Summary Forms

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-01	**Date Collected**	: 02/27/18 11:28
Client ID	: SDT-DS-BFT-PC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:22
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.0090	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.020	0.005	0.002	
7440-50-8	Copper, SPLP	0.460	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.018	0.020	0.006	J
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-02	**Date Collected**	: 02/27/18 11:30
Client ID	: SDT-DS-BFT-PC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:33
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.0046	0.0050	0.0017	J
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.046	0.005	0.002	
7440-50-8	Copper, SPLP	0.432	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.028	0.020	0.006	
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-03	**Date Collected**	: 02/27/18 11:32
Client ID	: SDT-DS-BFT-PC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:37
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.003	0.005	0.002	J
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.086	0.005	0.002	
7440-50-8	Copper, SPLP	0.638	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.053	0.020	0.006	
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-04	**Date Collected**	: 02/27/18 11:34
Client ID	: SDT-DS-BFT-CC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:41
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.011	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.021	0.005	0.002	
7440-50-8	Copper, SPLP	0.175	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.011	0.020	0.006	J
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-05	**Date Collected**	: 02/27/18 11:36
Client ID	: SDT-DS-BFT-CC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:45
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.006	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.054	0.005	0.002	
7440-50-8	Copper, SPLP	0.860	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.039	0.020	0.006	
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-06	**Date Collected**	: 02/27/18 11:38
Client ID	: SDT-DS-BFT-CC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:49
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.006	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.053	0.005	0.002	
7440-50-8	Copper, SPLP	0.824	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.043	0.020	0.006	
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-07	**Date Collected**	: 02/27/18 11:40
Client ID	: SDT-DS-GVT-PC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:53
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.013	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.011	0.005	0.002	
7440-50-8	Copper, SPLP	0.159	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	ND	0.020	0.006	U
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-08	**Date Collected**	: 02/27/18 11:42
Client ID	: SDT-DS-GVT-PC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 16:57
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.005	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.029	0.005	0.002	
7440-50-8	Copper, SPLP	0.277	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.015	0.020	0.006	J
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-09	**Date Collected**	: 02/27/18 11:44
Client ID	: SDT-DS-GVT-PC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 17:01
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.003	0.005	0.002	J
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.058	0.005	0.002	
7440-50-8	Copper, SPLP	0.357	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.031	0.020	0.006	
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-10	**Date Collected**	: 02/27/18 11:46
Client ID	: SDT-DS-GVT-CC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 17:05
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.016	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.018	0.005	0.002	
7440-50-8	Copper, SPLP	0.087	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	ND	0.020	0.006	U
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-11	**Date Collected**	: 02/27/18 11:48
Client ID	: SDT-DS-GVT-CC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 17:08
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.011	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.022	0.005	0.002	
7440-50-8	Copper, SPLP	0.258	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.010	0.020	0.006	J
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	0.185	0.100	0.034	

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-12	**Date Collected**	: 02/27/18 11:50
Client ID	: SDT-DS-GVT-CC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 17:55
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	0.0090	0.005	0.002	
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	0.026	0.005	0.002	
7440-50-8	Copper, SPLP	0.345	0.010	0.004	
7439-92-1	Lead, SPLP	ND	0.010	0.003	U
7440-02-0	Nickel, SPLP	0.015	0.020	0.006	J
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: WG1094297-1	**Date Collected**	: NA
Client ID	: WG1094297-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/07/18 15:47
Sample Matrix	: SOIL	**Dilution Factor**	: 10
Analytical Method	: 79,6020A	**Analyst**	: AM
Lab File ID	: WG1095175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: NA
Digestion Method	: EPA 3005A	**Date Digested**	: 03/03/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, SPLP	ND	0.005	0.002	U
7440-43-9	Cadmium, SPLP	ND	0.002	0.001	U
7440-47-3	Chromium, SPLP	ND	0.005	0.002	U
7440-50-8	Copper, SPLP	ND	0.010	0.004	U
7439-92-1	Lead, SPLP	0.005	0.010	0.003	J
7440-02-0	Nickel, SPLP	ND	0.020	0.006	U
7440-22-4	Silver, SPLP	ND	0.004	0.002	U
7440-66-6	Zinc, SPLP	ND	0.100	0.034	U

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1053009-1			R1053009-5			R1053009-7		R1053009-9	
Date Analyzed :	03/07/18 08:30			03/07/18 08:54			03/07/18 09:41		03/07/18 10:47	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	100.0000	101.0000	101	100.0000	99.6000	100	103.0000	103	98.7000	99
Cadmium	100.0000	99.4000	99	100.0000	99.2000	99	101.0000	101	101.0000	101
Chromium	100.0000	110.0000	110	100.0000	101.0000	101	101.0000	101	106.0000	106
Copper	100.0000	105.0000	105	100.0000	103.0000	103	106.0000	106	100.0000	100
Lead	100.0000	96.0000	96	100.0000	95.5000	96	98.3000	98	97.6000	98
Nickel	100.0000	105.0000	105	100.0000	106.0000	106	108.0000	108	102.0000	102
Silver	100.0000	99.8000	100	100.0000	100.0000	100	102.0000	102	101.0000	101
Zinc	100.0000	101.0000	101	100.0000	100.0000	100	103.0000	103	99.9000	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053009-11			R1053009-15		R1053009-17	
Date Analyzed :				03/07/18 11:34			03/07/18 12:26		03/07/18 13:14	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	99.3000	99	100.0000	100	100.0000	100
Cadmium				100.0000	101.0000	101	102.0000	102	101.0000	101
Chromium				100.0000	104.0000	104	106.0000	106	105.0000	105
Copper				100.0000	97.9000	98	102.0000	102	101.0000	101
Lead				100.0000	97.4000	97	97.8000	98	98.1000	98
Nickel				100.0000	100.0000	100	101.0000	101	102.0000	102
Silver				100.0000	101.0000	101	103.0000	103	103.0000	103
Zinc				100.0000	97.6000	98	98.9000	99	98.9000	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053009-19			R1053009-21		R1053009-23	
Date Analyzed :				03/07/18 14:01			03/07/18 14:51		03/07/18 15:39	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	103.0000	103	100.0000	100	100.0000	100
Cadmium				100.0000	101.0000	101	101.0000	101	98.2000	98
Chromium				100.0000	105.0000	105	105.0000	105	100.0000	100
Copper				100.0000	104.0000	104	101.0000	101	98.6000	99
Lead				100.0000	98.3000	98	97.4000	97	94.9000	95
Nickel				100.0000	102.0000	102	102.0000	102	96.7000	97
Silver				100.0000	103.0000	103	103.0000	103	99.2000	99
Zinc				100.0000	99.6000	100	100.0000	100	96.6000	97

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053009-25			R1053009-27		R1053009-29	
Date Analyzed :				03/07/18 16:26			03/07/18 17:12		03/07/18 17:59	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				100.0000	103.0000	103	99.4000	99	101.0000	101
Cadmium				100.0000	102.0000	102	98.4000	98	101.0000	101
Chromium				100.0000	107.0000	107	101.0000	101	108.0000	108
Copper				100.0000	101.0000	101	99.6000	100	102.0000	102
Lead				100.0000	98.6000	99	94.3000	94	96.6000	97
Nickel				100.0000	103.0000	103	99.5000	100	104.0000	104
Silver				100.0000	104.0000	104	101.0000	101	102.0000	102
Zinc				100.0000	100.0000	100	98.1000	98	98.6000	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1053009-2		R1053009-6		R1053009-8		R1053009-10		WG1094297-1	
Date Analyzed :	03/07/18 08:34		03/07/18 08:58		03/07/18 09:44		03/07/18 10:51		03/07/18 15:47	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U	0.002	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.001	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.002	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.004	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.005	J
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.006	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.002	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.034	U

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053009-12		R1053009-14		R1053009-16			
Date Analyzed :			03/07/18 11:38		03/07/18 11:44		03/07/18 12:30			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U	0.165	U	0.165	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Chromium			0.178	U	0.178	U	0.178	U		
Copper			0.384	U	0.384	U	0.384	U		
Lead			0.343	U	0.343	U	0.343	U		
Nickel			0.556	U	0.556	U	0.556	U		
Silver			0.163	U	0.163	U	0.163	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053009-18		R1053009-20		R1053009-22			
Date Analyzed :			03/07/18 13:18		03/07/18 14:05		03/07/18 14:55			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U	0.165	U	0.165	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Chromium			0.178	U	0.178	U	0.178	U		
Copper			0.384	U	0.384	U	0.384	U		
Lead			0.343	U	0.343	U	0.343	U		
Nickel			0.556	U	0.556	U	0.556	U		
Silver			0.163	U	0.183	J	0.294	J		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053009-24		R1053009-26		R1053009-28			
Date Analyzed :			03/07/18 15:43		03/07/18 16:30		03/07/18 17:16			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U	0.165	U	0.165	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Chromium			0.178	U	0.178	U	0.178	U		
Copper			0.384	U	0.384	U	0.384	U		
Lead			0.343	U	0.343	U	0.343	U		
Nickel			0.556	U	0.556	U	0.556	U		
Silver			0.163	U	0.163	U	0.163	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053009-30							
Date Analyzed :			03/07/18 18:03							
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Arsenic			0.165	U						
Cadmium			0.0599	U						
Chromium			0.178	U						
Copper			0.384	U						
Lead			0.343	U						
Nickel			0.556	U						
Silver			0.163	U						
Zinc			3.41	U						

Form 4a
Interference Check Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1053009-3		R1053009-4					
Analysis Date :			03/07/18 08:42		03/07/18 08:46					
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		20	0.108		21.7	108				
Cadmium		20	0.0391		20.2	101				
Chromium		40	0.363		47.1	118				
Copper		40	0.508		42.8	107				
Lead			0.0546							
Nickel		40	-0.117		43.1	108				
Silver		10	0.228		10.5	105				
Zinc		20	3.96		23.3	116				

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 7
Laboratory Control Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG1094297-2	**LCS Analysis Date**	: 03/07/18 15:51
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, SPLP	0.120	0.131	109.					80-120	20
Cadmium, SPLP	0.0510	0.0550	107.					80-120	20
Chromium, SPLP	0.200	0.227	114.					80-120	20
Copper, SPLP	0.250	0.270	108.					80-120	20
Lead, SPLP	0.510	0.515	101.					80-120	20
Nickel, SPLP	0.500	0.528	106.					80-120	20
Silver, SPLP	0.0500	0.0490	97.					80-120	20
Zinc, SPLP	0.500	0.528	106.					80-120	20

Form 12
Preparation Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL	**Prep Method**	: EPA 3005A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1806872-01	03/03/18 17:00	-	50
L1806872-02	03/03/18 17:00	-	50
L1806872-03	03/03/18 17:00	-	50
L1806872-04	03/03/18 17:00	-	50
L1806872-05	03/03/18 17:00	-	50
L1806872-06	03/03/18 17:00	-	50
L1806872-07	03/03/18 17:00	-	50
L1806872-08	03/03/18 17:00	-	50
L1806872-09	03/03/18 17:00	-	50
L1806872-10	03/03/18 17:00	-	50
L1806872-11	03/03/18 17:00	-	50
L1806872-12	03/03/18 17:00	-	50
WG1094297-1	03/03/18 17:00	-	50
WG1094297-2	03/03/18 17:00	-	50

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Analysis Method**	: 79,6020A
Start Date	: 03/07/18 07:30	**End Date**	: 03/07/18 18:03

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Cadmium, SPLP	Chromium, SPLP	Copper, SPLP	Lead, SPLP	Nickel, SPLP	Silver, SPLP	Zinc, SPLP
R1053009-13 TUNE		07:30:00								
R1053009-1 ICV	1	08:30:55	X	X	X	X	X	X	X	X
R1053009-2 ICB	1	08:34:50	X	X	X	X	X	X	X	X
R1053009-3 ICSA	1	08:42:42	X	X	X	X	X	X	X	X
R1053009-4 ICSAB	1	08:46:38	X	X	X	X	X	X	X	X
R1053009-5 CCV	1	08:54:25	X	X	X	X	X	X	X	X
R1053009-6 CCB	1	08:58:20	X	X	X	X	X	X	X	X
R1053009-7 CCV	1	09:41:01	X	X	X	X	X	X	X	X
R1053009-8 CCB	1	09:44:56	X	X	X	X	X	X	X	X
R1053009-9 CCV	1	10:47:29	X	X	X	X	X	X	X	X
R1053009-10 CCB	1	10:51:24	X	X	X	X	X	X	X	X
R1053009-11 CCV	1	11:34:34	X	X	X	X	X	X	X	X
R1053009-12 CCB	1	11:38:30	X	X	X	X	X	X	X	X
R1053009-14 CCB	1	11:44:22	X	X	X	X	X	X	X	X
R1053009-15 CCV	1	12:26:58	X	X	X	X	X	X	X	X
R1053009-16 CCB	1	12:30:54	X	X	X	X	X	X	X	X
R1053009-17 CCV	1	13:14:48	X	X	X	X	X	X	X	X
R1053009-18 CCB	1	13:18:43	X	X	X	X	X	X	X	X
R1053009-19 CCV	1	14:01:22	X	X	X	X	X	X	X	X
R1053009-20 CCB	1	14:05:17	X	X	X	X	X	X	X	X
R1053009-21 CCV	1	14:51:15	X	X	X	X	X	X	X	X
R1053009-22 CCB	1	14:55:11	X	X	X	X	X	X	X	X
R1053009-23 CCV	1	15:39:31	X	X	X	X	X	X	X	X
R1053009-24 CCB	1	15:43:27	X	X	X	X	X	X	X	X
WG1094297-1 BLANK	10	15:47:23	X	X	X	X	X	X	X	X
WG1094297-2 LCS	10	15:51:15	X	X	X	X	X	X	X	X
L1806872-01	10	16:22:14	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Analysis Method**	: 79,6020A
Start Date	: 03/07/18 07:30	**End Date**	: 03/07/18 18:03

Sample Number	Dilution Factor	Analysis Time	Arsenic, SPLP	Cadmium, SPLP	Chromium, SPLP	Copper, SPLP	Lead, SPLP	Nickel, SPLP	Silver, SPLP	Zinc, SPLP
R1053009-25 CCV	1	16:26:07	X	X	X	X	X	X	X	X
R1053009-26 CCB	1	16:30:02	X	X	X	X	X	X	X	X
L1806872-02	10	16:33:58	X	X	X	X	X	X	X	X
L1806872-03	10	16:37:51	X	X	X	X	X	X	X	X
L1806872-04	10	16:41:44	X	X	X	X	X	X	X	X
L1806872-05	10	16:45:36	X	X	X	X	X	X	X	X
L1806872-06	10	16:49:30	X	X	X	X	X	X	X	X
L1806872-07	10	16:53:23	X	X	X	X	X	X	X	X
L1806872-08	10	16:57:17	X	X	X	X	X	X	X	X
L1806872-09	10	17:01:10	X	X	X	X	X	X	X	X
L1806872-10	10	17:05:02	X	X	X	X	X	X	X	X
L1806872-11	10	17:08:55	X	X	X	X	X	X	X	X
R1053009-27 CCV	1	17:12:48	X	X	X	X	X	X	X	X
R1053009-28 CCB	1	17:16:44	X	X	X	X	X	X	X	X
L1806872-12	10	17:55:38	X	X	X	X	X	X	X	X
R1053009-29 CCV	1	17:59:31	X	X	X	X	X	X	X	X
R1053009-30 CCB	1	18:03:27	X	X	X	X	X	X	X	X

Form 14
ICP-MS Tune

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab Sample ID	: R1053009-13	**Analysis Date**	: 03/07/18 07:30
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9095	0.723	0.6
115 In	114.8754	0.749	0.9
7 Li	7.0107	0.69	1.5
238 U	238.0009	0.792	1.2

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Analysis Method**	: 79,6020A
Start Date	: 03/07/18	**End Date**	: 03/07/18

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1053009-1 ICV	08:30:55	91	95	94	98	99
R1053009-2 ICB	08:34:50	88	83	92	95	98
R1053009-3 ICSA	08:42:42	84	88	91	95	96
R1053009-4 ICSAB	08:46:38	81	81	88	93	93
R1053009-5 CCV	08:54:25	86	89	92	95	98
R1053009-6 CCB	08:58:20	85	80	93	94	98
R1053009-7 CCV	09:41:01	80	85	91	92	92
R1053009-8 CCB	09:44:56	80	80	88	89	91
R1053009-9 CCV	10:47:29	80	86	89	90	93
R1053009-10 CCB	10:51:24	79	74	85	88	92
R1053009-11 CCV	11:34:34	77	87	91	90	91
R1053009-12 CCB	11:38:30	79	80	90	93	94
R1053009-14 CCB	11:44:22	82	81	90	91	95
R1053009-15 CCV	12:26:58	79	89	84	85	92
R1053009-16 CCB	12:30:54	81	80	88	90	95
R1053009-17 CCV	13:14:48	79	87	84	86	93
R1053009-18 CCB	13:18:43	81	76	83	86	93
R1053009-19 CCV	14:01:22	80	87	82	87	93
R1053009-20 CCB	14:05:17	82	76	84	89	95
R1053009-21 CCV	14:51:15	79	85	83	86	93
R1053009-22 CCB	14:55:11	81	75	84	87	94
R1053009-23 CCV	15:39:31	81	90	83	87	95
R1053009-24 CCB	15:43:27	83	72	83	87	96
WG1094297-1 BLANK	15:47:23	80	76	82	84	94
WG1094297-2 LCS	15:51:15	79	76	80	83	94
L1806872-01	16:22:14	81	80	93	91	96
R1053009-25 CCV	16:26:07	85	91	96	97	100

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: ICPMSQ2	**Analysis Method**	: 79,6020A
Start Date	: 03/07/18	**End Date**	: 03/07/18

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1053009-26 CCB	16:30:02	87	85	99	100	103
L1806872-02	16:33:58	84	83	95	94	99
L1806872-03	16:37:51	84	84	92	92	96
L1806872-04	16:41:44	85	84	93	90	97
L1806872-05	16:45:36	81	81	89	88	95
L1806872-06	16:49:30	82	81	88	87	95
L1806872-07	16:53:23	82	81	87	87	96
L1806872-08	16:57:17	82	81	86	86	95
L1806872-09	17:01:10	83	83	84	85	94
L1806872-10	17:05:02	81	80	83	84	94
L1806872-11	17:08:55	81	79	82	84	92
R1053009-27 CCV	17:12:48	83	93	82	88	96
R1053009-28 CCB	17:16:44	86	79	84	87	95
L1806872-12	17:55:38	72	74	88	87	95
R1053009-29 CCV	17:59:31	78	86	91	90	97
R1053009-30 CCB	18:03:27	79	80	91	92	97

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-01	**Date Collected**	: 02/27/18 11:28
Client ID	: SDT-DS-BFT-PC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 09:16
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.178	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.054	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.147	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-02	**Date Collected**	: 02/27/18 11:30
Client ID	: SDT-DS-BFT-PC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:23
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	0.042	1.00	0.019	J
7440-39-3	Barium, TCLP	0.139	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	ND	0.200	0.021	U
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	0.035	0.500	0.035	J
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-03	**Date Collected**	: 02/27/18 11:32
Client ID	: SDT-DS-BFT-PC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:27
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	0.045	1.00	0.019	J
7440-39-3	Barium, TCLP	0.116	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	0.024	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	0.037	0.500	0.035	J
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-04	**Date Collected**	: 02/27/18 11:34
Client ID	: SDT-DS-BFT-CC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:32
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.089	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.043	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.073	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-05	**Date Collected**	: 02/27/18 11:36
Client ID	: SDT-DS-BFT-CC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:37
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.115	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	0.040	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-06	**Date Collected**	: 02/27/18 11:38
Client ID	: SDT-DS-BFT-CC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:42
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.092	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	0.033	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-07	**Date Collected**	: 02/27/18 11:40
Client ID	: SDT-DS-GVT-PC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.146	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.042	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.144	0.200	0.021	J
7439-92-1	Lead, TCLP	0.045	0.500	0.027	J
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-08	**Date Collected**	: 02/27/18 11:42
Client ID	: SDT-DS-GVT-PC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:51
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	0.033	1.00	0.019	J
7440-39-3	Barium, TCLP	0.157	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	0.111	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-09	**Date Collected**	: 02/27/18 11:44
Client ID	: SDT-DS-GVT-PC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 13:56
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.134	0.500	0.021	J
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	ND	0.200	0.021	U
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-10	**Date Collected**	: 02/27/18 11:46
Client ID	: SDT-DS-GVT-CC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 14:01
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	0.022	1.00	0.019	J
7440-39-3	Barium, TCLP	0.080	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.026	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.068	0.200	0.021	J
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-11	**Date Collected**	: 02/27/18 11:48
Client ID	: SDT-DS-GVT-CC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 14:05
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.093	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.026	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.103	0.200	0.021	J
7439-92-1	Lead, TCLP	0.028	0.500	0.027	J
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-12	**Date Collected**	: 02/27/18 11:50
Client ID	: SDT-DS-GVT-CC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/10/18 14:19
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	0.105	0.500	0.021	J
7440-43-9	Cadmium, TCLP	0.019	0.100	0.010	J
7440-47-3	Chromium, TCLP	0.139	0.200	0.021	J
7439-92-1	Lead, TCLP	0.053	0.500	0.027	J
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: WG1094000-1	**Date Collected**	: NA
Client ID	: WG1094000-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/10/18 09:07
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,6010C	**Analyst**	: AB
Lab File ID	: WG1096137.pdf	**Instrument ID**	: TRACE5
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 3015	**Date Digested**	: 03/02/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, TCLP	ND	1.00	0.019	U
7440-39-3	Barium, TCLP	ND	0.500	0.021	U
7440-43-9	Cadmium, TCLP	ND	0.100	0.010	U
7440-47-3	Chromium, TCLP	ND	0.200	0.021	U
7439-92-1	Lead, TCLP	ND	0.500	0.027	U
7782-49-2	Selenium, TCLP	ND	0.500	0.035	U
7440-22-4	Silver, TCLP	ND	0.100	0.028	U

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1054080-7			R1054080-12			R1054080-14		R1054080-16	
Date Analyzed :	03/10/18 05:33			03/10/18 06:14			03/10/18 07:30		03/10/18 08:25	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5190	104.	0.5000	0.5130	103.	0.5090	102.	0.5180	104.
Barium	0.5000	0.5280	106.	0.5000	0.5110	102.	0.5090	102.	0.5170	103.
Cadmium	0.5000	0.5070	101.	0.5000	0.5000	100.	0.4940	99.	0.5030	100.
Chromium	0.5000	0.5050	101.	0.5000	0.5040	101.	0.4980	100	0.5070	101.
Lead	0.5000	0.5140	103.	0.5000	0.5090	102.	0.5050	101.	0.5100	102.
Selenium	0.5000	0.4850	97.	0.5000	0.4940	99.	0.4920	98.	0.5010	100.
Silver	0.5000	0.5280	106.	0.5000	0.5020	100.	0.4960	99.	0.5150	103.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1054080-18						
Date Analyzed :				03/10/18 09:21						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5200	104.				
Barium				0.5000	0.5250	105.				
Cadmium				0.5000	0.5060	101.				
Chromium				0.5000	0.5060	101.				
Lead				0.5000	0.5120	102.				
Selenium				0.5000	0.4940	99.				
Silver				0.5000	0.5310	106.				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1054080-22			R1054080-24			R1054080-26		R1054080-28	
Date Analyzed :	03/10/18 10:27			03/10/18 11:22			03/10/18 12:18		03/10/18 13:13	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic	0.5000	0.5220	104.	0.5000	0.5120	102.	0.5000	100	0.5130	102.
Barium	0.5000	0.5140	103.	0.5000	0.5050	101.	0.4880	98.	0.5030	101.
Cadmium	0.5000	0.5060	101.	0.5000	0.4950	99.	0.4850	97.	0.4940	99.
Chromium	0.5000	0.5070	101.	0.5000	0.4980	100	0.4870	97.	0.4950	99.
Lead	0.5000	0.5130	103.	0.5000	0.5030	100.	0.4970	99.	0.5030	101.
Selenium	0.5000	0.5080	102.	0.5000	0.4960	99.	0.4950	99.	0.4910	98.
Silver	0.5000	0.5000	100	0.5000	0.4900	98.	0.4640	93.	0.4940	99.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1054080-30			R1054080-35			
Date Analyzed :				03/10/18 14:10			03/10/18 14:52			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Arsenic				0.5000	0.5270	105.	0.5260	105.		
Barium				0.5000	0.5140	103.	0.5060	101.		
Cadmium				0.5000	0.5110	102.	0.5060	101.		
Chromium				0.5000	0.5090	102.	0.5050	101.		
Lead				0.5000	0.5200	104.	0.5170	103.		
Selenium				0.5000	0.5030	101.	0.5010	100.		
Silver				0.5000	0.5040	101.	0.4970	99.		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2B
CRI Check Standard

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Units**	: mg/L

		Initial	Final
Lab ID	:	R1054080-11	R1054080-34
Date Analyzed	:	03/10/18 06:10	03/10/18 14:47

Parameter	True	Found	%R	Found	%R
Arsenic	0.0200	0.0240	120	0.0261	130
Barium	0.0400	0.0445	111	0.0427	107
Cadmium	0.0100	0.0112	112	0.0112	112
Chromium	0.0200	0.0230	115	0.0234	117
Lead	0.0450	0.0481	107	0.0504	112
Selenium	0.0200	0.0222	111	0.0219	110
Silver	0.0200	0.0225	112	0.0214	107

Acceptance Criteria: Methods 200.7, 6010

CRI: 70-130%

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1054080-8		R1054080-13		R1054080-15		R1054080-17		WG1094000-1	
Date Analyzed :	03/10/18 05:37		03/10/18 06:19		03/10/18 07:35		03/10/18 08:29		03/10/18 09:07	
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q
Arsenic	0.00190	U	0.00190	U	0.00190	U	0.00190	U	0.019	U
Barium	0.00210	U	0.00210	U	0.00210	U	0.00210	U	0.021	U
Cadmium	0.00100	U	0.00100	U	0.00100	U	0.00100	U	0.010	U
Chromium	0.00210	U	0.00210	U	0.00210	U	0.00210	U	0.021	U
Lead	0.00270	U	0.00270	U	0.00270	U	0.00270	U	0.027	U
Selenium	0.00350	U	0.00350	U	0.00350	U	0.00350	U	0.035	U
Silver	0.00280	U	0.00280	U	0.00280	U	0.00280	U	0.028	U

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1054080-23		R1054080-19		R1054080-25		R1054080-27			
Date Analyzed :	03/10/18 10:32		03/10/18 09:25		03/10/18 11:26		03/10/18 12:22			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Arsenic	0.00290	J	0.00190	U	0.00190	U	0.00280	J		
Barium	0.00210	U	0.00210	U	0.00210	U	0.00210	U		
Cadmium	0.00100	U	0.00100	U	0.00100	U	0.00100	U		
Chromium	0.00210	U	0.00210	U	0.00210	U	0.00210	U		
Lead	0.00270	U	0.00270	U	0.00270	U	0.00270	U		
Selenium	0.00350	U	0.00350	U	0.00350	U	0.00350	U		
Silver	0.00280	U	0.00280	U	0.00280	U	0.00280	U		

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1054080-29		R1054080-31		R1054080-36			
Date Analyzed :			03/10/18 13:18		03/10/18 14:15		03/10/18 14:56			
Parameter	**mg/l**	**Q**	**mg/l**	**Q**	**mg/l**	**Q**	**mg/l**	**Q**		**Q**
Arsenic			0.00190	U	0.00430	J	0.00260	J		
Barium			0.00210	U	0.00210	U	0.00210	U		
Cadmium			0.00100	U	0.00100	U	0.00100	U		
Chromium			0.00210	U	0.00210	U	0.00210	U		
Lead			0.00270	U	0.00270	U	0.00270	U		
Selenium			0.00350	U	0.00350	U	0.00350	U		
Silver			0.00280	U	0.00280	U	0.00280	U		

Form 4a
Interference Check Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Concentration Units**	: mg/L

			Initial Found				Final Found			
Lab ID	:		R1054080-9		R1054080-10		R1054080-32		R1054080-33	
Analysis Date	:		03/10/18 06:00		03/10/18 06:05		03/10/18 14:38		03/10/18 14:43	
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Arsenic		1	-0.00210		1.09	109	-0.000300		1.12	112
Barium		0.3	0.000500		0.321	107	0.000600		0.316	105
Cadmium		0.3	0.00260		0.322	107	0.00280		0.327	109
Chromium		0.3	0.00230		0.324	108	0.00180		0.331	110
Lead		1	-0.0126		1.04	104	-0.000900		1.06	106
Selenium		0.5	-0.00220		0.551	110	-0.00490		0.565	113
Silver		0.3	0.000500		0.325	108	0.000600		0.313	104

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 7
Laboratory Control Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG1094000-2	**LCS Analysis Date**	: 03/10/18 09:11
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Arsenic, TCLP	1.20	1.26	105.					80-120	20
Barium, TCLP	20.0	19.2	96.					80-120	20
Cadmium, TCLP	0.510	0.522	102.					80-120	20
Chromium, TCLP	2.00	1.97	98.					80-120	20
Lead, TCLP	5.10	4.94	97.					80-120	20
Selenium, TCLP	1.20	1.26	105.					80-120	20
Silver, TCLP	0.500	0.468	94.					80-120	20

Form 12
Preparation Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL	**Prep Method**	: EPA 3015

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1806872-01	03/02/18 16:33	-	5
L1806872-02	03/02/18 16:33	-	5
L1806872-03	03/02/18 16:33	-	5
L1806872-04	03/02/18 16:33	-	5
L1806872-05	03/02/18 16:33	-	5
L1806872-06	03/02/18 16:33	-	5
L1806872-07	03/02/18 16:33	-	5
L1806872-08	03/02/18 16:33	-	5
L1806872-09	03/02/18 16:33	-	5
L1806872-10	03/02/18 16:33	-	5
L1806872-11	03/02/18 16:33	-	5
L1806872-12	03/02/18 16:33	-	5
WG1094000-1	03/02/18 16:33	-	5
WG1094000-2	03/02/18 16:33	-	5

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Analysis Method**	: 79,6010C
Start Date	: 03/10/18 05:33	**End Date**	: 03/10/18 14:56

Sample Number	Dilution Factor	Analysis Time	Arsenic, TCLP	Barium, TCLP	Cadmium, TCLP	Chromium, TCLP	Lead, TCLP	Selenium, TCLP	Silver, TCLP
R1054080-7 ICV	1	05:33:00	X	X	X	X	X	X	X
R1054080-8 ICB	1	05:37:00	X	X	X	X	X	X	X
R1054080-9 ICSA	1	06:00:00	X	X	X	X	X	X	X
R1054080-10 ICSAB	1	06:05:00	X	X	X	X	X	X	X
R1054080-11 CRI	1	06:10:00	X	X	X	X	X	X	X
R1054080-12 CCV	1	06:14:00	X	X	X	X	X	X	X
R1054080-13 CCB	1	06:19:00	X	X	X	X	X	X	X
R1054080-14 CCV	1	07:30:00	X	X	X	X	X	X	X
R1054080-15 CCB	1	07:35:00	X	X	X	X	X	X	X
R1054080-16 CCV	1	08:25:00	X	X	X	X	X	X	X
R1054080-17 CCB	1	08:29:00	X	X	X	X	X	X	X
WG1094000-1 BLANK	1	09:07:00	X	X	X	X	X	X	X
WG1094000-2 LCS	1	09:11:00	X	X	X	X	X	X	X
L1806872-01	1	09:16:00	X	X	X	X	X	X	X
R1054080-18 CCV	1	09:21:00	X	X	X	X	X	X	X
R1054080-19 CCB	1	09:25:00	X	X	X	X	X	X	X
R1054080-22 ICV	1	10:27:00	X	X	X	X	X	X	X
R1054080-23 ICB	1	10:32:00	X	X	X	X	X	X	X
R1054080-24 CCV	1	11:22:00	X	X	X	X	X	X	X
R1054080-25 CCB	1	11:26:00	X	X	X	X	X	X	X
R1054080-26 CCV	1	12:18:00	X	X	X	X	X	X	X
R1054080-27 CCB	1	12:22:00	X	X	X	X	X	X	X
R1054080-28 CCV	1	13:13:00	X	X	X	X	X	X	X
R1054080-29 CCB	1	13:18:00	X	X	X	X	X	X	X
L1806872-02	1	13:23:00	X	X	X	X	X	X	X
L1806872-03	1	13:27:00	X	X	X	X	X	X	X
L1806872-04	1	13:32:00	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: TRACE5	**Analysis Method**	: 79,6010C
Start Date	: 03/10/18 05:33	**End Date**	: 03/10/18 14:56

Sample Number	Dilution Factor	Analysis Time	Arsenic, TCLP	Barium, TCLP	Cadmium, TCLP	Chromium, TCLP	Lead, TCLP	Selenium, TCLP	Silver, TCLP
L1806872-05	1	13:37:00	X	X	X	X	X	X	X
L1806872-06	1	13:42:00	X	X	X	X	X	X	X
L1806872-07	1	13:46:00	X	X	X	X	X	X	X
L1806872-08	1	13:51:00	X	X	X	X	X	X	X
L1806872-09	1	13:56:00	X	X	X	X	X	X	X
L1806872-10	1	14:01:00	X	X	X	X	X	X	X
L1806872-11	1	14:05:00	X	X	X	X	X	X	X
R1054080-30 CCV	1	14:10:00	X	X	X	X	X	X	X
R1054080-31 CCB	1	14:15:00	X	X	X	X	X	X	X
L1806872-12	1	14:19:00	X	X	X	X	X	X	X
R1054080-32 ICSA	1	14:38:00	X	X	X	X	X	X	X
R1054080-33 ICSAB	1	14:43:00	X	X	X	X	X	X	X
R1054080-34 CRI	1	14:47:00	X	X	X	X	X	X	X
R1054080-35 CCV	1	14:52:00	X	X	X	X	X	X	X
R1054080-36 CCB	1	14:56:00	X	X	X	X	X	X	X

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-01	**Date Collected**	: 02/27/18 11:28
Client ID	: SDT-DS-BFT-PC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:46
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-02	**Date Collected**	: 02/27/18 11:30
Client ID	: SDT-DS-BFT-PC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:48
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-03	**Date Collected**	: 02/27/18 11:32
Client ID	: SDT-DS-BFT-PC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:50
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-04	**Date Collected**	: 02/27/18 11:34
Client ID	: SDT-DS-BFT-CC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:52
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-05	**Date Collected**	: 02/27/18 11:36
Client ID	: SDT-DS-BFT-CC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:12
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-06	**Date Collected**	: 02/27/18 11:38
Client ID	: SDT-DS-BFT-CC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:13
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-07	**Date Collected**	: 02/27/18 11:40
Client ID	: SDT-DS-GVT-PC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-08	**Date Collected**	: 02/27/18 11:42
Client ID	: SDT-DS-GVT-PC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:17
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-09	**Date Collected**	: 02/27/18 11:44
Client ID	: SDT-DS-GVT-PC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:18
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-10	**Date Collected**	: 02/27/18 11:46
Client ID	: SDT-DS-GVT-CC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:20
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-11	**Date Collected**	: 02/27/18 11:48
Client ID	: SDT-DS-GVT-CC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:22
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-12	**Date Collected**	: 02/27/18 11:50
Client ID	: SDT-DS-GVT-CC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 16:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: WG1095393-1	**Date Collected**	: NA
Client ID	: WG1095393-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/08/18 15:43
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, SPLP	ND	0.0010	0.0001	U

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1053245-9			R1053245-11			R1053245-13		R1053245-15	
Date Analyzed	:	03/08/18 14:06			03/08/18 14:28			03/08/18 14:49		03/08/18 15:12	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.0030	0.0030	100	0.0100	0.0110	110.	0.0100	100.	0.0109	109.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053245-17			R1053245-19		R1053245-21	
Date Analyzed :				03/08/18 15:33			03/08/18 15:53		03/08/18 16:08	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0100	0.0102	102.	0.0102	102.	0.0101	101.

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053245-23						
Date Analyzed :				03/08/18 16:29						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				**0.0100**	**0.0106**	**106.**				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1053245-10		R1053245-12		R1053245-14		R1053245-16		WG1095393-1	
Date Analyzed :	03/08/18 14:07		03/08/18 14:30		03/08/18 14:51		03/08/18 15:14		03/08/18 15:43	
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q
Mercury	0.0000100	U	0.0000100	U	0.0000100	U	0.0000100	U	0.0001	U

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053245-18		R1053245-20		R1053245-22			
Date Analyzed :			03/08/18 15:34		03/08/18 15:55		03/08/18 16:10			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000100	U	0.0000100	U	0.0000100	U		

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:		R1053245-24							
Date Analyzed	:		03/08/18 16:30							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000100	U						

Form 7
Laboratory Control Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG1095393-2	**LCS Analysis Date**	: 03/08/18 15:45
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Mercury, SPLP	**0.00500**	**0.00430**	**86.**					**80-120**	**20**

Form 12
Preparation Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL	**Prep Method**	: EPA 7470A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1806872-01	03/07/18 15:40	-	5
L1806872-02	03/07/18 15:40	-	5
L1806872-03	03/07/18 15:40	-	5
L1806872-04	03/07/18 15:40	-	5
L1806872-05	03/07/18 15:40	-	5
L1806872-06	03/07/18 15:40	-	5
L1806872-07	03/07/18 15:40	-	5
L1806872-08	03/07/18 15:40	-	5
L1806872-09	03/07/18 15:40	-	5
L1806872-10	03/07/18 15:40	-	5
L1806872-11	03/07/18 15:40	-	5
L1806872-12	03/07/18 15:40	-	5
WG1095393-1	03/07/18 15:40	-	5
WG1095393-2	03/07/18 15:40	-	5

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Analysis Method**	: 79,7470A
Start Date	: 03/08/18 14:06	**End Date**	: 03/08/18 16:30

Sample Number	Dilution Factor	Analysis Time	Mercury, SPLP
R1053245-9 ICV	1	14:06:00	X
R1053245-10 ICB	1	14:07:42	X
R1053245-11 CCV	1	14:28:43	X
R1053245-12 CCB	1	14:30:44	X
R1053245-13 CCV	1	14:49:39	X
R1053245-14 CCB	1	14:51:22	X
R1053245-15 CCV	1	15:12:27	X
R1053245-16 CCB	1	15:14:10	X
R1053245-17 CCV	1	15:33:08	X
R1053245-18 CCB	1	15:34:51	X
WG1095393-1 BLANK	1	15:43:25	X
WG1095393-2 LCS	1	15:45:08	X
L1806872-01	1	15:46:52	X
L1806872-02	1	15:48:36	X
L1806872-03	1	15:50:20	X
L1806872-04	1	15:52:02	X
R1053245-19 CCV	1	15:53:45	X
R1053245-20 CCB	1	15:55:28	X
R1053245-21 CCV	1	16:08:41	X
R1053245-22 CCB	1	16:10:24	X
L1806872-05	1	16:12:06	X
L1806872-06	1	16:13:48	X
L1806872-07	1	16:15:31	X
L1806872-08	1	16:17:15	X
L1806872-09	1	16:18:58	X
L1806872-10	1	16:20:43	X
L1806872-11	1	16:22:25	X

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Analysis Method**	: 79,7470A
Start Date	: 03/08/18 14:06	**End Date**	: 03/08/18 16:30

Sample Number	Dilution Factor	Analysis Time	Mercury, SPLP
L1806872-12	1	16:24:07	X
R1053245-23 CCV	1	16:29:16	X
R1053245-24 CCB	1	16:30:59	X

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-01	**Date Collected**	: 02/27/18 11:28
Client ID	: SDT-DS-BFT-PC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:19
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-02	**Date Collected**	: 02/27/18 11:30
Client ID	: SDT-DS-BFT-PC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:21
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-03	**Date Collected**	: 02/27/18 11:32
Client ID	: SDT-DS-BFT-PC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:22
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-04	**Date Collected**	: 02/27/18 11:34
Client ID	: SDT-DS-BFT-CC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:24
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-05	**Date Collected**	: 02/27/18 11:36
Client ID	: SDT-DS-BFT-CC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:26
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-06	**Date Collected**	: 02/27/18 11:38
Client ID	: SDT-DS-BFT-CC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:27
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-07	**Date Collected**	: 02/27/18 11:40
Client ID	: SDT-DS-GVT-PC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:29
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-08	**Date Collected**	: 02/27/18 11:42
Client ID	: SDT-DS-GVT-PC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:31
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-09	**Date Collected**	: 02/27/18 11:44
Client ID	: SDT-DS-GVT-PC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:36
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-10	**Date Collected**	: 02/27/18 11:46
Client ID	: SDT-DS-GVT-CC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:38
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-11	**Date Collected**	: 02/27/18 11:48
Client ID	: SDT-DS-GVT-CC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:40
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-12	**Date Collected**	: 02/27/18 11:50
Client ID	: SDT-DS-GVT-CC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 15:41
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 1
METALS

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: WG1095394-1	**Date Collected**	: NA
Client ID	: WG1095394-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/08/18 15:15
Sample Matrix	: SOIL	**Dilution Factor**	: 1
Analytical Method	: 79,7470A	**Analyst**	: MG
Lab File ID	: WG1095505.pdf	**Instrument ID**	: CETAC
Sample Amount	: 5ml	**%Solids**	: NA
Digestion Method	: EPA 7470A	**Date Digested**	: 03/07/18

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, TCLP	ND	0.0010	0.0002	U

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1053245-9			R1053245-11			R1053245-13		R1053245-15	
Date Analyzed	:	03/08/18 14:06			03/08/18 14:28			03/08/18 14:49		03/08/18 15:12	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.0030	0.0030	100	0.0100	0.0110	110.	0.0100	100.	0.0109	109.

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1053245-17			R1053245-19			
Date Analyzed :				03/08/18 15:33			03/08/18 15:53			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				**0.0100**	**0.0102**	**102.**	**0.0102**	**102.**		

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC		

		Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID	:	R1053245-10		R1053245-12		R1053245-14		R1053245-16		WG1095394-1	
Date Analyzed	:	03/08/18 14:07		03/08/18 14:30		03/08/18 14:51		03/08/18 15:14		03/08/18 15:15	
Parameter		**mg/l**	**Q**	**mg/l**	**Q**	**mg/l**	**Q**	**mg/l**	**Q**	**mg/l**	**Q**
Mercury		0.0000390	U	0.0000390	U	0.0000390	U	0.0000390	U	0.0002	U

Form 3
Blanks

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1053245-18		R1053245-20					
Date Analyzed :			03/08/18 15:34		03/08/18 15:55					
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000390	U	0.0000390	U				

Form 7
Laboratory Control Sample

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Client Sample ID	: NA	**Matrix**	: SOIL
Lab Sample ID	: WG1095394-2	**LCS Analysis Date**	: 03/08/18 15:17
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Mercury, TCLP	**0.00500**	**0.00510**	**102.**					**80-120**	**20**

Form 12
Preparation Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL	**Prep Method**	: EPA 7470A

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L1806872-01	03/07/18 15:40	-	5
L1806872-02	03/07/18 15:40	-	5
L1806872-03	03/07/18 15:40	-	5
L1806872-04	03/07/18 15:40	-	5
L1806872-05	03/07/18 15:40	-	5
L1806872-06	03/07/18 15:40	-	5
L1806872-07	03/07/18 15:40	-	5
L1806872-08	03/07/18 15:40	-	5
L1806872-09	03/07/18 15:40	-	5
L1806872-10	03/07/18 15:40	-	5
L1806872-11	03/07/18 15:40	-	5
L1806872-12	03/07/18 15:40	-	5
WG1095394-1	03/07/18 15:40	-	5
WG1095394-2	03/07/18 15:40	-	5

Form 13
Analysis Run Log

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: CETAC	**Analysis Method**	: 79,7470A
Start Date	: 03/08/18 14:06	**End Date**	: 03/08/18 15:55

Sample Number	Dilution Factor	Analysis Time	Mercury, TCLP
R1053245-9 ICV	1	14:06:00	X
R1053245-10 ICB	1	14:07:42	X
R1053245-11 CCV	1	14:28:43	X
R1053245-12 CCB	1	14:30:44	X
R1053245-13 CCV	1	14:49:39	X
R1053245-14 CCB	1	14:51:22	X
R1053245-15 CCV	1	15:12:27	X
R1053245-16 CCB	1	15:14:10	X
WG1095394-1 BLANK	1	15:15:53	X
WG1095394-2 LCS	1	15:17:36	X
L1806872-01	1	15:19:19	X
L1806872-02	1	15:21:03	X
L1806872-03	1	15:22:47	X
L1806872-04	1	15:24:31	X
L1806872-05	1	15:26:14	X
L1806872-06	1	15:27:58	X
L1806872-07	1	15:29:41	X
L1806872-08	1	15:31:25	X
R1053245-17 CCV	1	15:33:08	X
R1053245-18 CCB	1	15:34:51	X
L1806872-09	1	15:36:35	X
L1806872-10	1	15:38:20	X
L1806872-11	1	15:40:01	X
L1806872-12	1	15:41:43	X
R1053245-19 CCV	1	15:53:45	X
R1053245-20 CCB	1	15:55:28	X

Organic Summary Forms

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-01	**Date Collected**	: 02/27/18 11:28
Client ID	: SDT-DS-BFT-PC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 22:38
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071811	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	16.6	0.500	0.500	
25323-68-6	Trichlorobiphenyls	35.4	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	44.4	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	ND	0.500	0.500	U
26601-64-9	Hexachlorobiphenyls	ND	0.500	0.500	U
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	96.4	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-02	**Date Collected**	: 02/27/18 11:30
Client ID	: SDT-DS-BFT-PC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/07/18 23:52
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071812	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	25.9	0.500	0.500	
25323-68-6	Trichlorobiphenyls	99.2	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	98.2	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	7.29	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	ND	0.500	0.500	U
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	231	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-03	**Date Collected**	: 02/27/18 11:32
Client ID	: SDT-DS-BFT-PC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 03:24
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071815	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	27.8	0.500	0.500	
25323-68-6	Trichlorobiphenyls	104	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	94.8	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	8.21	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	1.91	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	237	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-04	**Date Collected**	: 02/27/18 11:34
Client ID	: SDT-DS-BFT-CC03	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 04:39
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071816	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	22.0	0.500	0.500	
25323-68-6	Trichlorobiphenyls	83.9	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	120	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	15.3	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	5.38	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	2.62	0.500	0.500	
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	249	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-05	**Date Collected**	: 02/27/18 11:36
Client ID	: SDT-DS-BFT-CC06	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 05:53
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071817	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	23.3	0.500	0.500	
25323-68-6	Trichlorobiphenyls	92.8	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	81.2	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	7.24	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	1.50	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	206	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-06	**Date Collected**	: 02/27/18 11:38
Client ID	: SDT-DS-BFT-CC08	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 07:07
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071818	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	24.9	0.500	0.500	
25323-68-6	Trichlorobiphenyls	84.3	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	78.7	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	7.44	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	1.29	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	197	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-07	**Date Collected**	: 02/27/18 11:40
Client ID	: SDT-DS-GVT-PC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 08:21
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071819	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	27.0	0.500	0.500	
25323-68-6	Trichlorobiphenyls	166	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	118	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	15.8	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	4.42	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	1.48	0.500	0.500	
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	333	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-08	**Date Collected**	: 02/27/18 11:42
Client ID	: SDT-DS-GVT-PC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 09:35
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071820	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	25.2	0.500	0.500	
25323-68-6	Trichlorobiphenyls	123	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	84.4	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	8.90	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	1.51	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	243	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-09	**Date Collected**	: 02/27/18 11:44
Client ID	: SDT-DS-GVT-PC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 10:49
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071821	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	28.5	0.500	0.500	
25323-68-6	Trichlorobiphenyls	144	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	108	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	11.9	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	1.98	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	294	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-10	**Date Collected**	: 02/27/18 11:46
Client ID	: SDT-DS-GVT-CC02	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 12:03
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071822	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	23.9	0.500	0.500	
25323-68-6	Trichlorobiphenyls	102	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	159	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	23.3	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	5.68	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	3.17	0.500	0.500	
55722-26-4	Octachlorobiphenyls	3.71	0.500	0.500	
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	321	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-11	**Date Collected**	: 02/27/18 11:48
Client ID	: SDT-DS-GVT-CC04	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 13:18
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071823	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	24.0	0.500	0.500	
25323-68-6	Trichlorobiphenyls	103	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	115	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	13.8	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	2.92	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	1.76	0.500	0.500	
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	260	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: L1806872-12	**Date Collected**	: 02/27/18 11:50
Client ID	: SDT-DS-GVT-CC05	**Date Received**	: 02/28/18
Sample Location	: STRATFORD, CT	**Date Analyzed**	: 03/08/18 14:32
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071824	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	27.2	0.500	0.500	
25323-68-6	Trichlorobiphenyls	102	0.500	0.500	
26914-33-0	Tetrachlorobiphenyls	118	0.500	0.500	
25429-29-2	Pentachlorobiphenyls	11.4	0.500	0.500	
26601-64-9	Hexachlorobiphenyls	2.75	0.500	0.500	
28655-71-2	Heptachlorobiphenyls	1.03	0.500	0.500	
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	262	0.500	0.500	

Form 1
SemiVolatile Organics

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab ID	: WG1094741-1	**Date Collected**	: NA
Client ID	: WG1094741-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 03/07/18 12:31
Sample Matrix	: SOIL	**Date Extracted**	: 03/06/18
Analytical Method	: 105,8270D-SIM/680(M)	**Dilution Factor**	: 1
Lab File ID	: F203071803	**Analyst**	: MJS
Sample Amount	: 1000 ml	**Instrument ID**	: BNA2
Extraction Method	: EPA 3510C	**GC Column**	: RTX-5
Extract Volume	: 1000 uL	**%Solids**	: NA
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ng/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
27323-18-8	Monochlorobiphenyls	ND	0.500	0.500	U
25512-42-9	Dichlorobiphenyls	ND	0.500	0.500	U
25323-68-6	Trichlorobiphenyls	ND	0.500	0.500	U
26914-33-0	Tetrachlorobiphenyls	ND	0.500	0.500	U
25429-29-2	Pentachlorobiphenyls	ND	0.500	0.500	U
26601-64-9	Hexachlorobiphenyls	ND	0.500	0.500	U
28655-71-2	Heptachlorobiphenyls	ND	0.500	0.500	U
55722-26-4	Octachlorobiphenyls	ND	0.500	0.500	U
53742-07-7	Nonachlorobiphenyls	ND	0.500	0.500	U
2051-24-3	Decachlorobiphenyl	ND	0.500	0.500	U
NONE	Total Homologs	ND	0.500	0.500	U

Form 2
Surrogate Recovery
PCBS

Client: AMEC Foster Wheeler E & I, Inc.
Project Name: STRATFORD ARMY ENGINE PLANT

Lab Number: L1806872
Project Number: 3616176064.08.01
Matrix: Soil

CLIENT ID (LAB SAMPLE NO.)	S1 ()	S2 ()	S3 ()	S4 ()	S5 ()	S6 ()	TOT OUT
SDT-DS-BFT-PC03 (L1806872-01)	76	72	--	--	--	--	0
SDT-DS-BFT-PC06 (L1806872-02)	83	87	--	--	--	--	0
SDT-DS-BFT-PC08 (L1806872-03)	80	83	--	--	--	--	0
SDT-DS-BFT-CC03 (L1806872-04)	88	89	--	--	--	--	0
SDT-DS-BFT-CC06 (L1806872-05)	77	78	--	--	--	--	0
SDT-DS-BFT-CC08 (L1806872-06)	81	80	--	--	--	--	0
SDT-DS-GVT-PC02 (L1806872-07)	84	86	--	--	--	--	0
SDT-DS-GVT-PC04 (L1806872-08)	80	80	--	--	--	--	0
SDT-DS-GVT-PC05 (L1806872-09)	85	87	--	--	--	--	0
SDT-DS-GVT-CC02 (L1806872-10)	79	88	--	--	--	--	0
SDT-DS-GVT-CC04 (L1806872-11)	77	85	--	--	--	--	0
SDT-DS-GVT-CC05 (L1806872-12)	84	86	--	--	--	--	0
WG1094741-1BLANK	87	83	--	--	--	--	0
WG1094741-2LCS	88	90	--	--	--	--	0
WG1094741-3LCSD	79	89	--	--	--	--	0

QC LIMITS
(50-125) S1 = CL3-BZ#19-C13
(50-125) S2 = CL8-BZ#202-C13

*** Values outside of QC limits**

FORM II A2-PCBHOMS-SPLP

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl1-BZ#1	100	85.9	86	100	78.0	78	10	40-140	30
Cl1-BZ#2	100	82.7	83	100	76.3	76	9	40-140	30
CL1-BZ#3	100	82.9	83	100	77.2	77	8	40-140	30
Cl2-BZ#4/#10	200	173.	86	200	156.	78	10	40-140	30
Cl2-BZ#9	100	83.9	84	100	76.3	76	10	40-140	30
Cl2-BZ#7	100	84.8	85	100	78.4	78	9	40-140	30
Cl2-BZ#6	100	83.0	83	100	76.0	76	9	40-140	30
Cl2-BZ#5	100	83.2	83	100	75.7	76	9	40-140	30
Cl2-BZ#8	100	83.9	84	100	76.6	77	9	40-140	30
Cl3-BZ#19	100	84.0	84	100	75.4	75	11	40-140	30
Cl2-BZ#14	100	83.4	83	100	76.3	76	9	40-140	30
Cl3-BZ#30	100	84.5	84	100	76.3	76	10	40-140	30
Cl3-BZ#18	100	81.8	82	100	74.2	74	10	40-140	30
Cl2-BZ#11	100	84.5	84	100	77.6	78	7	40-140	30
Cl3-BZ#17	100	84.0	84	100	76.0	76	10	40-140	30
Cl2-BZ#12	100	83.8	84	100	76.8	77	9	40-140	30
Cl3-BZ#27	100	84.5	84	100	76.6	76	10	40-140	30
Cl2-BZ#13	100	82.7	83	100	76.6	76	9	40-140	30
Cl3-BZ#24	100	85.1	85	100	77.0	77	10	40-140	30
Cl3-BZ#16	100	82.4	82	100	74.9	75	9	40-140	30
Cl3-BZ#32	100	83.4	83	100	75.9	76	9	40-140	30
Cl2-BZ#15	100	80.4	80	100	74.7	75	6	40-140	30
Cl3-BZ#34	100	83.7	84	100	76.2	76	10	40-140	30
Cl3-BZ#23	100	85.7	86	100	77.7	78	10	40-140	30
Cl4-BZ#54	100	85.8	86	100	77.1	77	11	40-140	30
Cl3-BZ#29	100	83.6	84	100	75.8	76	10	40-140	30
Cl4-BZ#50	100	84.3	84	100	75.8	76	10	40-140	30
Cl3-BZ#26	100	83.9	84	100	76.2	76	10	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl3-BZ#25	100	82.9	83	100	75.8	76	9	40-140	30
Cl4-BZ#53	100	84.2	84	100	76.1	76	10	40-140	30
Cl3-BZ#-31	100	82.4	82	100	75.2	75	9	40-140	30
Cl3-BZ#28	100	83.6	84	100	71.1	71	17	40-140	30
Cl3-BZ#33	100	88.2	88	100	91.4	91	3	40-140	30
Cl4-BZ#51	100	86.5	86	100	79.1	79	8	40-140	30
Cl3-BZ#21/#20	200	172.	86	200	154.	77	11	40-140	30
Cl4-BZ#45	100	84.6	85	100	77.3	77	10	40-140	30
Cl3-BZ#22	100	84.6	85	100	77.6	78	9	40-140	30
Cl4-BZ#73/#46	200	173.	86	200	157.	79	8	40-140	30
Cl4-BZ#69	100	85.6	86	100	74.6	75	14	40-140	30
Cl4-BZ#43	100	84.2	84	100	80.7	81	4	40-140	30
Cl3-BZ#36	100	88.6	89	100	80.6	81	9	40-140	30
Cl4-BZ#52	100	83.6	84	100	75.7	76	10	40-140	30
Cl4-BZ#48	100	87.4	87	100	79.2	79	10	40-140	30
Cl4-BZ#49	100	84.4	84	100	75.7	76	10	40-140	30
Cl5-BZ#104	100	86.0	86	100	77.5	78	10	40-140	30
Cl4-BZ#47	100	80.9	81	100	74.8	75	8	40-140	30
Cl4-BZ#65/#75/#62	300	265.	88	300	238.	79	11	40-140	30
Cl3-BZ#39	100	85.2	85	100	79.2	79	7	40-140	30
Cl3-BZ#38	100	89.4	89	100	81.8	82	8	40-140	30
Cl4-BZ#44	100	84.9	85	100	76.5	76	11	40-140	30
Cl4-BZ#59	100	82.9	83	100	76.0	76	9	40-140	30
Cl4-BZ#42	100	88.5	88	100	78.9	79	11	40-140	30
Cl4-BZ#71	100	85.3	85	100	77.8	78	9	40-140	30
Cl3-BZ#35	100	86.3	86	100	80.3	80	7	40-140	30
Cl4-BZ#41	100	87.7	88	100	79.7	80	10	40-140	30
Cl4-BZ#72	100	89.1	89	100	82.3	82	8	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl5-BZ#96	100	87.6	88	100	79.6	80	10	40-140	30
Cl5-BZ#103	100	90.4	90	100	81.9	82	9	40-140	30
Cl4-BZ#68/#64	200	178.	89	200	162.	81	9	40-140	30
Cl4-BZ#40	100	86.7	87	100	78.7	79	10	40-140	30
Cl3-BZ#37	100	85.8	86	100	80.5	80	7	40-140	30
Cl5-BZ#100	100	88.4	88	100	82.0	82	7	40-140	30
Cl5-BZ#94	100	91.7	92	100	84.7	85	8	40-140	30
Cl4-BZ#57	100	86.9	87	100	79.3	79	10	40-140	30
Cl4-BZ#67/#58	200	178.	89	200	164.	82	8	40-140	30
Cl5-BZ#102	100	90.3	90	100	82.7	83	8	40-140	30
Cl4-BZ#61	100	87.1	87	100	80.0	80	8	40-140	30
Cl5-BZ#98	100	89.4	89	100	81.5	81	9	40-140	30
Cl4-BZ#76	100	92.0	92	100	85.4	85	8	40-140	30
Cl5-BZ#93	100	88.7	89	100	82.4	82	8	40-140	30
Cl4-BZ#63	100	85.2	85	100	78.3	78	9	40-140	30
Cl5-BZ#121/#95/#88	300	275.	92	300	250.	84	9	40-140	30
Cl4-BZ#74	100	86.8	87	100	80.7	81	7	40-140	30
Cl6-BZ#155	100	88.5	88	100	80.6	81	8	40-140	30
Cl4-BZ#70	100	88.7	89	100	81.4	81	9	40-140	30
Cl5-BZ#91	100	87.5	88	100	81.0	81	8	40-140	30
Cl4-BZ#66	100	88.3	88	100	82.5	82	7	40-140	30
Cl4-BZ#80	100	88.0	88	100	82.4	82	7	40-140	30
Cl4-BZ#55	100	88.8	89	100	82.5	82	8	40-140	30
Cl5-BZ#92	100	89.6	90	100	82.9	83	8	40-140	30
Cl5-BZ#89/#84	200	180.	90	200	163.	81	11	40-140	30
Cl5-BZ#101/#90	200	174.	87	200	165.	82	6	40-140	30
Cl4-BZ#56	100	89.9	90	100	83.4	83	8	40-140	30
Cl5-BZ#113	100	97.3	97	100	89.3	89	9	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl5-BZ#99	100	88.1	88	100	82.9	83	6	40-140	30
Cl6-BZ#150	100	89.3	89	100	82.6	83	7	40-140	30
Cl4-BZ#60	100	89.1	89	100	83.2	83	7	40-140	30
Cl6-BZ#152	100	88.3	88	100	82.0	82	7	40-140	30
Cl5-BZ#119	100	94.1	94	100	89.0	89	5	40-140	30
Cl5-BZ#83/#125/#112	300	279.	93	300	259.	86	8	40-140	30
Cl5-BZ#86/#109	200	175.	87	200	162.	81	7	40-140	30
Cl6-BZ#145	100	89.6	90	100	82.7	83	8	40-140	30
Cl5-BZ#97	100	94.1	94	100	87.3	87	8	40-140	30
Cl6-BZ#148	100	89.6	90	100	84.0	84	7	40-140	30
Cl4-BZ#79	100	89.4	89	100	85.1	85	5	40-140	30
Cl5-BZ#116	100	88.7	89	100	82.9	83	7	40-140	30
Cl6-BZ#154	100	90.0	90	100	84.1	84	7	40-140	30
Cl4-BZ#78	100	89.4	89	100	85.8	86	3	40-140	30
Cl5-BZ#87/#111	200	188.	94	200	178.	89	5	40-140	30
Cl6-BZ#136	100	90.6	91	100	84.5	84	8	40-140	30
Cl5-BZ#117	100	83.6	84	100	78.8	79	6	40-140	30
Cl5-BZ#115	100	101.	101	100	95.6	96	5	40-140	30
Cl5-BZ#85	100	83.9	84	100	78.9	79	6	40-140	30
Cl5-BZ#120	100	91.7	92	100	87.0	87	6	40-140	30
Cl5-BZ#110	100	88.2	88	100	84.4	84	5	40-140	30
Cl4-BZ#81	100	87.0	87	100	83.8	84	4	40-140	30
Cl6-BZ#151	100	87.1	87	100	84.9	85	2	40-140	30
Cl6-BZ#135	100	90.4	90	100	88.6	88	2	40-140	30
Cl5-BZ#82	100	90.7	91	100	90.5	90	1	40-140	30
Cl6-BZ#144	100	89.0	89	100	87.0	87	2	40-140	30
Cl6-BZ#147/#149	200	178.	89	200	175.	88	1	40-140	30
Cl4-BZ#77	100	86.0	86	100	87.7	88	2	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl6-BZ#143/#139	200	181.	90	200	180.	90	0	40-140	30
Cl5-BZ#124	100	90.8	91	100	90.5	90	1	40-140	30
Cl6-BZ#140	100	90.8	91	100	89.0	89	2	40-140	30
Cl5-BZ#108	100	98.6	99	100	98.2	98	1	40-140	30
Cl5-BZ#107/#123	200	179.	89	200	177.	88	1	40-140	30
Cl7-BZ#188	100	91.8	92	100	89.4	89	3	40-140	30
Cl6-BZ#134	100	89.5	90	100	88.5	88	2	40-140	30
Cl5-BZ#106	100	96.6	97	100	83.4	83	16	40-140	30
Cl6-BZ#133	100	103.	103	100	102.	102	1	40-140	30
Cl6-BZ#142	100	72.4	72	100	68.1	68	6	40-140	30
Cl5-BZ#118	100	91.0	91	100	91.1	91	0	40-140	30
Cl6-BZ#131	100	91.0	91	100	90.3	90	1	40-140	30
Cl7-BZ#184	100	89.6	90	100	87.6	88	2	40-140	30
Cl6-BZ#165	100	92.4	92	100	91.5	92	0	40-140	30
Cl6-BZ#146	100	86.6	87	100	86.6	86	1	40-140	30
Cl6-BZ#161	100	91.6	92	100	91.0	91	1	40-140	30
Cl5-BZ#122	100	92.0	92	100	91.7	92	0	40-140	30
Cl6-BZ#168	100	100.	100	100	81.6	82	20	40-140	30
Cl5-BZ#114	100	91.4	91	100	92.5	92	1	40-140	30
Cl6-BZ#153	100	78.1	78	100	100.	100	25	40-140	30
Cl6-BZ#132	100	88.5	88	100	87.5	88	0	40-140	30
Cl7-BZ#179	100	86.3	86	100	86.1	86	0	40-140	30
Cl6-BZ#141	100	89.1	89	100	88.4	88	1	40-140	30
Cl7-BZ#176	100	87.3	87	100	86.9	87	0	40-140	30
Cl5-BZ#105	100	85.8	86	100	86.0	86	0	40-140	30
Cl6-BZ#137	100	91.0	91	100	90.2	90	1	40-140	30
Cl5-BZ#127	100	87.7	88	100	89.0	89	1	40-140	30
Cl7-BZ#186	100	90.4	90	100	89.0	89	1	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
Cl6-BZ#130/#164	200	184.	92	200	184.	92	0	40-140	30
Cl7-BZ#178	100	88.3	88	100	89.2	89	1	40-140	30
Cl6-BZ#138	100	94.2	94	100	94.9	95	1	40-140	30
Cl6-BZ#163/#160	200	186.	93	200	188.	94	1	40-140	30
Cl6-BZ#129/#158	200	176.	88	200	175.	88	0	40-140	30
Cl7-BZ#182/#175	200	186.	93	200	184.	92	1	40-140	30
Cl7-BZ#187	100	88.2	88	100	88.8	89	1	40-140	30
Cl7-BZ#183	100	88.8	89	100	89.0	89	0	40-140	30
Cl6-BZ#166	100	88.1	88	100	88.4	88	0	40-140	30
Cl6-BZ#159	100	89.9	90	100	90.4	90	0	40-140	30
Cl5-BZ#126	100	90.2	90	100	92.8	93	3	40-140	30
Cl7-BZ#185	100	89.6	90	100	89.3	89	1	40-140	30
Cl6-BZ#162	100	93.4	93	100	93.0	93	0	40-140	30
Cl7-BZ#174	100	90.2	90	100	91.4	91	1	40-140	30
Cl6-BZ#128	100	91.8	92	100	92.6	92	0	40-140	30
Cl8-BZ#202	100	91.3	91	100	91.6	92	1	40-140	30
Cl6-BZ#167	100	89.6	90	100	90.9	91	1	40-140	30
Cl7-BZ#181	100	92.8	93	100	92.9	93	0	40-140	30
Cl7-BZ#177	100	91.0	91	100	91.1	91	0	40-140	30
Cl8-BZ#204/#200-CAL	200	181.	91	200	181.	90	1	40-140	30
Cl7-BZ#171	100	90.2	90	100	91.9	92	2	40-140	30
Cl7-BZ#173	100	89.0	89	100	89.8	90	1	40-140	30
Cl8-BZ#197	100	90.5	90	100	90.4	90	0	40-140	30
Cl7-BZ#172	100	88.9	89	100	90.4	90	1	40-140	30
Cl7-BZ#192	100	90.0	90	100	91.7	92	2	40-140	30
Cl6-BZ#156	100	89.9	90	100	92.3	92	2	40-140	30
Cl6-BZ#157	100	88.5	88	100	91.0	91	3	40-140	30
Cl7-BZ#180	100	89.5	90	100	91.0	91	1	40-140	30

Laboratory Control Sample
Form 3

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Matrix	: SOIL		
LCS Sample ID	: WG1094741-2 **Analysis Date** : 03/07/18 15:13	**File ID**	: F203071805
LCSD Sample ID	: WG1094741-3 **Analysis Date** : 03/07/18 16:27	**File ID**	: F203071806

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ng/l)	Found (ng/l)	%R	True (ng/l)	Found (ng/l)	%R	RPD	Recovery Limits	RPD Limit
CI7-BZ#193	100	87.4	87	100	88.2	88	1	40-140	30
CI8-BZ#199	100	87.6	88	100	87.7	88	0	40-140	30
CI7-BZ#191	100	88.9	89	100	90.4	90	1	40-140	30
CI8-BZ#198	100	85.9	86	100	88.0	88	2	40-140	30
CI8-BZ#201	100	89.2	89	100	89.6	90	1	40-140	30
CI7-BZ#170	100	87.4	87	100	89.6	90	3	40-140	30
CI7-BZ#190	100	89.7	90	100	92.4	92	2	40-140	30
CI8-BZ#196	100	97.5	98	100	100.	100	2	40-140	30
CI8-BZ#203	100	81.8	82	100	81.7	82	0	40-140	30
CI6-BZ#169	100	86.9	87	100	91.9	92	6	40-140	30
CI9-BZ#208	100	83.3	83	100	85.1	85	2	40-140	30
CI9-BZ#207	100	86.9	87	100	88.1	88	1	40-140	30
CI7-BZ#189	100	87.5	88	100	92.5	92	4	40-140	30
CI8-BZ#195	100	85.8	86	100	88.3	88	2	40-140	30
CI8-BZ#194	100	84.0	84	100	87.0	87	4	40-140	30
CI8-BZ#205	100	83.7	84	100	86.5	86	2	40-140	30
CI9-BZ#206	100	82.8	83	100	85.6	86	4	40-140	30
CI10-BZ#209	100	81.6	82	100	84.7	85	4	40-140	30

Method Blank Summary
Form 4

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Lab Sample ID	: WG1094741-1	**Lab File ID**	: F203071803
Instrument ID	: BNA2	**Extraction Date**	: 03/06/18
Matrix	: SOIL	**Analysis Date**	: 03/07/18 12:31
Level	: HIGH		

Client Sample No.	Lab Sample ID	Analysis Date
WG1094741-2LCS	WG1094741-2	03/07/18 15:13
WG1094741-3LCSD	WG1094741-3	03/07/18 16:27
SDT-DS-BFT-PC03	L1806872-01	03/07/18 22:38
SDT-DS-BFT-PC06	L1806872-02	03/07/18 23:52
SDT-DS-BFT-PC08	L1806872-03	03/08/18 03:24
SDT-DS-BFT-CC03	L1806872-04	03/08/18 04:39
SDT-DS-BFT-CC06	L1806872-05	03/08/18 05:53
SDT-DS-BFT-CC08	L1806872-06	03/08/18 07:07
SDT-DS-GVT-PC02	L1806872-07	03/08/18 08:21
SDT-DS-GVT-PC04	L1806872-08	03/08/18 09:35
SDT-DS-GVT-PC05	L1806872-09	03/08/18 10:49
SDT-DS-GVT-CC02	L1806872-10	03/08/18 12:03
SDT-DS-GVT-CC04	L1806872-11	03/08/18 13:18
SDT-DS-GVT-CC05	L1806872-12	03/08/18 14:32

Instrument Performance Check
Decafluorotriphenylphosphine (DFTPP)
Form 5

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: BNA2	**Analysis Date**	: 02/24/18 09:10
Tune Standard	: R1050668-1	**Tune File ID**	: F202241801_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	N/A	30.3
68	N/A	0 (0)1
69		34.6
70	N/A	0.2 (.6)1
127	30-80% of mass 198	46.6
197	Less than 3.0% of mass 198	0
198	Greater than 40% of mass 442	42.2
199	5.0 - 15.0% of mass 198	6.6
275	15.0 - 50.0% of mass 198	32.7
365	Greater than 3.0% of mass 198	4.3
441	Present, but less than mass 443	76.7
442	Base Peak, 100% relative abundance	100
443	18.0 - 30.0% of mass 442	44.8 (18.9)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
0.5 ug/l	R1050668-2	F202241802	02/24/18 10:14
1.0 ug/l	R1050668-4	F202241803	02/24/18 11:28
10 ug/l	R1050668-5	F202241804	02/24/18 12:42
20 ug/l	R1050668-6	F202241805	02/24/18 13:56
50 ug/l	R1050668-3	F202241806	02/24/18 15:10
200 ug/l	R1050668-7	F202241807	02/24/18 16:25
500 ug/l	R1050668-8	F202241808	02/24/18 17:39
ICV Quant Report	R1050668-9	F202241809	02/24/18 18:53

Instrument Performance Check
Decafluorotriphenylphosphine (DFTPP)
Form 5

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: BNA2	**Analysis Date**	: 03/07/18 10:13
Tune Standard	: WG1095518-1	**Tune File ID**	: F203071801_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	N/A	33.8
68	N/A	0 (0)1
69		37.4
70	N/A	0.2 (.6)1
127	30-80% of mass 198	46.9
197	Less than 3.0% of mass 198	0
198	Greater than 40% of mass 442	44.9
199	5.0 - 15.0% of mass 198	6.7
275	15.0 - 50.0% of mass 198	32.2
365	Greater than 3.0% of mass 198	4.2
441	Present, but less than mass 443	74.6
442	Base Peak, 100% relative abundance	100
443	18.0 - 30.0% of mass 442	43.4 (19.5)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1095518-2CCAL	WG1095518-2	F203071802	03/07/18 11:17
WG1094741-1BLANK	WG1094741-1	F203071803	03/07/18 12:31
WG1094741-2LCS	WG1094741-2	F203071805	03/07/18 15:13
WG1094741-3LCSD	WG1094741-3	F203071806	03/07/18 16:27
SDT-DS-BFT-PC03	L1806872-01	F203071811	03/07/18 22:38
SDT-DS-BFT-PC06	L1806872-02	F203071812	03/07/18 23:52

Instrument Performance Check
Decafluorotriphenylphosphine (DFTPP)
Form 5

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: BNA2	**Analysis Date**	: 03/08/18 01:06
Tune Standard	: WG1095518-3	**Tune File ID**	: F203071813_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	N/A	34.9
68	N/A	0 (0)1
69		38.1
70	N/A	0.2 (.6)1
127	30-80% of mass 198	47.5
197	Less than 3.0% of mass 198	0
198	Greater than 40% of mass 442	43
199	5.0 - 15.0% of mass 198	6.7
275	15.0 - 50.0% of mass 198	32.5
365	Greater than 3.0% of mass 198	4.3
441	Present, but less than mass 443	78.3
442	Base Peak, 100% relative abundance	100
443	18.0 - 30.0% of mass 442	43.7 (18.8)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1095518-4CCAL	WG1095518-4	F203071814	03/08/18 02:10
SDT-DS-BFT-PC08	L1806872-03	F203071815	03/08/18 03:24
SDT-DS-BFT-CC03	L1806872-04	F203071816	03/08/18 04:39
SDT-DS-BFT-CC06	L1806872-05	F203071817	03/08/18 05:53
SDT-DS-BFT-CC08	L1806872-06	F203071818	03/08/18 07:07
SDT-DS-GVT-PC02	L1806872-07	F203071819	03/08/18 08:21
SDT-DS-GVT-PC04	L1806872-08	F203071820	03/08/18 09:35
SDT-DS-GVT-PC05	L1806872-09	F203071821	03/08/18 10:49
SDT-DS-GVT-CC02	L1806872-10	F203071822	03/08/18 12:03
SDT-DS-GVT-CC04	L1806872-11	F203071823	03/08/18 13:18
SDT-DS-GVT-CC05	L1806872-12	F203071824	03/08/18 14:32
WG1095518-6CCAL	WG1095518-6	F203071826	03/08/18 16:50

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
1)	i	Cl2-BZ#15-C13	----------ISTD----------								
2)	s	Cl3-BZ#19-C13 (surr)	0.366	0.347	0.335	0.344	0.351	0.354	0.366	0.352	3.17
3)	A1	Cl1-BZ#1-Cal/RTW	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
4)	A2	Monochlorobiphenyls	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
5)	A2	Cl1- conf Ion	0.951	0.910	0.892	0.916	0.918	0.922	0.942	0.922	2.16
6)	T	Cl1-BZ#2	1.014	0.947	0.922	0.952	0.967	0.979	1.008	0.970	3.42
7)	T	Cl1-BZ#3-RTW	0.956	0.923	0.914	0.942	0.956	0.973	1.001	0.952	3.09
8)	T	Cl2-BZ#4/#10-RTW	0.552	0.547	0.532	0.558	0.560	0.568	0.581	0.557	2.81
9)	T	Cl2-BZ#9	0.709	0.687	0.681	0.711	0.719	0.739	0.767	0.716	4.15
10)	T	Cl2-BZ#7	0.676	0.668	0.670	0.699	0.710	0.723	0.738	0.698	3.93
11)	T	Cl2-BZ#6	0.793	0.734	0.728	0.755	0.771	0.785	0.812	0.768	4.03
12)	T	Cl2-BZ#5	0.732	0.682	0.657	0.679	0.694	0.706	0.734	0.698	4.07
13)	A1	Cl2-BZ#8	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
14)	A2	Dichlorobiphenyls	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
15)	A2	Cl2-Conf Ion	0.780	0.783	0.748	0.785	0.798	0.820	0.842	0.794	3.82
16)	T	Cl3-BZ#19-RTW	0.411	0.387	0.369	0.384	0.389	0.397	0.407	0.392	3.67
17)	T	Cl2-BZ#14	0.754	0.737	0.723	0.752	0.774	0.797	0.825	0.766	4.63
18)	T	Cl3-BZ#30	0.611	0.612	0.594	0.621	0.630	0.647	0.666	0.626	3.88
19)	T	Cl3-BZ#18	0.465	0.436	0.406	0.424	0.429	0.437	0.452	0.436	4.37
20)	T	Cl2-BZ#11	0.805	0.777	0.772	0.815	0.841	0.867	0.877	0.822	5.05
21)	T	Cl3-BZ#17	0.434	0.386	0.375	0.397	0.407	0.414	0.425	0.406	5.16
22)	T	Cl2-BZ#12	0.712	0.676	0.692	0.719	0.739	0.762	0.791	0.727	5.50
23)	T	Cl3-BZ#27	0.550	0.544	0.530	0.559	0.571	0.583	0.595	0.562	4.05
24)	T	Cl2-BZ#13	0.800	0.836	0.786	0.819	0.848	0.874	0.903	0.838	4.89
25)	T	Cl3-BZ#24	0.568	0.566	0.544	0.571	0.585	0.596	0.612	0.577	3.88
26)	T	Cl3-BZ#16	0.369	0.350	0.333	0.349	0.352	0.359	0.369	0.354	3.61
27)	T	Cl3-BZ#32	0.652	0.607	0.579	0.605	0.617	0.631	0.649	0.620	4.18
28)	T	Cl2-BZ#15-RTW	0.873	0.873	0.818	0.845	0.845	0.837	0.852	0.849	2.33
29)	T	Cl3-BZ#34	0.573	0.554	0.552	0.577	0.585	0.598	0.617	0.579	3.99
30)	T	Cl3-BZ#23	0.569	0.521	0.535	0.567	0.580	0.596	0.612	0.569	5.62
31)	T	Cl4-BZ#54-RTW	0.526	0.510	0.505	0.532	0.538	0.544	0.556	0.530	3.39
32)	A1	Cl3-BZ#29-Cal	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
33)	A2	Trichlorobiphenyls	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
34)	A2	Cl3- Conf Ion	0.553	0.566	0.537	0.570	0.579	0.597	0.617	0.574	4.67
35)	A1	Cl4-BZ#50-Cal	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
36)	A2	Tetrachlorobiphenyls	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
37)	A2	Cl4-Conf Ion	0.458	0.417	0.417	0.436	0.446	0.455	0.470	0.443	4.57
38)	T	Cl3-BZ#26	0.675	0.609	0.601	0.630	0.645	0.665	0.682	0.644	4.94

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

	Compound	.5	1	10	20	50	200	500	Avg	%RSD
39) T	Cl3-BZ#25	0.603	0.628	0.588	0.616	0.630	0.650	0.674	0.627	4.62
40) T	Cl4-BZ#53	0.499	0.468	0.467	0.486	0.487	0.499	0.513	0.489	3.51
41) T	Cl3-BZ#-31	0.858	0.901	0.803	0.845	0.864	0.885	0.904	0.866	4.09
42) T	Cl3-BZ#28	0.869	0.828	0.784	0.830	0.858	0.877	0.924	0.853	5.21
43) T	Cl3-BZ#33	0.542	0.555	0.557	0.619	0.644	0.646	0.693	0.608	9.48
44) T	Cl3-BZ#21/#20	0.708	0.749	0.746	0.770	0.795	0.812	0.808	0.770	4.95
45) T	Cl4-BZ#51	0.538	0.484	0.515	0.543	0.561	0.564	0.570	0.539	5.70
46) T	Cl4-BZ#45	0.419	0.400	0.400	0.417	0.429	0.436	0.447	0.421	4.18
47) T	Cl3-BZ#22	0.714	0.703	0.711	0.751	0.770	0.783	0.818	0.750	5.74
48) T	Cl4-BZ#73/#46	0.514	0.549	0.535	0.563	0.586	0.589	0.604	0.563	5.75
49) T	Cl4-BZ#69	0.631	0.648	0.632	0.667	0.687	0.703	0.740	0.673	5.97
50) T	Cl4-BZ#43	0.449	0.433	0.423	0.441	0.447	0.460	0.457	0.444	2.97
51) T	Cl3-BZ#36	0.747	0.757	0.794	0.847	0.867	0.904	0.925	0.835	8.43
52) T	Cl4-BZ#52	0.601	0.527	0.504	0.535	0.546	0.552	0.562	0.547	5.57
53) T	Cl4-BZ#48	0.461	0.457	0.459	0.489	0.501	0.508	0.525	0.486	5.59
54) T	Cl4-BZ#49	0.553	0.514	0.479	0.511	0.526	0.533	0.544	0.523	4.67
55) T	Cl5-BZ#104-RTW	0.512	0.534	0.523	0.539	0.548	0.556	0.566	0.540	3.46
56) T	Cl4-BZ#47	0.635	0.602	0.600	0.497	0.525	0.529	0.558	0.564	8.87
57) T	Cl4-BZ#65/#75/#62	0.608	0.598	0.601	0.682	0.703	0.716	0.729	0.662	8.76
58) T	Cl3-BZ#39	0.720	0.733	0.726	0.764	0.781	0.811	0.848	0.769	6.22
59) T	Cl3-BZ#38	0.651	0.679	0.705	0.757	0.776	0.801	0.822	0.742	8.68
60) T	Cl4-BZ#44	0.417	0.470	0.429	0.454	0.458	0.469	0.488	0.455	5.39
61) T	Cl4-BZ#59	0.653	0.685	0.651	0.644	0.660	0.672	0.706	0.667	3.28
62) T	Cl4-BZ#42	0.436	0.387	0.378	0.440	0.453	0.463	0.470	0.432	8.36
63) T	Cl4-BZ#71	0.699	0.677	0.663	0.693	0.706	0.724	0.744	0.701	3.92
64) T	Cl3-BZ#35	0.712	0.736	0.731	0.770	0.797	0.827	0.857	0.776	6.92
65) T	Cl4-BZ#41	0.416	0.378	0.407	0.430	0.435	0.449	0.464	0.426	6.64
66) T	Cl4-BZ#72	0.657	0.704	0.679	0.737	0.772	0.792	0.794	0.733	7.52
67) T	Cl5-BZ#96	0.524	0.573	0.561	0.594	0.604	0.613	0.616	0.584	5.67
68) T	Cl5-BZ#103	0.425	0.419	0.423	0.455	0.465	0.474	0.497	0.451	6.64
69) T	Cl4-BZ#68/#64	0.628	0.617	0.642	0.685	0.713	0.722	0.747	0.679	7.49
70) T	Cl4-BZ#40	0.331	0.308	0.313	0.329	0.339	0.346	0.350	0.331	4.83
71) T	Cl3-BZ#37-RTW	0.924	0.996	0.970	1.027	1.063	1.093	1.146	1.031	7.34
72) T	Cl5-BZ#100	0.481	0.447	0.457	0.486	0.501	0.505	0.527	0.486	5.71
73) T	Cl5-BZ#94	0.302	0.318	0.361	0.367	0.377	0.388	0.400	0.359	10.10
74) T	Cl4-BZ#57	0.660	0.651	0.697	0.740	0.772	0.792	0.796	0.730	8.35
75) T	Cl4-BZ#67/#58	0.658	0.668	0.699	0.740	0.766	0.793	0.818	0.735	8.41
76) T	Cl5-BZ#102	0.480	0.487	0.500	0.518	0.534	0.544	0.554	0.517	5.58

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
77)	T	Cl4-BZ#61	0.693	0.667	0.688	0.714	0.742	0.761	0.798	0.723	6.35
78)	T	Cl5-BZ#98	0.436	0.446	0.458	0.471	0.490	0.500	0.512	0.473	6.08
79)	T	Cl4-BZ#76	0.691	0.698	0.723	0.772	0.797	0.819	0.851	0.764	8.12
80)	T	Cl5-BZ#93	0.365	0.333	0.368	0.390	0.395	0.407	0.416	0.382	7.45
81)	T	Cl4-BZ#63	0.637	0.657	0.647	0.685	0.709	0.717	0.749	0.686	6.03
82)	T	Cl5-BZ#121/#95/#88	0.459	0.470	0.487	0.511	0.530	0.539	0.552	0.507	7.07
83)	T	Cl4-BZ#74	0.711	0.707	0.716	0.749	0.781	0.806	0.840	0.759	6.86
84)	T	Cl6-BZ#155-RTW	0.551	0.530	0.536	0.565	0.575	0.582	0.595	0.562	4.27
85)	T	Cl4-BZ#70	0.761	0.721	0.744	0.770	0.806	0.824	0.844	0.781	5.73
86)	T	Cl4-BZ#66	0.650	0.659	0.662	0.709	0.736	0.751	0.785	0.707	7.41
87)	T	Cl5-BZ#91	0.446	0.439	0.425	0.437	0.449	0.457	0.474	0.447	3.49
88)	T	Cl4-BZ#80	0.684	0.710	0.692	0.733	0.761	0.783	0.821	0.741	6.80
89)	T	Cl4-BZ#55	0.700	0.717	0.712	0.745	0.780	0.799	0.841	0.756	6.89
90)	T	Cl5-BZ#92	0.416	0.409	0.415	0.435	0.449	0.456	0.472	0.436	5.47
91)	T	Cl5-BZ#89/#84	0.400	0.406	0.393	0.415	0.429	0.434	0.446	0.418	4.69
92)	T	Cl5-BZ#101/#90	0.462	0.435	0.458	0.483	0.501	0.510	0.519	0.481	6.43
93)	s	Cl5-BZ#101-C13 (surr)	0.477	0.483	0.481	0.512	0.535	0.547	0.563	0.514	6.77
94)	T	Cl4-BZ#56	0.696	0.704	0.700	0.738	0.778	0.794	0.826	0.748	6.92
95)	T	Cl5-BZ#113	0.520	0.523	0.553	0.562	0.579	0.595	0.627	0.566	6.83
96)	T	Cl5-BZ#99	0.540	0.511	0.516	0.535	0.550	0.564	0.587	0.543	4.91
97)	T	Cl6-BZ#150	0.589	0.573	0.573	0.599	0.619	0.621	0.644	0.602	4.46
98)	T	Cl4-BZ#60	0.777	0.733	0.745	0.791	0.827	0.842	0.881	0.800	6.71
99)	T	Cl6-BZ#152	0.599	0.614	0.618	0.656	0.667	0.671	0.696	0.646	5.57
100)	T	Cl5-BZ#119	0.634	0.567	0.626	0.668	0.685	0.704	0.722	0.658	8.09
101)	T	Cl5-BZ#83/#125/#112	0.523	0.504	0.520	0.546	0.566	0.579	0.596	0.548	6.22
102)	T	Cl5-BZ#86/#109	0.519	0.498	0.524	0.531	0.553	0.581	0.606	0.545	6.94
103)	T	Cl5-BZ#97	0.363	0.376	0.391	0.416	0.432	0.423	0.440	0.406	7.24
104)	T	Cl5-BZ#116	0.530	0.524	0.527	0.562	0.576	0.590	0.613	0.560	6.21
105)	A1	Cl5-BZ#87/#111	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
106)	A2	Pentachlorobiphenyls	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
107)	A2	Cl5-Conf Ion	0.503	0.505	0.515	0.551	0.570	0.584	0.605	0.548	7.45
108)	T	Cl6-BZ#145	0.672	0.621	0.631	0.666	0.685	0.685	0.708	0.667	4.63
109)	T	Cl6-BZ#148	0.451	0.430	0.427	0.453	0.467	0.471	0.490	0.456	4.96
110)	T	Cl4-BZ#79	0.703	0.687	0.676	0.736	0.757	0.784	0.811	0.736	6.91
111)	A1	Cl6-BZ#154-Cal	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
112)	A2	Hexachlorobiphenyls	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
113)	A2	Cl6-Conf Ion	0.499	0.513	0.492	0.519	0.540	0.549	0.573	0.527	5.49
114)	T	Cl4-BZ#78	0.800	0.831	0.854	0.919	0.956	0.982	1.039	0.912	9.54

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
115)	T	Cl6-BZ#136	0.564	0.542	0.551	0.589	0.603	0.606	0.631	0.584	5.59
116)	T	Cl5-BZ#117	0.647	0.646	0.663	0.699	0.722	0.729	0.746	0.693	5.97
117)	T	Cl5-BZ#115	0.647	0.638	0.654	0.684	0.703	0.724	0.759	0.687	6.46
118)	T	Cl5-BZ#85	0.426	0.433	0.402	0.410	0.423	0.442	0.467	0.429	4.99
119)	T	Cl5-BZ#120	0.620	0.624	0.637	0.674	0.688	0.708	0.750	0.671	7.16
120)	T	Cl5-BZ#110	0.689	0.619	0.604	0.631	0.654	0.668	0.672	0.648	4.78
121)	T	Cl4-BZ#81	0.689	0.715	0.695	0.724	0.754	0.775	0.824	0.739	6.51
122)	i	Cl7-BZ#180-C13	----------ISTD----------								
123)	T	Cl6-BZ#151	0.842	0.884	0.803	0.838	0.857	0.874	0.887	0.855	3.50
124)	T	Cl6-BZ#135	0.881	0.825	0.868	0.899	0.936	0.944	0.959	0.902	5.30
125)	T	Cl5-BZ#82	0.710	0.722	0.746	0.774	0.797	0.818	0.833	0.771	6.15
126)	T	Cl6-BZ#144	0.889	0.795	0.834	0.876	0.902	0.922	0.937	0.879	5.65
127)	T	Cl6-BZ#147/#149	0.989	0.872	0.880	0.927	0.951	0.967	0.985	0.939	5.10
128)	T	Cl4-BZ#77-RTW	1.242	1.198	1.185	1.256	1.315	1.367	1.417	1.283	6.77
129)	T	Cl6-BZ#143/#139	0.872	0.822	0.854	0.905	0.938	0.956	0.968	0.902	6.09
130)	T	Cl5-BZ#124	1.124	1.145	1.159	1.205	1.255	1.282	1.321	1.213	6.16
131)	T	Cl5-BZ#108	1.139	1.179	1.173	1.229	1.309	1.307	1.288	1.232	5.69
132)	T	Cl5-BZ#107/#123	1.279	1.199	1.248	1.297	1.334	1.401	1.437	1.314	6.37
133)	T	Cl6-BZ#140	0.866	0.864	0.818	0.847	0.889	0.905	0.914	0.872	3.86
134)	A1	Cl7-BZ#188-Cal/RTW	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
135)	A2	Heptachlorobiphenyls	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
136)	A2	Cl7-Conf Ion	0.975	0.961	0.981	1.029	1.067	1.077	1.086	1.025	5.14
137)	T	Cl6-BZ#134	0.695	0.658	0.707	0.756	0.780	0.799	0.807	0.743	7.69
138)	T	Cl5-BZ#106	1.068	1.039	1.064	1.255	1.333	1.197	1.405	1.194	12.05
139)	T	Cl6-BZ#133	1.065	0.897	0.947	1.015	1.080	1.052	1.024	1.011	6.58
140)	T	Cl6-BZ#142	0.706	0.637	0.646	0.660	0.642	0.712	0.755	0.680	6.65
141)	T	Cl5-BZ#118	1.142	1.086	1.085	1.147	1.188	1.217	1.249	1.159	5.41
142)	T	Cl6-BZ#131	0.798	0.730	0.729	0.782	0.794	0.817	0.832	0.783	5.12
143)	T	Cl7-BZ#184	1.020	0.986	0.944	1.008	1.030	1.044	1.061	1.013	3.82
144)	T	Cl6-BZ#165	1.079	1.037	1.032	1.100	1.133	1.161	1.170	1.102	5.08
145)	T	Cl6-BZ#146	0.972	0.912	0.918	0.949	0.976	1.000	1.024	0.964	4.28
146)	T	Cl6-BZ#161	1.204	1.145	1.143	1.211	1.262	1.304	1.320	1.227	5.80
147)	T	Cl5-BZ#122	1.034	1.006	1.001	1.052	1.094	1.134	1.156	1.068	5.74
148)	T	Cl6-BZ#168	1.209	1.095	1.091	1.170	1.240	1.233	1.215	1.179	5.34
149)	T	Cl5-BZ#114	1.133	1.064	1.112	1.161	1.213	1.248	1.282	1.173	6.65
150)	T	Cl6-BZ#153	1.085	1.012	0.996	1.010	1.024	1.080	1.141	1.050	5.09
151)	s	Cl6-BZ#153-C13 (surr)	0.962	0.816	0.856	0.911	0.945	0.963	0.982	0.919	6.73
152)	T	Cl6-BZ#132	0.857	0.850	0.797	0.822	0.847	0.855	0.870	0.842	2.97

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
153)	T	Cl7-BZ#179	1.064	1.039	1.004	1.029	1.052	1.058	1.078	1.046	2.35
154)	T	Cl6-BZ#141	0.868	0.810	0.792	0.828	0.852	0.864	0.886	0.843	4.01
155)	T	Cl7-BZ#176	1.032	0.985	0.940	0.968	0.993	1.007	1.030	0.994	3.33
156)	T	Cl5-BZ#105	1.428	1.491	1.334	1.391	1.420	1.475	1.508	1.435	4.26
157)	T	Cl6-BZ#137	0.799	0.823	0.833	0.861	0.890	0.912	0.929	0.864	5.62
158)	T	Cl5-BZ#127	1.541	1.587	1.488	1.518	1.578	1.633	1.674	1.574	4.12
159)	T	Cl7-BZ#186	1.091	1.023	1.075	1.102	1.137	1.145	1.167	1.106	4.42
160)	T	Cl6-BZ#130/#164	0.999	0.954	0.954	0.989	1.030	1.051	1.077	1.008	4.68
161)	T	Cl7-BZ#178	0.777	0.735	0.711	0.740	0.768	0.779	0.793	0.758	3.88
162)	T	Cl6-BZ#138	1.059	0.997	0.971	0.982	1.031	1.045	1.086	1.024	4.15
163)	T	Cl6-BZ#163/#160	1.070	1.103	1.105	1.165	1.203	1.224	1.239	1.158	5.73
164)	T	Cl6-BZ#129/#158	0.936	0.942	0.910	0.950	0.969	1.003	1.050	0.966	4.90
165)	T	Cl7-BZ#182/#175	0.805	0.808	0.837	0.872	0.905	0.919	0.926	0.867	5.93
166)	T	Cl7-BZ#187	0.881	0.907	0.851	0.870	0.896	0.894	0.919	0.888	2.61
167)	T	Cl7-BZ#183	0.853	0.823	0.814	0.851	0.867	0.873	0.895	0.854	3.29
168)	T	Cl6-BZ#166	1.294	1.194	1.190	1.237	1.274	1.289	1.331	1.258	4.24
169)	T	Cl6-BZ#159	1.208	1.248	1.189	1.233	1.277	1.304	1.351	1.258	4.47
170)	T	Cl5-BZ#126-RTW	1.402	1.520	1.455	1.516	1.576	1.623	1.681	1.539	6.24
171)	T	Cl7-BZ#185	0.886	0.718	0.735	0.775	0.796	0.814	0.835	0.794	7.33
172)	T	Cl6-BZ#162	1.138	1.023	1.113	1.213	1.188	1.221	1.267	1.166	7.01
173)	T	Cl7-BZ#174	0.787	0.753	0.758	0.779	0.801	0.813	0.828	0.788	3.51
174)	T	Cl6-BZ#128	0.889	0.772	0.821	0.849	0.878	0.902	0.926	0.862	6.11
175)	T	Cl6-BZ#167	1.488	1.492	1.480	1.521	1.572	1.609	1.670	1.547	4.66
176)	T	Cl8-BZ#202-RTW	0.923	0.807	0.854	0.883	0.912	0.924	0.942	0.892	5.32
177)	s	Cl8-BZ#202-C13 (surr)	1.071	0.901	0.873	0.905	0.941	0.939	0.964	0.942	6.83
178)	T	Cl7-BZ#181	0.842	0.809	0.846	0.895	0.920	0.934	0.959	0.886	6.25
179)	T	Cl7-BZ#177	0.768	0.720	0.763	0.757	0.779	0.789	0.805	0.769	3.51
180)	A1	Cl8-BZ#204/#200-Cal	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
181)	A2	Octachlorobiphenyls	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
182)	A2	Cl8-Conf Ion	0.891	0.829	0.833	0.865	0.892	0.903	0.921	0.876	4.03
183)	T	Cl7-BZ#171	0.725	0.742	0.730	0.745	0.763	0.771	0.794	0.753	3.23
184)	T	Cl7-BZ#173	0.720	0.777	0.707	0.723	0.745	0.749	0.771	0.742	3.54
185)	T	Cl7-BZ#172	0.826	0.782	0.769	0.780	0.790	0.805	0.829	0.797	2.93
186)	T	Cl7-BZ#192	1.036	1.056	1.061	1.075	1.112	1.137	1.168	1.092	4.39
187)	T	Cl6-BZ#156	1.290	1.099	1.139	1.178	1.212	1.239	1.285	1.206	5.99
188)	T	Cl6-BZ#157	1.336	1.206	1.178	1.225	1.247	1.249	1.279	1.246	4.12
189)	T	Cl7-BZ#180	0.970	0.959	0.986	0.945	0.961	0.946	1.024	0.970	2.86
190)	T	Cl7-BZ#193	1.024	1.025	0.910	1.005	1.020	1.022	0.983	0.998	4.19

Initial Calibration Summary
Form 6

Client	**: AMEC Foster Wheeler E & I, Inc.**	**Lab Number**	**: L1806872**
Project Name	**: STRATFORD ARMY ENGINE PLANT**	**Project Number**	**: 3616176064.08.01**
Instrument ID	**: BNA2**	**Ical Ref**	**: ICAL14481**
Calibration dates	**: 02/24/18 10:14 02/24/18 17:39**		

Calibration Files
.5 =F202241802.D 1 =F202241803.D 10 =F202241804.D 20 =F202241805.D 50 =F202241806.D
200 =F202241807.D 500 =F202241808.D

		Compound	.5	1	10	20	50	200	500	Avg	%RSD
191)	T	Cl8-BZ#197	0.917	0.851	0.859	0.887	0.905	0.908	0.934	0.894	3.44
192)	T	Cl7-BZ#191	1.071	0.997	0.985	1.019	1.041	1.057	1.086	1.037	3.64
193)	T	Cl8-BZ#199	0.915	0.904	0.848	0.868	0.887	0.891	0.908	0.889	2.66
194)	T	Cl8-BZ#198	0.810	0.689	0.737	0.770	0.703	0.782	0.789	0.754	6.04
195)	T	Cl8-BZ#201	0.710	0.612	0.619	0.618	0.701	0.634	0.662	0.651	6.29
196)	T	Cl7-BZ#170	0.771	0.786	0.699	0.726	0.746	0.752	0.778	0.751	4.09
197)	T	Cl7-BZ#190	1.037	1.068	1.067	1.086	1.106	1.128	1.161	1.093	3.82
198)	T	Cl8-BZ#196	0.757	0.686	0.641	0.685	0.721	0.720	0.730	0.706	5.37
199)	T	Cl8-BZ#203	0.728	0.738	0.749	0.767	0.770	0.778	0.809	0.763	3.59
200)	T	Cl6-BZ#169-RTW	1.317	1.356	1.239	1.294	1.330	1.361	1.426	1.332	4.41
201)	T	Cl9-BZ#208-RTW	1.142	0.924	0.878	0.903	0.910	0.908	0.936	0.943	9.49
202)	T	Cl9-BZ#207	0.948	0.891	0.891	0.910	0.928	0.925	0.950	0.921	2.64
203)	T	Cl7-BZ#189-RTW	0.998	1.027	0.936	0.968	0.987	1.003	1.048	0.995	3.71
204)	T	Cl8-BZ#195	0.682	0.762	0.656	0.674	0.680	0.692	0.710	0.694	4.97
205)	T	Cl8-BZ#194	0.808	0.758	0.705	0.714	0.729	0.730	0.754	0.743	4.69
206)	T	Cl8-BZ#205-RTW	1.051	0.897	0.853	0.878	0.886	0.888	0.919	0.910	7.15
207)	A1	Cl9-BZ#206-Cal/RTW	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
208)	A2	Nonachlorobiphenyls	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
209)	A2	Cl9-Conf Ion	0.823	0.747	0.727	0.737	0.749	0.751	0.778	0.759	4.26
210)	A1	Cl10-BZ#209-Cal/RTW	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29
211)	A2	Decachlorobiphenyl	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29
212)	A2	Cl10-Conf Ion	0.773	0.739	0.734	0.747	0.746	0.751	0.779	0.753	2.29

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/07/18 11:17		
Lab File ID	: F203071802	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-2	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl2-BZ#15-C13	1	1	.01	0	20	67	0
Cl3-BZ#19-C13 (surr)	0.352	0.369	.01	-4.8	20	71	0
Cl1-BZ#1-Cal/RTW	0.922	1.008	.01	-9.3	20	74	0
Cl1-BZ#2	0.97	1.034	.01	-6.6	20	72	0
Cl1-BZ#3-RTW	0.952	1.02	.01	-7.1	20	72	0
Cl2-BZ#4/#10-RTW	0.557	0.599	.01	-7.5	20	72	0
Cl2-BZ#9	0.716	0.752	.01	-5	20	70	0
Cl2-BZ#7	0.698	0.75	.01	-7.4	20	71	0
Cl2-BZ#6	0.768	0.807	.01	-5.1	20	71	0
Cl2-BZ#5	0.698	0.725	.01	-3.9	20	70	0
Cl2-BZ#8	0.794	0.838	.01	-5.5	20	71	0
Cl3-BZ#19-RTW	0.392	0.408	.01	-4.1	20	71	0
Cl2-BZ#14	0.766	0.803	.01	-4.8	20	70	0
Cl3-BZ#30	0.626	0.65	.01	-3.8	20	70	0
Cl3-BZ#18	0.436	0.437	.01	-0.2	20	69	0
Cl2-BZ#11	0.822	0.861	.01	-4.7	20	69	0
Cl3-BZ#17	0.406	0.418	.01	-3	20	69	0
Cl2-BZ#12	0.727	0.754	.01	-3.7	20	69	0
Cl3-BZ#27	0.562	0.586	.01	-4.3	20	69	0
Cl2-BZ#13	0.838	0.874	.01	-4.3	20	69	0
Cl3-BZ#24	0.577	0.602	.01	-4.3	20	69	0
Cl3-BZ#16	0.354	0.36	.01	-1.7	20	69	0
Cl3-BZ#32	0.62	0.637	.01	-2.7	20	70	0
Cl2-BZ#15-RTW	0.849	0.878	.01	-3.4	20	70	0
Cl3-BZ#34	0.579	0.596	.01	-2.9	20	69	0
Cl3-BZ#23	0.569	0.595	.01	-4.6	20	69	0
Cl4-BZ#54-RTW	0.53	0.555	.01	-4.7	20	70	0
Cl3-BZ#29-Cal	0.574	0.584	.01	-1.7	20	68	0
Cl4-BZ#50-Cal	0.443	0.452	.01	-2	20	68	0
Cl3-BZ#26	0.644	0.658	.01	-2.2	20	69	0
Cl3-BZ#25	0.627	0.638	.01	-1.8	20	68	0
Cl4-BZ#53	0.489	0.497	.01	-1.6	20	69	0
Cl3-BZ#-31	0.866	0.857	.01	1	20	67	0
Cl3-BZ#28	0.853	0.817	.01	4.2	20	64	0
Cl3-BZ#33	0.608	0.756	.01	-24.3*	20	79	0
Cl3-BZ#21/#20	0.77	0.77	.01	0	20	65	0
Cl4-BZ#51	0.539	0.566	.01	-5	20	68	0
Cl4-BZ#45	0.421	0.428	.01	-1.7	20	67	0
Cl3-BZ#22	0.75	0.76	.01	-1.3	20	67	0
Cl4-BZ#73/#46	0.563	0.58	.01	-3	20	67	0
Cl4-BZ#69	0.673	0.662	.01	1.6	20	65	0
Cl4-BZ#43	0.444	0.47	.01	-5.9	20	71	0
Cl3-BZ#36	0.835	0.895	.01	-7.2	20	70	0
Cl4-BZ#52	0.547	0.548	.01	-0.2	20	68	0
Cl4-BZ#48	0.486	0.497	.01	-2.3	20	67	0

*** Value outside of QC limits.**

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/07/18 11:17		
Lab File ID	: F203071802	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-2	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl4-BZ#49	0.523	0.518	.01	1	20	66	0
Cl5-BZ#104-RTW	0.54	0.56	.01	-3.7	20	69	0
Cl4-BZ#47	0.564	0.585	.01	-3.7	20	75	0
Cl4-BZ#65/#75/#62	0.662	0.688	.01	-3.9	20	66	0
Cl3-BZ#39	0.769	0.812	.01	-5.6	20	70	0
Cl3-BZ#38	0.742	0.782	.01	-5.4	20	68	0
Cl4-BZ#44	0.455	0.457	.01	-0.4	20	67	0
Cl4-BZ#59	0.667	0.664	.01	0.4	20	68	0
Cl4-BZ#42	0.432	0.441	.01	-2.1	20	66	0
Cl4-BZ#71	0.701	0.709	.01	-1.1	20	68	0
Cl3-BZ#35	0.776	0.792	.01	-2.1	20	67	0
Cl4-BZ#41	0.426	0.434	.01	-1.9	20	67	0
Cl4-BZ#72	0.733	0.766	.01	-4.5	20	67	0
Cl5-BZ#96	0.584	0.629	.01	-7.7	20	70	0
Cl5-BZ#103	0.451	0.474	.01	-5.1	20	69	0
Cl4-BZ#68/#64	0.679	0.713	.01	-5	20	67	0
Cl4-BZ#40	0.331	0.33	.01	0.3	20	66	0
Cl3-BZ#37-RTW	1.031	1.062	.01	-3	20	67	0
Cl5-BZ#100	0.486	0.522	.01	-7.4	20	70	0
Cl5-BZ#94	0.359	0.378	.01	-5.3	20	68	0
Cl4-BZ#57	0.73	0.742	.01	-1.6	20	65	0
Cl4-BZ#67/#58	0.735	0.763	.01	-3.8	20	67	0
Cl5-BZ#102	0.517	0.557	.01	-7.7	20	70	0
Cl4-BZ#61	0.723	0.733	.01	-1.4	20	67	0
Cl5-BZ#98	0.473	0.494	.01	-4.4	20	68	0
Cl4-BZ#76	0.764	0.836	.01	-9.4	20	71	0
Cl5-BZ#93	0.382	0.405	.01	-6	20	69	0
Cl4-BZ#63	0.686	0.659	.01	3.9	20	63	0
Cl5-BZ#121/#95/#88	0.507	0.544	.01	-7.3	20	69	0
Cl4-BZ#74	0.759	0.772	.01	-1.7	20	67	0
Cl6-BZ#155-RTW	0.562	0.57	.01	-1.4	20	67	0
Cl4-BZ#70	0.781	0.779	.01	0.3	20	65	0
Cl4-BZ#66	0.707	0.724	.01	-2.4	20	66	0
Cl5-BZ#91	0.447	0.461	.01	-3.1	20	69	0
Cl4-BZ#80	0.741	0.748	.01	-0.9	20	66	0
Cl4-BZ#55	0.756	0.76	.01	-0.5	20	66	0
Cl5-BZ#92	0.436	0.458	.01	-5	20	69	0
Cl5-BZ#89/#84	0.418	0.43	.01	-2.9	20	67	0
Cl5-BZ#101/#90	0.481	0.504	.01	-4.8	20	68	0
Cl5-BZ#101-C13 (surr)	0.514	0.528	.01	-2.7	20	66	0
Cl4-BZ#56	0.748	0.777	.01	-3.9	20	67	0
Cl5-BZ#113	0.566	0.63	.01	-11.3	20	73	0
Cl5-BZ#99	0.543	0.551	.01	-1.5	20	67	0
Cl6-BZ#150	0.602	0.62	.01	-3	20	68	0
Cl4-BZ#60	0.8	0.82	.01	-2.5	20	67	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/07/18 11:17		
Lab File ID	: F203071802	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-2	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#152	0.646	0.657	.01	-1.7	20	66	0
Cl5-BZ#119	0.658	0.68	.01	-3.3	20	67	0
Cl5-BZ#83/#125/#112	0.548	0.578	.01	-5.5	20	69	0
Cl5-BZ#86/#109	0.545	0.584	.01	-7.2	20	71	0
Cl5-BZ#97	0.406	0.421	.01	-3.7	20	66	0
Cl5-BZ#116	0.56	0.572	.01	-2.1	20	67	0
Cl5-BZ#87/#111	0.548	0.599	.01	-9.3	20	71	0
Cl6-BZ#145	0.667	0.682	.01	-2.2	20	67	0
Cl6-BZ#148	0.456	0.464	.01	-1.8	20	67	0
Cl4-BZ#79	0.736	0.721	.01	2	20	64	0
Cl6-BZ#154-Cal	0.527	0.536	.01	-1.7	20	67	0
Cl4-BZ#78	0.912	0.948	.01	-3.9	20	67	0
Cl6-BZ#136	0.584	0.614	.01	-5.1	20	69	0
Cl5-BZ#117	0.693	0.683	.01	1.4	20	64	0
Cl5-BZ#115	0.687	0.735	.01	-7	20	70	0
Cl5-BZ#85	0.429	0.474	.01	-10.5	20	75	0
Cl5-BZ#120	0.671	0.696	.01	-3.7	20	68	0
Cl5-BZ#110	0.648	0.645	.01	0.5	20	66	0
Cl4-BZ#81	0.739	0.738	.01	0.1	20	66	0
Cl7-BZ#180-C13	1	1	.01	0	20	64	0
Cl6-BZ#151	0.855	0.9	.01	-5.3	20	68	0
Cl6-BZ#135	0.902	0.969	.01	-7.4	20	67	0
Cl5-BZ#82	0.771	0.835	.01	-8.3	20	68	0
Cl6-BZ#144	0.879	0.94	.01	-6.9	20	67	0
Cl6-BZ#147/#149	0.939	0.985	.01	-4.9	20	67	0
Cl4-BZ#77-RTW	1.283	1.33	.01	-3.7	20	65	0
Cl6-BZ#143/#139	0.902	0.972	.01	-7.8	20	67	0
Cl5-BZ#124	1.213	1.321	.01	-8.9	20	68	0
Cl5-BZ#108	1.232	1.258	.01	-2.1	20	62	0
Cl5-BZ#107/#123	1.314	1.469	.01	-11.8	20	71	0
Cl6-BZ#140	0.872	0.94	.01	-7.8	20	68	0
Cl7-BZ#188-Cal/RTW	1.025	1.122	.01	-9.5	20	68	0
Cl6-BZ#134	0.743	0.794	.01	-6.9	20	66	0
Cl5-BZ#106	1.194	1.229	.01	-2.9	20	59	0
Cl6-BZ#133	1.011	1.038	.01	-2.7	20	62	0
Cl6-BZ#142	0.68	0.78	.01	-14.7	20	78	0
Cl5-BZ#118	1.159	1.278	.01	-10.3	20	69	0
Cl6-BZ#131	0.783	0.834	.01	-6.5	20	68	0
Cl7-BZ#184	1.013	1.082	.01	-6.8	20	68	0
Cl6-BZ#165	1.102	1.161	.01	-5.4	20	66	0
Cl6-BZ#146	0.964	1.033	.01	-7.2	20	68	0
Cl6-BZ#161	1.227	1.311	.01	-6.8	20	67	0
Cl5-BZ#122	1.068	1.138	.01	-6.6	20	67	0
Cl6-BZ#168	1.179	1.187	.01	-0.7	20	62	0
Cl5-BZ#114	1.173	1.287	.01	-9.7	20	68	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/07/18 11:17		
Lab File ID	: F203071802	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-2	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#153	1.05	1.186	.01	-13	20	75	0
Cl6-BZ#153-C13 (surr)	0.919	0.973	.01	-5.9	20	66	0
Cl6-BZ#132	0.842	0.868	.01	-3.1	20	66	0
Cl7-BZ#179	1.046	1.087	.01	-3.9	20	67	0
Cl6-BZ#141	0.843	0.858	.01	-1.8	20	65	0
Cl7-BZ#176	0.994	1.016	.01	-2.2	20	66	0
Cl5-BZ#105	1.435	1.486	.01	-3.6	20	67	0
Cl6-BZ#137	0.864	0.909	.01	-5.2	20	66	0
Cl5-BZ#127	1.574	1.638	.01	-4.1	20	67	0
Cl7-BZ#186	1.106	1.165	.01	-5.3	20	66	0
Cl6-BZ#130/#164	1.008	1.061	.01	-5.3	20	66	0
Cl7-BZ#178	0.758	0.774	.01	-2.1	20	65	0
Cl6-BZ#138	1.024	1.055	.01	-3	20	66	0
Cl6-BZ#163/#160	1.158	1.223	.01	-5.6	20	66	0
Cl6-BZ#129/#158	0.966	1.041	.01	-7.8	20	69	0
Cl7-BZ#182/#175	0.867	0.939	.01	-8.3	20	67	0
Cl7-BZ#187	0.888	0.909	.01	-2.4	20	65	0
Cl7-BZ#183	0.854	0.875	.01	-2.5	20	65	0
Cl6-BZ#166	1.258	1.28	.01	-1.7	20	65	0
Cl6-BZ#159	1.258	1.286	.01	-2.2	20	65	0
Cl5-BZ#126-RTW	1.539	1.644	.01	-6.8	20	67	0
Cl7-BZ#185	0.794	0.817	.01	-2.9	20	66	0
Cl6-BZ#162	1.166	1.212	.01	-3.9	20	66	0
Cl7-BZ#174	0.788	0.814	.01	-3.3	20	66	0
Cl6-BZ#128	0.862	0.926	.01	-7.4	20	68	0
Cl6-BZ#167	1.547	1.652	.01	-6.8	20	68	0
Cl8-BZ#202-RTW	0.892	0.931	.01	-4.4	20	66	0
Cl8-BZ#202-C13 (surr)	0.942	0.965	.01	-2.4	20	66	0
Cl7-BZ#181	0.886	0.932	.01	-5.2	20	65	0
Cl7-BZ#177	0.769	0.8	.01	-4	20	66	0
Cl8-BZ#204/#200-Cal	0.876	0.909	.01	-3.8	20	66	0
Cl7-BZ#171	0.753	0.764	.01	-1.5	20	65	0
Cl7-BZ#173	0.742	0.75	.01	-1.1	20	65	0
Cl7-BZ#172	0.797	0.788	.01	1.1	20	64	0
Cl7-BZ#192	1.092	1.116	.01	-2.2	20	65	0
Cl6-BZ#156	1.206	1.237	.01	-2.6	20	66	0
Cl6-BZ#157	1.246	1.276	.01	-2.4	20	66	0
Cl7-BZ#180	0.97	1.024	.01	-5.6	20	69	0
Cl7-BZ#193	0.998	0.976	.01	2.2	20	62	0
Cl8-BZ#197	0.894	0.914	.01	-2.2	20	65	0
Cl7-BZ#191	1.037	1.047	.01	-1	20	65	0
Cl8-BZ#199	0.889	0.895	.01	-0.7	20	65	0
Cl8-BZ#198	0.754	0.763	.01	-1.2	20	70	0
Cl8-BZ#201	0.651	0.659	.01	-1.2	20	61	0
Cl7-BZ#170	0.751	0.769	.01	-2.4	20	66	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872	
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01	
Instrument ID	: BNA2	**Calibration Date**	: 03/07/18 11:17	
Lab File ID	: F203071802	**Init. Calib. Date(s)**	: 02/24/18	02/24/18
Sample No	: WG1095518-2	**Init. Calib. Times**	: 10:14	17:39
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl7-BZ#190	1.093	1.134	.01	-3.8	20	66	0
Cl8-BZ#196	0.706	0.699	.01	1	20	63	0
Cl8-BZ#203	0.763	0.792	.01	-3.8	20	66	0
Cl6-BZ#169-RTW	1.332	1.353	.01	-1.6	20	66	0
Cl9-BZ#208-RTW	0.943	0.904	.01	4.1	20	64	0
Cl9-BZ#207	0.921	0.924	.01	-0.3	20	64	0
Cl7-BZ#189-RTW	0.995	0.999	.01	-0.4	20	65	0
Cl8-BZ#195	0.694	0.683	.01	1.6	20	65	0
Cl8-BZ#194	0.743	0.719	.01	3.2	20	64	0
Cl8-BZ#205-RTW	0.91	0.858	.01	5.7	20	62	0
Cl9-BZ#206-Cal/RTW	0.759	0.721	.01	5	20	62	0
Cl10-BZ#209-Cal/RTW	0.753	0.71	.01	5.7	20	61	0

*** Value outside of QC limits.**

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 02:10		
Lab File ID	: F203071814	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-4	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl2-BZ#15-C13	1	1	.01	0	20	68	0
Cl3-BZ#19-C13 (surr)	0.352	0.372	.01	-5.7	20	72	0
Cl1-BZ#1-Cal/RTW	0.922	0.999	.01	-8.4	20	74	0
Cl1-BZ#2	0.97	1.044	.01	-7.6	20	73	0
Cl1-BZ#3-RTW	0.952	1.031	.01	-8.3	20	73	0
Cl2-BZ#4/#10-RTW	0.557	0.599	.01	-7.5	20	72	0
Cl2-BZ#9	0.716	0.771	.01	-7.7	20	72	0
Cl2-BZ#7	0.698	0.75	.01	-7.4	20	71	0
Cl2-BZ#6	0.768	0.82	.01	-6.8	20	72	0
Cl2-BZ#5	0.698	0.739	.01	-5.9	20	72	0
Cl2-BZ#8	0.794	0.851	.01	-7.2	20	72	0
Cl3-BZ#19-RTW	0.392	0.408	.01	-4.1	20	71	0
Cl2-BZ#14	0.766	0.822	.01	-7.3	20	72	0
Cl3-BZ#30	0.626	0.669	.01	-6.9	20	72	0
Cl3-BZ#18	0.436	0.453	.01	-3.9	20	71	0
Cl2-BZ#11	0.822	0.892	.01	-8.5	20	72	0
Cl3-BZ#17	0.406	0.422	.01	-3.9	20	70	0
Cl2-BZ#12	0.727	0.787	.01	-8.3	20	72	0
Cl3-BZ#27	0.562	0.594	.01	-5.7	20	70	0
Cl2-BZ#13	0.838	0.901	.01	-7.5	20	72	0
Cl3-BZ#24	0.577	0.61	.01	-5.7	20	71	0
Cl3-BZ#16	0.354	0.369	.01	-4.2	20	71	0
Cl3-BZ#32	0.62	0.646	.01	-4.2	20	71	0
Cl2-BZ#15-RTW	0.849	0.88	.01	-3.7	20	70	0
Cl3-BZ#34	0.579	0.615	.01	-6.2	20	71	0
Cl3-BZ#23	0.569	0.607	.01	-6.7	20	71	0
Cl4-BZ#54-RTW	0.53	0.555	.01	-4.7	20	70	0
Cl3-BZ#29-Cal	0.574	0.609	.01	-6.1	20	71	0
Cl4-BZ#50-Cal	0.443	0.469	.01	-5.9	20	71	0
Cl3-BZ#26	0.644	0.675	.01	-4.8	20	71	0
Cl3-BZ#25	0.627	0.666	.01	-6.2	20	71	0
Cl4-BZ#53	0.489	0.514	.01	-5.1	20	71	.02
Cl3-BZ#-31	0.866	0.907	.01	-4.7	20	71	0
Cl3-BZ#28	0.853	0.917	.01	-7.5	20	72	0
Cl3-BZ#33	0.608	0.692	.01	-13.8	20	73	0
Cl3-BZ#21/#20	0.77	0.817	.01	-6.1	20	69	0
Cl4-BZ#51	0.539	0.572	.01	-6.1	20	69	.02
Cl4-BZ#45	0.421	0.452	.01	-7.4	20	71	0
Cl3-BZ#22	0.75	0.818	.01	-9.1	20	72	0
Cl4-BZ#73/#46	0.563	0.6	.01	-6.6	20	69	.02
Cl4-BZ#69	0.673	0.735	.01	-9.2	20	72	.02
Cl4-BZ#43	0.444	0.463	.01	-4.3	20	70	0
Cl3-BZ#36	0.835	0.923	.01	-10.5	20	72	.02
Cl4-BZ#52	0.547	0.565	.01	-3.3	20	70	.02
Cl4-BZ#48	0.486	0.525	.01	-8	20	71	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 02:10		
Lab File ID	: F203071814	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-4	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl4-BZ#49	0.523	0.553	.01	-5.7	20	71	0
Cl5-BZ#104-RTW	0.54	0.582	.01	-7.8	20	72	0
Cl4-BZ#47	0.564	0.594	.01	-5.3	20	76	0
Cl4-BZ#65/#75/#62	0.662	0.719	.01	-8.6	20	69	0
Cl3-BZ#39	0.769	0.819	.01	-6.5	20	71	.02
Cl3-BZ#38	0.742	0.844	.01	-13.7	20	73	0
Cl4-BZ#44	0.455	0.49	.01	-7.7	20	72	.02
Cl4-BZ#59	0.667	0.705	.01	-5.7	20	72	0
Cl4-BZ#42	0.432	0.476	.01	-10.2	20	71	.02
Cl4-BZ#71	0.701	0.747	.01	-6.6	20	72	0
Cl3-BZ#35	0.776	0.857	.01	-10.4	20	73	0
Cl4-BZ#41	0.426	0.461	.01	-8.2	20	72	0
Cl4-BZ#72	0.733	0.805	.01	-9.8	20	70	0
Cl5-BZ#96	0.584	0.629	.01	-7.7	20	70	0
Cl5-BZ#103	0.451	0.505	.01	-12	20	73	0
Cl4-BZ#68/#64	0.679	0.746	.01	-9.9	20	71	0
Cl4-BZ#40	0.331	0.355	.01	-7.3	20	71	0
Cl3-BZ#37-RTW	1.031	1.122	.01	-8.8	20	71	.02
Cl5-BZ#100	0.486	0.531	.01	-9.3	20	72	.02
Cl5-BZ#94	0.359	0.405	.01	-12.8	20	72	0
Cl4-BZ#57	0.73	0.789	.01	-8.1	20	69	0
Cl4-BZ#67/#58	0.735	0.813	.01	-10.6	20	72	.02
Cl5-BZ#102	0.517	0.561	.01	-8.5	20	71	0
Cl4-BZ#61	0.723	0.796	.01	-10.1	20	72	0
Cl5-BZ#98	0.473	0.514	.01	-8.7	20	71	.02
Cl4-BZ#76	0.764	0.867	.01	-13.5	20	73	0
Cl5-BZ#93	0.382	0.421	.01	-10.2	20	72	0
Cl4-BZ#63	0.686	0.706	.01	-2.9	20	67	.02
Cl5-BZ#121/#95/#88	0.507	0.554	.01	-9.3	20	71	0
Cl4-BZ#74	0.759	0.84	.01	-10.7	20	73	0
Cl6-BZ#155-RTW	0.562	0.606	.01	-7.8	20	71	0
Cl4-BZ#70	0.781	0.846	.01	-8.3	20	71	0
Cl4-BZ#66	0.707	0.785	.01	-11	20	72	.02
Cl5-BZ#91	0.447	0.484	.01	-8.3	20	73	0
Cl4-BZ#80	0.741	0.82	.01	-10.7	20	73	0
Cl4-BZ#55	0.756	0.834	.01	-10.3	20	72	0
Cl5-BZ#92	0.436	0.473	.01	-8.5	20	71	0
Cl5-BZ#89/#84	0.418	0.458	.01	-9.6	20	72	0
Cl5-BZ#101/#90	0.481	0.494	.01	-2.7	20	67	0
Cl5-BZ#101-C13 (surr)	0.514	0.557	.01	-8.4	20	70	.02
Cl4-BZ#56	0.748	0.811	.01	-8.4	20	70	0
Cl5-BZ#113	0.566	0.666	.01	-17.7	20	78	0
Cl5-BZ#99	0.543	0.603	.01	-11	20	74	0
Cl6-BZ#150	0.602	0.638	.01	-6	20	70	.02
Cl4-BZ#60	0.8	0.866	.01	-8.2	20	71	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 02:10		
Lab File ID	: F203071814	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-4	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#152	0.646	0.713	.01	-10.4	20	72	0
Cl5-BZ#119	0.658	0.766	.01	-16.4	20	76	0
Cl5-BZ#83/#125/#112	0.548	0.572	.01	-4.4	20	68	0
Cl5-BZ#86/#109	0.545	0.62	.01	-13.8	20	76	.02
Cl5-BZ#97	0.406	0.459	.01	-13.1	20	72	0
Cl5-BZ#116	0.56	0.62	.01	-10.7	20	73	0
Cl5-BZ#87/#111	0.548	0.613	.01	-11.9	20	73	0
Cl6-BZ#145	0.667	0.708	.01	-6.1	20	70	0
Cl6-BZ#148	0.456	0.498	.01	-9.2	20	72	0
Cl4-BZ#79	0.736	0.823	.01	-11.8	20	73	0
Cl6-BZ#154-Cal	0.527	0.568	.01	-7.8	20	71	.02
Cl4-BZ#78	0.912	1.041	.01	-14.1	20	74	0
Cl6-BZ#136	0.584	0.624	.01	-6.8	20	70	.02
Cl5-BZ#117	0.693	0.692	.01	0.1	20	65	0
Cl5-BZ#115	0.687	0.832	.01	-21.1*	20	80	0
Cl5-BZ#85	0.429	0.435	.01	-1.4	20	69	0
Cl5-BZ#120	0.671	0.763	.01	-13.7	20	75	.02
Cl5-BZ#110	0.648	0.702	.01	-8.3	20	73	.02
Cl4-BZ#81	0.739	0.818	.01	-10.7	20	73	0
Cl7-BZ#180-C13	1	1	.01	0	20	66	0
Cl6-BZ#151	0.855	0.94	.01	-9.9	20	72	0
Cl6-BZ#135	0.902	1.015	.01	-12.5	20	71	0
Cl5-BZ#82	0.771	0.884	.01	-14.7	20	73	.02
Cl6-BZ#144	0.879	0.983	.01	-11.8	20	72	0
Cl6-BZ#147/#149	0.939	1.046	.01	-11.4	20	72	0
Cl4-BZ#77-RTW	1.283	1.422	.01	-10.8	20	71	0
Cl6-BZ#143/#139	0.902	1.013	.01	-12.3	20	71	0
Cl5-BZ#124	1.213	1.408	.01	-16.1	20	74	0
Cl5-BZ#108	1.232	1.549	.01	-25.7*	20	78	.02
Cl5-BZ#107/#123	1.314	1.415	.01	-7.7	20	70	0
Cl6-BZ#140	0.872	0.961	.01	-10.2	20	71	0
Cl7-BZ#188-Cal/RTW	1.025	1.135	.01	-10.7	20	70	0
Cl6-BZ#134	0.743	0.816	.01	-9.8	20	69	0
Cl5-BZ#106	1.194	1.258	.01	-5.4	20	62	0
Cl6-BZ#133	1.011	0.991	.01	2	20	60	0
Cl6-BZ#142	0.68	0.877	.01	-29*	20	90	0
Cl5-BZ#118	1.159	1.329	.01	-14.7	20	74	.02
Cl6-BZ#131	0.783	0.876	.01	-11.9	20	73	.02
Cl7-BZ#184	1.013	1.124	.01	-11	20	72	.02
Cl6-BZ#165	1.102	1.263	.01	-14.6	20	73	0
Cl6-BZ#146	0.964	1.068	.01	-10.8	20	72	0
Cl6-BZ#161	1.227	1.39	.01	-13.3	20	73	0
Cl5-BZ#122	1.068	1.207	.01	-13	20	73	0
Cl6-BZ#168	1.179	1.452	.01	-23.2*	20	77	.02
Cl5-BZ#114	1.173	1.322	.01	-12.7	20	72	.02

*** Value outside of QC limits.**

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 02:10		
Lab File ID	: F203071814	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-4	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#153	1.05	1.006	.01	4.2	20	65	.02
Cl6-BZ#153-C13 (surr)	0.919	0.998	.01	-8.6	20	70	0
Cl6-BZ#132	0.842	0.933	.01	-10.8	20	73	.02
Cl7-BZ#179	1.046	1.176	.01	-12.4	20	74	0
Cl6-BZ#141	0.843	0.953	.01	-13	20	74	.02
Cl7-BZ#176	0.994	1.09	.01	-9.7	20	72	0
Cl5-BZ#105	1.435	1.536	.01	-7	20	71	0
Cl6-BZ#137	0.864	0.989	.01	-14.5	20	73	.02
Cl5-BZ#127	1.574	1.726	.01	-9.7	20	72	.02
Cl7-BZ#186	1.106	1.208	.01	-9.2	20	70	0
Cl6-BZ#130/#164	1.008	1.129	.01	-12	20	72	0
Cl7-BZ#178	0.758	0.851	.01	-12.3	20	73	0
Cl6-BZ#138	1.024	1.182	.01	-15.4	20	76	0
Cl6-BZ#163/#160	1.158	1.325	.01	-14.4	20	73	0
Cl6-BZ#129/#158	0.966	1.036	.01	-7.2	20	70	0
Cl7-BZ#182/#175	0.867	0.955	.01	-10.1	20	70	0
Cl7-BZ#187	0.888	0.977	.01	-10	20	72	0
Cl7-BZ#183	0.854	0.95	.01	-11.2	20	72	0
Cl6-BZ#166	1.258	1.414	.01	-12.4	20	73	0
Cl6-BZ#159	1.258	1.448	.01	-15.1	20	75	.02
Cl5-BZ#126-RTW	1.539	1.733	.01	-12.6	20	72	0
Cl7-BZ#185	0.794	0.853	.01	-7.4	20	71	.02
Cl6-BZ#162	1.166	1.334	.01	-14.4	20	74	.02
Cl7-BZ#174	0.788	0.855	.01	-8.5	20	70	.02
Cl6-BZ#128	0.862	0.95	.01	-10.2	20	71	0
Cl6-BZ#167	1.547	1.685	.01	-8.9	20	71	0
Cl8-BZ#202-RTW	0.892	0.969	.01	-8.6	20	70	.02
Cl8-BZ#202-C13 (surr)	0.942	1.014	.01	-7.6	20	71	0
Cl7-BZ#181	0.886	0.976	.01	-10.2	20	70	0
Cl7-BZ#177	0.769	0.858	.01	-11.6	20	73	0
Cl8-BZ#204/#200-Cal	0.876	0.943	.01	-7.6	20	70	0
Cl7-BZ#171	0.753	0.843	.01	-12	20	73	.02
Cl7-BZ#173	0.742	0.809	.01	-9	20	72	0
Cl7-BZ#172	0.797	0.884	.01	-10.9	20	74	0
Cl7-BZ#192	1.092	1.207	.01	-10.5	20	72	.02
Cl6-BZ#156	1.206	1.33	.01	-10.3	20	72	0
Cl6-BZ#157	1.246	1.335	.01	-7.1	20	70	0
Cl7-BZ#180	0.97	1.009	.01	-4	20	69	0
Cl7-BZ#193	0.998	1.05	.01	-5.2	20	68	0
Cl8-BZ#197	0.894	0.955	.01	-6.8	20	70	0
Cl7-BZ#191	1.037	1.151	.01	-11	20	73	0
Cl8-BZ#199	0.889	0.955	.01	-7.4	20	71	0
Cl8-BZ#198	0.754	0.79	.01	-4.8	20	74	0
Cl8-BZ#201	0.651	0.712	.01	-9.4	20	67	.02
Cl7-BZ#170	0.751	0.804	.01	-7.1	20	71	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872	
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01	
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 02:10	
Lab File ID	: F203071814	**Init. Calib. Date(s)**	: 02/24/18	02/24/18
Sample No	: WG1095518-4	**Init. Calib. Times**	: 10:14	17:39
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl7-BZ#190	1.093	1.197	.01	-9.5	20	71	0
Cl8-BZ#196	0.706	0.809	.01	-14.6	20	74	0
Cl8-BZ#203	0.763	0.762	.01	0.1	20	65	0
Cl6-BZ#169-RTW	1.332	1.468	.01	-10.2	20	73	.02
Cl9-BZ#208-RTW	0.943	0.975	.01	-3.4	20	71	.02
Cl9-BZ#207	0.921	0.986	.01	-7.1	20	70	.02
Cl7-BZ#189-RTW	0.995	1.079	.01	-8.4	20	72	.02
Cl8-BZ#195	0.694	0.728	.01	-4.9	20	71	.02
Cl8-BZ#194	0.743	0.786	.01	-5.8	20	71	0
Cl8-BZ#205-RTW	0.91	0.959	.01	-5.4	20	71	.02
Cl9-BZ#206-Cal/RTW	0.759	0.804	.01	-5.9	20	71	.02
Cl10-BZ#209-Cal/RTW	0.753	0.791	.01	-5	20	70	0

*** Value outside of QC limits.**

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 16:50		
Lab File ID	: F203071826	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-6	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl2-BZ#15-C13	1	1	.01	0	20	55	0
Cl3-BZ#19-C13 (surr)	0.352	0.377	.01	-7.1	20	59	0
Cl1-BZ#1-Cal/RTW	0.922	1.025	.01	-11.2	20	61	0
Cl1-BZ#2	0.97	1.052	.01	-8.5	20	60	0
Cl1-BZ#3-RTW	0.952	1.037	.01	-8.9	20	60	0
Cl2-BZ#4/#10-RTW	0.557	0.615	.01	-10.4	20	60	0
Cl2-BZ#9	0.716	0.77	.01	-7.5	20	59	0
Cl2-BZ#7	0.698	0.76	.01	-8.9	20	59	0
Cl2-BZ#6	0.768	0.826	.01	-7.6	20	59	0
Cl2-BZ#5	0.698	0.743	.01	-6.4	20	59	0
Cl2-BZ#8	0.794	0.854	.01	-7.6	20	59	0
Cl3-BZ#19-RTW	0.392	0.42	.01	-7.1	20	59	0
Cl2-BZ#14	0.766	0.816	.01	-6.5	20	58	0
Cl3-BZ#30	0.626	0.67	.01	-7	20	59	0
Cl3-BZ#18	0.436	0.453	.01	-3.9	20	58	0
Cl2-BZ#11	0.822	0.874	.01	-6.3	20	57	0
Cl3-BZ#17	0.406	0.428	.01	-5.4	20	58	0
Cl2-BZ#12	0.727	0.774	.01	-6.5	20	58	0
Cl3-BZ#27	0.562	0.6	.01	-6.8	20	58	0
Cl2-BZ#13	0.838	0.892	.01	-6.4	20	58	0
Cl3-BZ#24	0.577	0.619	.01	-7.3	20	58	0
Cl3-BZ#16	0.354	0.369	.01	-4.2	20	58	0
Cl3-BZ#32	0.62	0.652	.01	-5.2	20	58	0
Cl2-BZ#15-RTW	0.849	0.878	.01	-3.4	20	57	0
Cl3-BZ#34	0.579	0.616	.01	-6.4	20	58	0
Cl3-BZ#23	0.569	0.608	.01	-6.9	20	58	0
Cl4-BZ#54-RTW	0.53	0.571	.01	-7.7	20	58	0
Cl3-BZ#29-Cal	0.574	0.605	.01	-5.4	20	57	0
Cl4-BZ#50-Cal	0.443	0.465	.01	-5	20	57	0
Cl3-BZ#26	0.644	0.67	.01	-4	20	57	0
Cl3-BZ#25	0.627	0.652	.01	-4	20	57	0
Cl4-BZ#53	0.489	0.509	.01	-4.1	20	57	0
Cl3-BZ#-31	0.866	0.883	.01	-2	20	56	0
Cl3-BZ#28	0.853	0.838	.01	1.8	20	54	0
Cl3-BZ#33	0.608	0.757	.01	-24.5*	20	65	0
Cl3-BZ#21/#20	0.77	0.8	.01	-3.9	20	55	0
Cl4-BZ#51	0.539	0.584	.01	-8.3	20	57	.02
Cl4-BZ#45	0.421	0.443	.01	-5.2	20	57	0
Cl3-BZ#22	0.75	0.8	.01	-6.7	20	57	0
Cl4-BZ#73/#46	0.563	0.604	.01	-7.3	20	57	0
Cl4-BZ#69	0.673	0.685	.01	-1.8	20	55	0
Cl4-BZ#43	0.444	0.488	.01	-9.9	20	60	0
Cl3-BZ#36	0.835	0.91	.01	-9	20	58	0
Cl4-BZ#52	0.547	0.569	.01	-4	20	57	.02
Cl4-BZ#48	0.486	0.519	.01	-6.8	20	57	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 16:50		
Lab File ID	: F203071826	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-6	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl4-BZ#49	0.523	0.542	.01	-3.6	20	57	0
Cl5-BZ#104-RTW	0.54	0.584	.01	-8.1	20	59	0
Cl4-BZ#47	0.564	0.596	.01	-5.7	20	62	0
Cl4-BZ#65/#75/#62	0.662	0.713	.01	-7.7	20	56	0
Cl3-BZ#39	0.769	0.816	.01	-6.1	20	57	0
Cl3-BZ#38	0.742	0.816	.01	-10	20	58	0
Cl4-BZ#44	0.455	0.471	.01	-3.5	20	57	0
Cl4-BZ#59	0.667	0.693	.01	-3.9	20	58	0
Cl4-BZ#42	0.432	0.465	.01	-7.6	20	56	.02
Cl4-BZ#71	0.701	0.735	.01	-4.9	20	57	0
Cl3-BZ#35	0.776	0.826	.01	-6.4	20	57	0
Cl4-BZ#41	0.426	0.453	.01	-6.3	20	57	0
Cl4-BZ#72	0.733	0.795	.01	-8.5	20	57	0
Cl5-BZ#96	0.584	0.643	.01	-10.1	20	59	0
Cl5-BZ#103	0.451	0.496	.01	-10	20	59	0
Cl4-BZ#68/#64	0.679	0.735	.01	-8.2	20	57	0
Cl4-BZ#40	0.331	0.345	.01	-4.2	20	56	0
Cl3-BZ#37-RTW	1.031	1.083	.01	-5	20	56	.02
Cl5-BZ#100	0.486	0.539	.01	-10.9	20	59	.02
Cl5-BZ#94	0.359	0.402	.01	-12	20	59	0
Cl4-BZ#57	0.73	0.766	.01	-4.9	20	55	0
Cl4-BZ#67/#58	0.735	0.796	.01	-8.3	20	57	.02
Cl5-BZ#102	0.517	0.57	.01	-10.3	20	59	0
Cl4-BZ#61	0.723	0.758	.01	-4.8	20	56	0
Cl5-BZ#98	0.473	0.518	.01	-9.5	20	58	0
Cl4-BZ#76	0.764	0.867	.01	-13.5	20	60	0
Cl5-BZ#93	0.382	0.421	.01	-10.2	20	59	0
Cl4-BZ#63	0.686	0.698	.01	-1.7	20	54	0
Cl5-BZ#121/#95/#88	0.507	0.563	.01	-11	20	58	0
Cl4-BZ#74	0.759	0.804	.01	-5.9	20	57	0
Cl6-BZ#155-RTW	0.562	0.596	.01	-6	20	57	0
Cl4-BZ#70	0.781	0.834	.01	-6.8	20	57	0
Cl4-BZ#66	0.707	0.76	.01	-7.5	20	57	.02
Cl5-BZ#91	0.447	0.478	.01	-6.9	20	59	0
Cl4-BZ#80	0.741	0.79	.01	-6.6	20	57	0
Cl4-BZ#55	0.756	0.794	.01	-5	20	56	0
Cl5-BZ#92	0.436	0.475	.01	-8.9	20	58	0
Cl5-BZ#89/#84	0.418	0.449	.01	-7.4	20	58	0
Cl5-BZ#101/#90	0.481	0.52	.01	-8.1	20	57	0
Cl5-BZ#101-C13 (surr)	0.514	0.554	.01	-7.8	20	57	.02
Cl4-BZ#56	0.748	0.802	.01	-7.2	20	57	0
Cl5-BZ#113	0.566	0.651	.01	-15	20	62	0
Cl5-BZ#99	0.543	0.581	.01	-7	20	58	0
Cl6-BZ#150	0.602	0.655	.01	-8.8	20	58	0
Cl4-BZ#60	0.8	0.847	.01	-5.9	20	56	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 16:50		
Lab File ID	: F203071826	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-6	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#152	0.646	0.701	.01	-8.5	20	58	0
Cl5-BZ#119	0.658	0.772	.01	-17.3	20	62	0
Cl5-BZ#83/#125/#112	0.548	0.575	.01	-4.9	20	56	0
Cl5-BZ#86/#109	0.545	0.608	.01	-11.6	20	60	0
Cl5-BZ#97	0.406	0.454	.01	-11.8	20	58	0
Cl5-BZ#116	0.56	0.604	.01	-7.9	20	58	0
Cl5-BZ#87/#111	0.548	0.615	.01	-12.2	20	59	0
Cl6-BZ#145	0.667	0.724	.01	-8.5	20	58	0
Cl6-BZ#148	0.456	0.492	.01	-7.9	20	58	0
Cl4-BZ#79	0.736	0.783	.01	-6.4	20	57	0
Cl6-BZ#154-Cal	0.527	0.564	.01	-7	20	57	0
Cl4-BZ#78	0.912	0.97	.01	-6.4	20	56	0
Cl6-BZ#136	0.584	0.64	.01	-9.6	20	58	0
Cl5-BZ#117	0.693	0.704	.01	-1.6	20	54	0
Cl5-BZ#115	0.687	0.818	.01	-19.1	20	64	0
Cl5-BZ#85	0.429	0.422	.01	1.6	20	55	0
Cl5-BZ#120	0.671	0.746	.01	-11.2	20	60	0
Cl5-BZ#110	0.648	0.685	.01	-5.7	20	58	0
Cl4-BZ#81	0.739	0.777	.01	-5.1	20	57	0
Cl7-BZ#180-C13	1	1	.01	0	20	56	0
Cl6-BZ#151	0.855	0.906	.01	-6	20	59	0
Cl6-BZ#135	0.902	0.972	.01	-7.8	20	58	0
Cl5-BZ#82	0.771	0.839	.01	-8.8	20	59	.02
Cl6-BZ#144	0.879	0.943	.01	-7.3	20	58	0
Cl6-BZ#147/#149	0.939	0.988	.01	-5.2	20	58	0
Cl4-BZ#77-RTW	1.283	1.281	.01	0.2	20	54	0
Cl6-BZ#143/#139	0.902	0.983	.01	-9	20	58	0
Cl5-BZ#124	1.213	1.307	.01	-7.7	20	58	0
Cl5-BZ#108	1.232	1.247	.01	-1.2	20	53	0
Cl5-BZ#107/#123	1.314	1.456	.01	-10.8	20	61	0
Cl6-BZ#140	0.872	0.924	.01	-6	20	58	0
Cl7-BZ#188-Cal/RTW	1.025	1.114	.01	-8.7	20	58	0
Cl6-BZ#134	0.743	0.786	.01	-5.8	20	56	0
Cl5-BZ#106	1.194	1.203	.01	-0.8	20	50	0
Cl6-BZ#133	1.011	1.019	.01	-0.8	20	52	0
Cl6-BZ#142	0.68	0.791	.01	-16.3	20	68	0
Cl5-BZ#118	1.159	1.266	.01	-9.2	20	59	0
Cl6-BZ#131	0.783	0.836	.01	-6.8	20	59	0
Cl7-BZ#184	1.013	1.073	.01	-5.9	20	58	0
Cl6-BZ#165	1.102	1.167	.01	-5.9	20	57	0
Cl6-BZ#146	0.964	1.046	.01	-8.5	20	60	0
Cl6-BZ#161	1.227	1.305	.01	-6.4	20	57	0
Cl5-BZ#122	1.068	1.15	.01	-7.7	20	58	0
Cl6-BZ#168	1.179	1.187	.01	-0.7	20	53	0
Cl5-BZ#114	1.173	1.27	.01	-8.3	20	58	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872		
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01		
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 16:50		
Lab File ID	: F203071826	**Init. Calib. Date(s)**	: 02/24/18	02/24/18	
Sample No	: WG1095518-6	**Init. Calib. Times**	: 10:14	17:39	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl6-BZ#153	1.05	1.176	.01	-12	20	64	0
Cl6-BZ#153-C13 (surr)	0.919	0.976	.01	-6.2	20	57	0
Cl6-BZ#132	0.842	0.884	.01	-5	20	58	0
Cl7-BZ#179	1.046	1.1	.01	-5.2	20	58	0
Cl6-BZ#141	0.843	0.889	.01	-5.5	20	58	0
Cl7-BZ#176	0.994	1.042	.01	-4.8	20	58	0
Cl5-BZ#105	1.435	1.437	.01	-0.1	20	56	0
Cl6-BZ#137	0.864	0.931	.01	-7.8	20	58	.02
Cl5-BZ#127	1.574	1.631	.01	-3.6	20	57	0
Cl7-BZ#186	1.106	1.169	.01	-5.7	20	57	0
Cl6-BZ#130/#164	1.008	1.068	.01	-6	20	58	0
Cl7-BZ#178	0.758	0.796	.01	-5	20	58	0
Cl6-BZ#138	1.024	1.159	.01	-13.2	20	62	0
Cl6-BZ#163/#160	1.158	1.176	.01	-1.6	20	54	0
Cl6-BZ#129/#158	0.966	1.057	.01	-9.4	20	61	0
Cl7-BZ#182/#175	0.867	0.948	.01	-9.3	20	58	0
Cl7-BZ#187	0.888	0.926	.01	-4.3	20	57	0
Cl7-BZ#183	0.854	0.899	.01	-5.3	20	58	0
Cl6-BZ#166	1.258	1.327	.01	-5.5	20	58	0
Cl6-BZ#159	1.258	1.305	.01	-3.7	20	57	0
Cl5-BZ#126-RTW	1.539	1.608	.01	-4.5	20	57	0
Cl7-BZ#185	0.794	0.827	.01	-4.2	20	58	0
Cl6-BZ#162	1.166	1.239	.01	-6.3	20	58	.02
Cl7-BZ#174	0.788	0.829	.01	-5.2	20	58	.02
Cl6-BZ#128	0.862	0.919	.01	-6.6	20	58	0
Cl6-BZ#167	1.547	1.674	.01	-8.2	20	59	0
Cl8-BZ#202-RTW	0.892	0.955	.01	-7.1	20	58	0
Cl8-BZ#202-C13 (surr)	0.942	0.978	.01	-3.8	20	58	0
Cl7-BZ#181	0.886	0.951	.01	-7.3	20	58	0
Cl7-BZ#177	0.769	0.816	.01	-6.1	20	58	0
Cl8-BZ#204/#200-Cal	0.876	0.919	.01	-4.9	20	57	0
Cl7-BZ#171	0.753	0.786	.01	-4.4	20	57	.02
Cl7-BZ#173	0.742	0.776	.01	-4.6	20	58	0
Cl7-BZ#172	0.797	0.819	.01	-2.8	20	58	0
Cl7-BZ#192	1.092	1.145	.01	-4.9	20	57	0
Cl6-BZ#156	1.206	1.26	.01	-4.5	20	58	0
Cl6-BZ#157	1.246	1.288	.01	-3.4	20	57	0
Cl7-BZ#180	0.97	1.026	.01	-5.8	20	59	0
Cl7-BZ#193	0.998	0.996	.01	0.2	20	54	0
Cl8-BZ#197	0.894	0.932	.01	-4.3	20	57	0
Cl7-BZ#191	1.037	1.076	.01	-3.8	20	57	0
Cl8-BZ#199	0.889	0.912	.01	-2.6	20	57	0
Cl8-BZ#198	0.754	0.774	.01	-2.7	20	61	0
Cl8-BZ#201	0.651	0.666	.01	-2.3	20	53	.02
Cl7-BZ#170	0.751	0.772	.01	-2.8	20	58	0

* Value outside of QC limits.

Continuing Calibration
Form 7

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872	
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01	
Instrument ID	: BNA2	**Calibration Date**	: 03/08/18 16:50	
Lab File ID	: F203071826	**Init. Calib. Date(s)**	: 02/24/18	02/24/18
Sample No	: WG1095518-6	**Init. Calib. Times**	: 10:14	17:39
Channel	:			

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Cl7-BZ#190	1.093	1.151	.01	-5.3	20	58	0
Cl8-BZ#196	0.706	0.7	.01	0.8	20	54	0
Cl8-BZ#203	0.763	0.809	.01	-6	20	58	0
Cl6-BZ#169-RTW	1.332	1.34	.01	-0.6	20	56	0
Cl9-BZ#208-RTW	0.943	0.934	.01	1	20	57	.02
Cl9-BZ#207	0.921	0.951	.01	-3.3	20	57	0
Cl7-BZ#189-RTW	0.995	1.024	.01	-2.9	20	58	.02
Cl8-BZ#195	0.694	0.694	.01	0	20	57	.02
Cl8-BZ#194	0.743	0.744	.01	-0.1	20	57	0
Cl8-BZ#205-RTW	0.91	0.897	.01	1.4	20	56	0
Cl9-BZ#206-Cal/RTW	0.759	0.762	.01	-0.4	20	57	0
Cl10-BZ#209-Cal/RTW	0.753	0.744	.01	1.2	20	55	-.02

* Value outside of QC limits.

Internal Standard Area and RT Summary
Form 8

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: BNA2	**Analysis Date**	: 03/07/18 11:17
Sample No	: WG1095518-2	**Lab File ID**	: F203071802

	Cl2-BZ#15-C13		Cl7-BZ#180-C13			
	Area	RT	Area	RT	Area	RT
WG1095518-2	390307	23.86	200718	44.88		
Upper Limit	780614	24.36	401436	45.38		
Lower Limit	195154	23.36	100359	44.38		
Sample ID						
WG1094741-1 BLANK	367914	23.86	191336	44.88		
WG1094741-2 LCS	309766	23.86	168439	44.88		
WG1094741-3 LCSD	385904	23.86	202474	44.88		
SDT-DS-BFT-PC03	362171	23.86	196144	44.94		
SDT-DS-BFT-PC06	357670	23.86	194404	44.88		
WG1095518-4 CCAL	391222	23.86	205053	44.88		

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8

Client	: AMEC Foster Wheeler E & I, Inc.	**Lab Number**	: L1806872
Project Name	: STRATFORD ARMY ENGINE PLANT	**Project Number**	: 3616176064.08.01
Instrument ID	: BNA2	**Analysis Date**	: 03/08/18 02:10
Sample No	: WG1095518-4	**Lab File ID**	: F203071814

	Cl2-BZ#15-C13		Cl7-BZ#180-C13			
	Area	RT	Area	RT	Area	RT
WG1095518-4	391222	23.86	205053	44.88		
Upper Limit	782444	24.36	410106	45.38		
Lower Limit	195611	23.36	102527	44.38		
Sample ID						
SDT-DS-BFT-PC08	377674	23.86	199103	44.88		
SDT-DS-BFT-CC03	372970	23.86	195368	44.88		
SDT-DS-BFT-CC06	380007	23.86	200766	44.88		
SDT-DS-BFT-CC08	313478	23.86	169876	44.88		
SDT-DS-GVT-PC02	381434	23.86	199398	44.88		
SDT-DS-GVT-PC04	379013	23.86	198771	44.88		
SDT-DS-GVT-PC05	382102	23.86	201216	44.88		
SDT-DS-GVT-CC02	378628	23.86	198366	44.88		
SDT-DS-GVT-CC04	376925	23.86	197407	44.88		
SDT-DS-GVT-CC05	382828	23.86	201376	44.88		
WG1095518-6 CCAL	318587	23.86	173051	44.88		

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

ATTACHMENT C

Kemron Treatability Study Report

STRATFORD DEWATERING
BENCH-SCALE STUDY
FINAL REPORT

KEMRON PROJECT #: SH0664

March 21, 2018

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Appendix H – Solidification Mixture Design Development Data Sheets
Appendix I – Solidification Evaluations Testing Data Sheets

1.0 INTRODUCTION

KEMRON Environmental Services, Inc. (KEMRON) is pleased to present AMEC Foster Wheeler (AMEC) with an interim report for the dewatering study performed on materials from the Stratford Dewatering Site (the site) located at the Stratford Army Engine Plant in Stratford, Connecticut. The purpose of the dewatering study was to evaluate Gravity Drainage Belt Filter Press, Centrifuge, Recessed Plate and Geotube (geotextile bag testing) dewatering techniques in order to increase the material percent solids and density for potential disposal or re-use. In addition, KEMRON evaluated the ability of commonly available reagents and additives capable of improving the physical characteristics of the sediment, primarily moisture / free moisture content and strength. This interim report will primarily describe the protocol used during testing of the site materials as well as the results of testing performed.

In addition to dewatering evaluations, KEMRON was tasked with conducting solidification / stabilization simulations on candidate dewatered materials. Solidification / stabilization testing was performed to evaluate the potential for commonly available additives to improve the physical characteristics, primarily moisture reduction and strength, of the candidate dewatered materials.

This study was performed in general accordance with the Scope of Work (SOW) provided by AMEC dated August 31, 2017 and subsequent telephone and electronic mail conversations between KEMRON and AMEC.

2.0 MATERIAL RECEIPT AND CHARACTERIZATION

On October 6, 2017, KEMRON received two (2) samples from the site including sediment and surface water samples. The individual site composite sediment and composite water materials were prepared, homogenized and containerized prior to shipment to KEMRON's laboratory in Atlanta, Georgia. On receipt, all materials were logged into KEMRON's sample tracking database and placed in secure, refrigerated storage maintained at a temperature of 4 degrees Celsius (^{o}C). Prior to testing KEMRON re-homogenized each site material to ensure uniform materials for testing. A copy of the sample Chain of Custody Record is included in **Appendix A**.

Homogenization was performed on the composite sediment material by placing the sediment material into a large plastic mixing bin. The sediment material was blended by hand until visually homogenous. Note that a layer of free liquid was observed on the surface of the as-received sediment material at the time of the shipment receipt. These liquids were re-incorporated into the sediment material during homogenization. Similarly, the surface water was homogenized by pouring the surface water into a large mixing container and blending until visually homogenous.

After homogenization aliquots of the as-received sediment were subjected to the following untreated material characterization testing:

Parameter	**Method**
Moisture Content	ASTM D2216
Bulk Unit Weight	ASTM D7263
Grain Size Distribution	ASTM D422
Atterberg Limits	ASTM D4318
USCS Classification	ASTM D2487

Results of untreated characterization testing are presented in **Table 1**. Copies of the physical properties testing data sheets are included in **Appendix B**. The following is a summary of the information presented in Table 1:

TABLE 1

UNTREATED PHYSICAL PROPERTIES TESTING

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE ID
			Homogenized Sediment
Moisture Content	ASTM D2216		
ASTM Moisture Content		%	72.69
Percent Solids		%	57.91
Bulk Unit Weight	ASTM D7263	pcf	98.7
Atterburg Limits	ASTM D4318 Method B		
Liquid Limit			70
Plastic Limit			37
Plasticity Index			33
Particle Size Distribution	ASTM D422		
Gravel		%	0.0
Sand		%	23.9
Silt		%	64.3
Clay		%	11.8
Sample Description	ASTM D2487		Dark brown elastic silt with sand
Sample Classification	ASTM D2487		MH

Notes:
% = Percent
pcf = pounds per cubic foot
Sample descriptions based on the Unified Classification System.
Sample color determined by the Munsell Soil Color Charts.

Review of the data in **Table 1** shows the composite sediment is composed mainly of silt at 64.3 percent (%) with a plasticity index of 33 and is classified as MH and described as s dark brown elastic silt with sand. The sediment exhibited a bulk unit weight of 98.7 pounds per cubic foot (pcf) and had a percent solids of 57.91%.

In addition to the as-received sediment material, KEMRON prepared a simulated raw hydraulic dredge (RHD) material consisting of the sediment combined with the surface water. Prior to preparing the RHD material, KEMRON sieved the as-received sediment material through a #200 sieve. The material passing the sieve was utilized in preparing the RHD material and the retained material was bagged and placed into storage. The material passing the #200 sieve represented approximately 76% of the solids present in the as-received sediment material. The RHD material was prepared to create a material exhibiting a solids content of approximately 6 to 8%. KEMRON prepared a large batch of the RHD at an approximately ratio of 16:1 surface water to sieved sediment material. Moisture content testing performed on the RHD indicated a percent solids content of 6.02% was achieved.

Note that all analytical testing conducted during the course of the study was performed by Envirosystems, Inc. located in Hampton, New Hampshire. Note that all analytical testing was subcontracted and managed by AMEC. As such this report does not include the results of any analytical testing performed on the untreated or treated materials.

3.0 POLYMER EVALUATIONS

KEMRON prepared approximately one (1) gallon of the simulated raw hydraulic dredge (RHD) material at approximately 6% solids as directed by AMEC. KEMRON forwarded the prepared slurry to WaterSolve, a polymer distributer and expert in polymer applications and testing. WaterSolve conducted a series of jar tests in order to determine the most effective polymers (coagulants and flocculants included) and dosage for the site material. Polymer effectiveness was determined by visual observations such as sediment floc, water release rate, and water clarity. Results of the polymer evaluations indicate that a single product application of the polymer “Solve 137”, a cationic organic flocculant, at a dosing rate of 2.3 pounds per dry ton (lbs/dry-ton) is recommended. WaterSolve indicated that an increase in polymer addition of 5% above the recommended dosage may increase treatment effectiveness when a mechanical dewatering process is utilized. KEMRON conducted a series of jar tests to evaluate the polymer effectiveness at increased dosing rates of +2.5% and +5.0%. KEMRON observed there to be little difference in the settling rate and water clarity with the increased polymer dosing rates. Therefore, KEMRON continued to use the recommended dosage of 2.3 lb/dry-ton throughout the duration of the study. Complete polymer evaluation reports from WaterSolve are provided in **Appendix C**. Contact information for WaterSolve is included below:

Doug Walker
WaterSolve
5031 - 68th Street SE
Caledonia, MI 49316
T: (616) 575-8693

4.0 MECHANICAL DEWATERING EVALUATIONS

KEMRON evaluated three (3) mechanical dewatering technologies including the Belt Filter Press, Centrifugation and Recessed Plate (Baroid filter press). Testing was conducted on the RHD material with a 6.02% solids content which had been conditioned with the Solve 137 polymer at an addition rate of 2.3 lb/dry ton.

4.1 Crown Belt Press Testing

The Crown Belt Press is an instrument designed to simulate the action of a sludge dewatering belt filter press. The press permits rapid evaluation of conditioners and belt materials for a given application. The Crown Belt Press removes water from treated material in a fashion comparable to a full-scale press and allows for the collection of data pertinent to the belt press process. KEMRON performed some trial runs on various filter media provided by National Filter Media. KEMRON observed the Red Twill media to perform the most effectively while allowing the filter cake to release from the media without leaving behind residual. For each test, KEMRON used a 1,000 milliliter (mL) aliquot of the prepared slurry containing approximately 6.02% solids. KEMRON conditioned the slurry with the appropriated polymer and dosage (13.3ml) and poured the conditioned slurry through the gravity drain funnel and filter media provided with the crown belt press. KEMRON timed the release of water until water no longer dripped through the funnel, a period requiring 20 minutes. KEMRON removed the filter cake from the gravity drain funnel and placed it between the belt press media.
In accordance with the Crown Belt Press manufacturers recommended procedure, each belt press test consisted of three squeezes, each one greater in tension than the previous to simulate the different treatment zones of a typical belt filter press.

KEMRON conducted the first squeeze by slowly increasing the belt tension until either the material began to overflow the belt pair or significant dewatering was observed. Once the belt tension stabilized, KEMRON recorded the peak tension in pounds. KEMRON recorded a tension of 103 pounds for the first squeeze. The belt tension was released and a second squeeze was conducted by rapidly increasing the belt tension until dewatering occurred and the peak tension of 163.5 pounds was recorded. Squeeze number three was conducted in the same manner as squeeze number two with a maximum tension of 207.5 pounds.

Upon completion of three squeezes using the above testing regimen, KEMRON removed the pressed cake from the belt and performed moisture / solids content, and paint filter testing. The crown belt press simulation resulted in the collection of 920 ml of effluent liquid collected during the initial gravity drainage of the 1,000 gram feed sample, a collection of 49 ml of effluent collected during the first squeeze, 3 ml during the second squeeze, and 2 ml collected during the final squeeze. The final moisture content of the treated material was 88.97% and the solids content was a 52.92%. The treated crown belt press material passed paint filter testing. Additionally, KEMRON forwarded an aliquot of the collected effluent and resultant solids for analytical testing.

The belt press dewatering simulations were conducted in accordance with the operating procedures for the Crown belt press. KEMRON understands that the number of squeezes and the belt tensions utilized are relevant for full-scale belt press applications and design purposes. However, the testing parameters utilized may not represent all equipment and contractor treatment procedures. The results of the crown belt filter testing is presented in Table 2 and the bench top data sheet is included in **Appendix D**.

AMEC FW
STRATFORD DEWATERING
KEMRON PROJECT NO. SH0664

TABLE 2

Summary of Mechanical Dewatering Evaluations

Sample Identification	Feed Volume (mL)	Feed Solids (%)	Polymer Addition[(1)] (lb/dry-ton)	Effluent Collected (mL)	Final Moisture Content (%) ASTM D2216	Final Percent Solids (%)	Paint Filter Test (Pass/Fail) EPA 9095
DEW-SED-PT-BeltPress	1000	6.06	2.3	974	88.97	52.92	Pass
DEW-SED-PT-Centrifuge	1000	6.06	2.3	930	135.87	42.40	Pass
DEW-SED-PT-FilterPress (100psi)	400	6.06	2.3	370	133.16	42.94	Pass

Notes:
Belt Press testing conducted using Red Twill belt press material from National Filter Media
Filter Press testing conducted using Micronics Polypropylene Mono/Multi Satin 3.3-4.4 CFM Filter Cloth Style 8944
Centrifuge testing was performed at 1,500 revolutions per minute for a period of 10 minutes
All testing conducted on screened material <#200 Sieve
(1) = Selection and dosage of polymer "Solve 137" determined by WaterSolve
PT = Polymer Treated
% = percent
mL=milliliters
lb = pounds

4.2 Centrifugation Testing

KEMRON performed centrifuge testing on the polymer conditioned 6.02% solids RHD material by placing a1,000 mL aliquot of the prepared slurry into Teflon bottles. The samples were then placed into a large capacity centrifuge and centrifuged for a period of 10 minutes at a 1,500 rotations per minute (RPM). After treatment, the water was decanted from the top of the settled sediment and the sediment was removed from the bottom of centrifuge bottles and subjected to moisture / solids content and paint filter testing. The results of the centrifuge testing is also included in **Table 2** and bench data sheets are found in **Appendix D**.

Review of the data in Table 2 shows that 930 ml of liquid was decanted from the surface of the centrifuged sediment materials. The final moisture content of the residual solids was 135.87% and the solids content was measured at 42.4%. The centrifuged solids material passed paint filter testing.

4.3 Recessed Plate (Baroid Filter Press) Testing

Baroid Filter Press testing is a dewatering simulation where positive pressure is applied to the site material. This testing is considered a viable simulation to evaluate dewatering applications such as plate and frame treatments. Filter press testing was performed at a positive pressure of 100 pounds per square inch (psi). Each stainless steel Baroid Filter Press chamber was lined with a Micronics Filter Cloth Style 8944. The provided filter cloth was a polypropylene mono/multi satin weave with a 3.3-3.4 cubic feet per minute (CFM) air flow rate.

KEMRON placed 400 mL of the polymer conditioned test slurry into the Baroid filter press chamber. A positive 100 pounds per sqare inch (psi) air pressure was introduced into the chamber to force any free liquid from the test material, and was continued for approximately six (6) minutes until breakthrough occurred. After air breakthrough occurred, KEMRON removed the filter cake from the test chamber and tested the sample for moisture / solids content and paint filter. The results of Baroid filter press testing are summarized in **Table 2**, and bench data sheets are included in **Appendix D**.

Review of Table 2 shows that 370 ml of effluent was collected from the approximately 400 ml test sample, and the treated filter cake had a moisture content of 133.16% with a solids content of 42.94%. The treated filter cake passed paint filter testing. Specifications on the filter media used can be obtained by contacting:

Ryan S. Nickerson
Micronics Inc.
200 West Road
Portsmouth, NH 03801
(P) 603-433-1299 Ext. 3037
(F) 603-433-6673
ryan.nickerson@micronicsinc.com

5.0 GEOTEXTILE FABRIC TESTING

KEMRON performed both the Rapid Dewatering Test (RDT) and GeoTube Dewatering Test (GDT) in accordance with Tencate testing procedures. Testing was performed on a Raw Hydraulic Dredge material specifically prepared for the GeoTube testing. This GeoTube RHD material was developed by adding site surface water to the as-received site sediment material (not sieved separated) until a percent solids content of approximately six (6) percent was achieved. Prior to performing the RDT and GDT testing, the GeoTube RHD material was conditioned with the polymer in accordance with the protocol outlined by WaterSolve. The RDT is designed to provide an indication if dewatering with GeoTubes is feasible. GeoTubes are also used to evaluate the efficiency of polymers, measure the volume of effluent filtrate for the treated sediment, record time for filtration and analyze the quality of effluent water.

5.1 Rapid Dewatering Testing (RDT)

KEMRON performed RDT testing using GeoTube GT 500 fabric provided by Tencate. GeoTube 500 fabric is recommended by Tencate because it is the most commonly used fabric for dewatering sediment materials. RDT tests consisted of a 1,000 mL aliquot of prepared slurry at approximately 6% solids. KEMRON treated the slurry with the appropriate polymer and dosage recommended by WaterSolve and poured the conditioned slurry through the GT 500 fabric. Effluent drainage was timed and the amount of effluent collected was recorded after 1 minute of draining and again after 60 minutes. After 60 minutes, aliquots of the filter cake material were subjected to percent solids content and paint filter testing. The results of RDT testing is included in **Table 3**. Review of Table 3 shows that the RDT cake residual exhibited a solids content of 32.21% and failed the paint filter testing. Note that KEMRON understands that the RDT testing procedure does not produce the same quality of sediment as a full scale GeoTube application is capable of producing and is not representative of potential full-scale applications. The RDT testing is a quick screening test to evaluate the feasibility of GeoTube dewatering and compare the effectiveness of various polymers. Bench data sheets are included in **Appendix E**.

Specifications for the GeoTube GT 500 fabric can be obtained by contacting Tencate.

Chris Timpson, Engineering Business Mgr-Southeast
Tencate
3680 Mount Olive Road
Commerce, GA 30529
706-693-1833

5.2 GeoTube Dewatering Testing (GDT)

KEMRON performed the GDT testing using GeoTube GT 500 fabric bags provided by Tencate. KEMRON passed fifteen (15) gallons of polymer conditioned RHD slurry through the GT 500 bags. The sediment was allowed to drain for a period of 24 hours prior to performing physical properties testing on the dewatered sediment. The results of the GDT testing are provided in **Table 3**. These results show that after 24 hours of draining, the dewatered cake material had a solids content of 49.17% and passed paint filter testing. Data sheets for all GDT testing is included in **Appendix E**. KEMRON also forwarded aliquots of the GDT effluent and resultant solids to an Envirosystems, Inc.

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TABLE 3
Summary of Geotextile Fabric Testing

Sample Identification	Feed Soilds (%)	Polymer Addition (lb/dry-ton)	Cake Evaluations	
			ASTM D2216	
			Cake Percent Solids (%)	Paint Filter Test (Pass/Fail)
DEW-SED-PT-RDT	6.06	2.3	32.21	Fail
DEW-SED-PT-GDT*	6.06	2.3	49.17	Pass

Notes:
% = percent

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KEMRON Environmental Services, Inc.

6.0 GRAVITY DRAINAGE TESTING

KEMRON performed gravity drainage testing on the as-received composite sediment at the request of AMEC. Unlike the previous dewatering testing, the feed material for the gravity drainage test was not screened (not sieved), and was not treated with polymer. Gravity drainage testing was performed to evaluate the reduction in moisture that may be achieved by allowing the site material to gravity drain during barge decanting/dewatering and or while stockpiled during field operations. In order to simulate the process on the laboratory scale, testing was performed by allowing a known quantity of the untreated material to drain via gravity through a porous filter paper media with a particle retention size of 25 microns which is consistent with silt sized particles. Prior to performing gravity drainage testing AMEC had requested that an additional 15% site surface water addition be adjusted for the gravity drainage test. KEMRON added 15% site surface water by wet bulk weight to the samples prior to testing.. For example with a 1,000 g aliquot of sediment, KEMRON blended 150 ml of site surface water.

KEMRON placed approximately 1,134.5 grams of the surface water and as-received composite sediment mixture into a pre-weighed funnel lined with the filter media and allowed it to drain for a period of 72 hours. After 72 hours, KEMRON performed solids content, pocket penetrometer, shear strength, painter filter testing, and unconfined compressive strength (UCS) testing. Results of the gravity drainage testing are presented in **Table 4**.

At the request of AMEC, KEMRON continued gravity drainage testing for an additional 2 days, a total treatment period of 5 days. KEMRON observed a slight continuation of free liquid removal from the test material after 5 days. Over the additional 2 days of testing a total of 18 ml of additional effluent was collected. At the termination of the 5 day gravity drain testing the percent solids content was 56.52%, an increase of 0.2% compared to the 72 hour gravity drainage sediment. The results of testing performed on the 5 day gravity drainage material is also summarized in **Table 4**.

The results presented in **Table 4** indicate the material does not gravity drain very well. Only 80 grams of effluent were collected over a 72 hour period. The cake percent solids was determined to increase from 50.36% in the feed stock to 56.32% in the treated cake after 5 days of draining. The treated sediment material exhibited a density of 92.9 pcf, a shear strength of 0.10 kilograms per square centimeter (Kg/cm^2) but no recordable pocket penetrometer strength. The treated sediment material failed paint filter testing and could not undergo UCS testing because the material lacked sufficient strength to maintain its shape prior to testing. Gravity drainage testing data sheets can be found in **Appendix F**

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TABLE 4
Summary of Gravity Drainage Testing

Sample Identification	Gravity Drainage Treatment Time (Hrs/Days)	Initial Soil Mass (g)	Final Soil Mass (g)	Effluent Collected (mL)	Initial Percent Solids (%)	Cake Evaluations								
						ASTM D2216	ASTM D7263	Cake Pocket Penetrometer (TSF)	Cake Shear Strength (Kg/cm^2)	Paint Filter Test (Pass/Fail)	Unconfined Compressive Strength ASTM D2166			
						Final Percent Solids (%)	Final Density (lb/ft^3)				Moisture Content (%)	Bulk Density (lb/ft^3)	Dry Density (lb/ft^3)	UCS (lb/in^2)
DEW-SED-GravityDrain	72 Hr / 3 Day	1134.5	1052.0	80.69	50.36	56.32	92.9	0.0	0.10	Fail				F
DEW-SED-GravityDrain	120 Hr / 5.0 Day	1134.5	1034.0	98.69	50.36	56.52								

Notes:

Gravity Drain Testing conducted for 120 hours (5 days)

DEW-SED-Gravity Drain- raw, unscreened sediment with no polymer treatment and 15% water addition by bulk weight

mL= milliliters

g = grams

TSF=tons per square foot

% = percent

Kg/cm^2=kilograms per square centimeter

lbs/ft^3=pounds per cubic foot

lb/in^2 = pounds per square inch

Shear Strength measured using a laboratory vane shear apparatus

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7.0 ADDITIONAL DEWATERING TESTING

Following review of the mechanical and gravity drainage dewatering simulations, AMEC requested that additional dewatering testing be performed to evaluate the effectiveness of the Baroid filter press treatment with and without the use of polymer conditioning, and to determine if a higher treatment pressure of 125 psi provided additional treatment effectiveness. KEMRON conducted the following dewatering testing:

- DEW-SED-FilterPress (Baroid filter press) at 100 psi with no polymer
- DEW-SED-PT-FilterPress (Baroid filter press) at 125 psi with polymer conditioning
- DEW-SED-FilterPress (Baroid filter press) at 125 psi with no polymer

The results of the additional mechanical dewatering simulations are summarized in **Table 5**. All treatment simulations were conducted in accordance with the previously discussed treatment protocols. Note that KEMRON has included the results of the Crown belt press, centrifugation treatment, and baroid filter press testing which were originally presented in Table 2 to compare potential treatment effectiveness.

Review of **Table 5** indicates that the use of polymer conditioning significantly reduces the effectiveness of dewatering using this treatment application. Additionally an increase in treatment pressure did not provide an increase in treatment effectiveness. Bench top testing data sheets for the additional dewatering simulations are found in **Appendix G**.

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TABLE 5

Additional Mechanical Dewatering Evaluations

Sample Identification	Feed Volume (mL)	Feed Solids (%)	Polymer Addition[(1)] (lb/dry-ton)	Effluent Collected (mL)	Final Moisture Content (%) ASTM D2216	Final Percent Solids (%)	Paint Filter Test (Pass/Fail) EPA 9095
DEW-SED-FilterPress (100psi)	400	6.06	N/A	395	51.02	66.22	N/A
DEW-SED-PT-FilterPress (125psi)	400	6.06	2.3	390	102.66	49.39	N/A
DEW-SED-FilterPress (125psi)	400	6.06	N/A	395	51.30	66.10	N/A
DEW-SED-PT-BeltPress	1000	6.06	2.3	974	88.97	52.92	Pass
DEW-SED-PT-Centrifuge	1000	6.06	2.3	930	135.87	42.40	Pass
DEW-SED-PT-FilterPress (100psi)	400	6.06	2.3	370	133.16	42.94	Pass

Notes:
Belt Press testing conducted using Red Twill belt press material from National Filter Media
Filter Press testing conducted using Micronics Polypropylene Mono/Multi Satin 3.3-4.4 CFM Filter Cloth Style 8944
Centrifuge testing was performed at 1,500 revolutions per minute for a period of 10 minutes
All testing conducted on screened material <#200 Sieve
(1) = Selection and dosage of polymer "Solve 137" determined by WaterSolve
PT = Polymer Treated
% = percent
mL=milliliters
lb = pounds

8.0 SOLIDIFICATION / STABILIZATION EVALUATIONS

The primary applications of solidification / stabilization include 1) treatment of liquids and sludges for land disposal, 2) remediation of contaminated sites containing organic and inorganic contaminants, and 3) solidification of materials which are physically unstable. In the remainder of this discussion, the terms solidification, stabilization and immobilization will be used interchangeably. To perform solidification treatment, common binding reagents or proprietary reagents are added to the untreated waste materials. Common binding agents may include materials like Portland cement, blast furnace slag, cement or lime kiln dusts, fly ash and organophillic clays. For this project Type I Portland cement and Mintek's Calciment® product were the only solidification reagents utilized.

Solidification Evaluations

Based on the data from the dewatering phases of the study, AMEC selected two dewatered materials for solidification evaluations. KEMRON conducted bulk dewatering treatments including; 1) Crown Belt Filter simulations on the polymer treated RHD material, which exhibited an initial solids content of approximately six (6) percent. KEMRON performed numerous belt filter treatments to produce the necessary quantity of treated material for solidification evaluations. The typical results for the effectiveness of belt filter treatment is outlined in **Table 2**, and 2) Gravity Drainage treatment which was conducted on the as-received sediment material with an additional 15% surface water incorporation. Typical results for gravity drainage dewatering is summarized in **Table 4**.

KEMRON prepared a total of twelve (12) solidification mixtures including three (3) mixtures using Type I Portland cement for both the belt press and gravity drainage treated materials, and 3 mixtures for each dewatered material using the Mintek Calciment® material. The mixture design formulations are presented in **Table 6** and bench top mixture development data sheets are included in **Appendix H**. The mixtures were developed by placing an aliquot of the appropriate dewatered material into a blending chamber. The reagent was added dry to the dewatered sediment and blended at a rate of approximately 30 to 40 rotations per minute (rpm) until visually homogeneous, approximately 60 to 90 seconds. Immediately following mixture development, the mixtures were placed and tamped into cylindrical molds for curing. Note that all reagent addition rates are calculated on a by-weight basis according to the amount of dewatered sediment being treated. For example for a mixture developed with the Belt Press dewatered material at a 5% Portland cement addition rate, 5 grams of Type I Portland cement was added dry to every 100 grams of the dewatered Belt Press material.

Throughout the curing process, KEMRON monitored the potential setting characteristics of each treated material via pocket penetrometer, and pocket Torvane shear strength testing. Penetrometer and Torvane testing was conducted at curing intervals of 1, 3, and 5 days of curing. The results of penetrometer and Torvane testing are summarized in **Table 6**. Review of this data indicates that Type I Portland cement provided higher penetrometer and Torvane shear strengths than the Calciment® material for both the belt press and gravity drainage materials. Note that with the treatment of the belt press material, the six (6) percent Portland cement addition rate achieved the maximum penetrometer strength of greater than 4.5 tons per square foot (TSF) at the 3 day cure interval and the 8% Portland cement addition did not reach the maximum penetrometer strength until the 5 day cure interval. This may be a function of water available in the material to hydrate the cement.

At the eight (8) day cure interval each solidified material was subjected to Unconfined Compressive Strength (UCS) testing in accordance with ASTM Method D1633. The results of UCS testing is also presented in **Table 6** and bench top testing data sheets are included in **Appendix I**. Table 6 indicates that the belt press dewatered sediment achieved the highest UCS strength of 71.7 pounds per square inch (psi) with a 6% addition rate of Type I Portland cement added dry. Note that the belt filter material treated with a higher addition rate of 8% Portland cement showed a lower UCS strength which may indicate there is insufficient available water to fully hydrate the cement at an 8% addition rate. The treated Gravity Drainage material exhibited the highest UCS strength of 57.2 psi at the 8-day cure, when treated with a 5% Type I Portland cement dry addition.

KEMRON conducted an additional UCS break at the 28 day cure interval to evaluate potential strength gain with longer mixture curing. Review of the 28-day UCS results presented in **Table 6** shows that significant strength gains were observed in the belt press material treated with Portland cement at addition rates of 6 and 8%. Specifically, the UCS strength of the 6% Portland cement treated belt press material increased from 72.0 to 108.3 psi from the 8 to the 28 day curing period, and the strength of the 8% Portland cement treated belt press material increased from 48.1 to 91.3 psi during the same curing interval. The Mintek Calciment treated belt press samples also showed an increase in UCS strength achieving a 31.5 psi value with a 6% Calciment addition at the 28 day cure, and a strength of 44.8 psi with an 8% Calciment addition at day 28.

Review of the 28-day UCS results for the Gravity Drainage treated materials also show significant strength gains between the 8 and 28-day cure intervals. The gravity drainage material treated with a Portland cement addition of 4% showed a strength gain from 35.8 to 61 psi over the extended curing period, and the 5% Portland treated sample exhibited a strength gain from 57.2 to 90.0 psi from the 8 to the 28-day cure period. Unlike the belt press treated materials, the gravity drainage material treated with the Mintek Calciment did not exhibit a notable increase in UCS strength.

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TABLE 6

Summary of Solidification Evaluations

KEMRON Sample Number	Untreated Material Type	Reagent Type	Reagent Addition % by Wet Soil wt.	Cure Day	Pocket Penetromer (TSF)	Pocket Torvane kg/cm^2	UCS ASTM D1633 (psi)	ASTM D7263 Bulk Unit Weight (lb/ft^3)	Moisture Content ASTM D2216	
									Moisture Content (%)	Percent Solids (%)
0664-001	DEW-SED-PT-Belt Press	Type I Portland Cement	3.0	1	0.0	0.5				
				3	0.0	0.5				
				5	0.25	2.8				
				8			5.4	90.4	90.6	52.47
				28			8.8	91.1	91.3	52.28
0664-002	DEW-SED-PT-Belt Press	Type I Portland Cement	6.0	1	2.0	2.5				
				3	>4.5	6.25				
				5	>4.5	5.5*				
				8			72.0	89.7	85.7	53.87
				28			108.3	89.2	85.3	53.96
0664-003	DEW-SED-PT-Belt Press	Type I Portland Cement	8.0	1	2.0	2.5				
				3	4.0	4.5				
				5	>4.5	4.5				
				8			48.1	90.6	80.5	55.41
				28			91.3	89.6	80.8	55.32
0664-004	DEW-SED-PT-Belt Press	Mintek Calciment	3.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.25	1.0				
				8			F	91.5	91.1	52.33
				28			F	88.5	94.8	51.34
0664-005	DEW-SED-PT-Belt Press	Mintek Calciment	6.0	1	0.0	1.0				
				3	0.0	1.0				
				5	0.25	2.5				
				8			10.0	92.6	81.3	55.15
				28			31.5	92.1	85.2	54.00
0664-006	DEW-SED-PT-Belt Press	Mintek Calciment	8.0	1	0.0	1.0				
				3	0.0	1.0				
				5	0.25	2.5				
				8			9.8	93.9	82.8	54.72
				28			33.8	92.0	83.7	54.45
0664-007	DEW-SED-Gravity Drain	Type I Portland Cement	2.0	1	0.0	1.0				
				3	0.25	1.5				
				5	0.5	2.0				
				8			3.2	91.6	77.6	56.31
				28			5.5	97.1	84.3	54.25
0664-008	DEW-SED-Gravity Drain	Type I Portland Cement	4.0	1	1.5	3.5				
				3	4.0	3.5				
				5	>4.5	3.5				
				8			35.8	94.8	77.5	56.32
				28			61.0	92.7	78.8	55.92
0664-009	DEW-SED-Gravity Drain	Type I Portland Cement	5.0	1	1.5	3.0				
				3	3.75	4.0				
				5	>4.5	1.5*				
				8			57.2	95.4	72.1	58.12
				28			90.0	94.5	73.8	57.53
0664-010	DEW-SED-Gravity Drain	Mintek Calciment	2.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.0	0.0				
				8			F	93.4	81.3	55.15
				28			F	91.6	85.0	54.06
0664-011	DEW-SED-Gravity Drain	Mintek Calciment	4.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.5	2.0				
				8			9.1	97.4	73.1	57.76
				28			11.5	95.6	75.2	57.07
0664-012	DEW-SED-Gravity Drain	Mintek Calciment	5.0	1	0.0	0.5				
				3	0.0	0.0				
				5	0.5	1.8				
				8			11.0	96.2	76.7	56.60
				28			18.5	94.3	76.6	56.64

Notes:
% = Percent
Wt= Weight
s.u. = standard units
lb/ft^3 = pounds per cubic foot
= Grey Shading, Testing not requested
Belt Press feed material is a 6% solids slurry, polymer treated. Dewatered sediment % solids of 49.14%
TSF= Tons per square foot
* pocket torvane could not penetrate the material sufficiently for an accurate test
psi= pounds per square inch
F= Fails under its own weight

9.0 EFFLUENT WATER TREATMENT EVALUATIONS

KEMRON performed evaluations of the quality of the effluent water collected during the bulk treatment of the RHD material using the belt filter simulations. Aliquots of the raw belt press effluent were forwarded to Alpha Analytical for total metals and total PCB analyses. To evaluate the potential reduction in metals and PCB concentrations in the effluent water, KEMRON performed filtration testing using filter media with nominal pore sizes of 0.45 microns and 0.10 microns. Aliquots of each filtered water was forwarded for analyses.

Additionally, KEMRON conducted carbon isotherm testing on both the raw effluent water from belt press treatment as well as the belt press water which had been filtered through the 0.1 micron filter media, to determine the potential effectiveness of activated carbon adsorption at reducing concentrations of PCBs from the belt press effluent water. KEMRON performed two individual carbon isotherm tests using carbon addition rates of 0.0 (a control), 10, 20, 40 and 80 grams of bituminous coal granular activated carbon (GAC) per liter of test water. The GAC material utilized in the testing was product F-400 provided by Calgon Carbon Corporation.

The isotherm testing was conducted on raw effluent water collected during belt filter treatment, and on belt filter effluent water which had been pre-filtered through a 0.1 micron filter media. Five (5) separate sample jars were prepared for each isotherm test. KEMRON placed one (1) liter of the effluent water to be tested into each of the 5 jars, and the outlined quantity of GAC was added to the appropriate jar. The jars were agitated for a period of two (2) hours using a multi-station gang stirrer equipped with stainless steel mixing paddles. Following the 2-hour mixing period each jar sample was filtered through a standard nylon paint filter and submitted to Alpha Analytical for total PCB analyses. Analytical results were provided from Alpha Analytica directly to the client and not included in this report. The Sample ID matrix for the analytical tesing is as follows:

Sample Matrix for Belt Press Effluent Water Treatment

SAMPLE ID	Description
SW-DF-BFF-0.1um	Belt Press Effluent water, filtered through a 0.1 micron sample. PCB and Metals analysis
SW-DF-BFF-0.1um Ctr	Belt Press Effluent water, filtered through a 0.1 micron sample, control sample of Isotherm Carbon treatment testing. PCB and Metals analysis
SW-DF-BFF-0.1um 10C	Belt Press Effluent water, filtered through a 0.1 micron sample, 10 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB and Metals analysis
SW-DF-BFF-0.1um 20C	Belt Press Effluent water, filtered through a 0.1 micron sample, 20 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB and Metals analysis
SW-DF-BFF-0.1um 40C	Belt Press Effluent water, filtered through a 0.1 micron sample, 40 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB and Metals analysis
SW-DF-BFF-0.1um 80C	Belt Press Effluent water, filtered through a 0.1 micron sample, 80 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB and Metals analysis
SW-DF-BFT- Crt	Belt Press Effluent water, unfiltered, control sample of Isotherm Carbon treatment testing. PCB analysis only.
SW-DF-BFT- 10C	Belt Press Effluent water, unfiltered, 10 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB analysis only.
SW-DF-BFT- 20C	Belt Press Effluent water, unfiltered, 20 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB analysis only.
SW-DF-BFT- 40C	Belt Press Effluent water, unfiltered, 40 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB analysis only.
SW-DF-BFT- 80C	Belt Press Effluent water, unfiltered, 80 grams carbon/1L effluent water for Isotherm Carbon treatment. PCB analysis only.

10.0 CONCLUSIONS

KEMRON conducted treatability testing services for AMEC to evaluate potential dewatering technologies capable of increasing the solids content of mechanically dredged and simulated hydraulic dredge sediment materials from the site. KEMRON performed dewatering simulations including belt press, centrifuge, filter press, geotextile Geotube, and gravity drainage dewatering applications. Additionally, KEMRON conducted solidification treatment applications to evaluate the potential for Type I Portland cement and Calciment® to further improve the physical characteristics of candidate dewatered materials, primarily improving the strength of the treated materials.

Based on the results of testing, the use of the cationic organic flocculant “Solve 137” polymer, distributed by WaterSolve was highly effective at separating the solids and liquid phases of the simulated hydraulic dredge material, and increased the effectiveness of mechanical dewatering techniques with the exception of the Baroid filter press testing. The Baroid filter press is often utilized to simulate potential dewatering technologies such as plate and frame dewatering. Testing indicated that the Baroid filter press simulations were more effective without the use of the polymer. All of the dewatering technologies evaluated achieved some degree of solids content increase. However, gravity drainage treatment was the only dewatering technology that did not produce a treated material capable of passing paint filter testing.

Solidification evaluations were conducted on dewatered materials from gravity drainage testing and belt press treatments. Solidification reagents evaluated included Type I Portland cement and Calciment® which were individually added dry to both dewatered materials. The results of testing conducted on the treated materials during the solidification phase of the study indicate that Portland cement was more effective at increasing the UCS strength of the dewatered sediments than the Calciment® reagent. The selection of the appropriate reagent addition rate will likely be dependent on the desired UCS strength of the treated material. Testing indicated that a 6% addition of Portland cement added to the belt press residual sediment achieved a UCS value of 72.0 psi after 8 days of curing, and increased to 108.3 psi at the 28-day cure interval. The 8% Portland addition treated belt press material exhibited lower UCS values at the same cure dates with strength values of 48.1 psi after 8 days and 91.3 psi after 28 days. Treatments utilizing the Mintek Calciment reagent applied at addition rates of 6 and 8% to the belt press material achieved significantly lower strengths at the 8 day cure date but did exhibit an increase in strength at the 28-day cure time with values of 31.5 and 33.8 psi respectively.

Testing conducted on the gravity drainage dewatered sediment showed that a 4% dry addition of Portland cement showed an 8 day UCS value of 35.8 psi and increased to 61.0 psi after 28 days. The 5% addition rate of Portland cement resulted in a UCS value of 57.2 psi after 8 days of curing and increased to 90.0 psi at the 28-day cure. The gravity drainage material treated with the Calciment reagent did not exhibit a significant increase in strength from day 8 to the 28-day cure.

This report should be reviewed in its entirety including all attachments prior to making decisions concerning a remedial approach. This study is intended to suggest what will occur in the field but does not guarantee the same results.

AMEC FOSTER WHEELER
STRATFORD DEWATERING
KEMRON PROJECT No. SH0664

TABLE 1

UNTREATED PHYSICAL PROPERTIES TESTING

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE ID
			Homogenized Sediment
Moisture Content	ASTM D2216		
ASTM Moisture Content		%	72.69
Percent Solids		%	57.91
Bulk Unit Weight	ASTM D7263	pcf	98.7
Atterburg Limits	ASTM D4318 Method B		
Liquid Limit			70
Plastic Limit			37
Plasticity Index			33
Particle Size Distribution	ASTM D422		
Gravel		%	0.0
Sand		%	23.9
Silt		%	64.3
Clay		%	11.8
Sample Description	ASTM D2487		Dark brown elastic silt with sand
Sample Classification	ASTM D2487		MH

Notes:
% = Percent
pcf = pounds per cubic foot
Sample descriptions based on the Unified Classification System.
Sample color determined by the Munsell Soil Color Charts.

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TABLE 2

Summary of Mechanical Dewatering Evaluations

Sample Identification	Feed Volume (mL)	Feed Solids (%)	Polymer Addition[(1)] (lb/dry-ton)	Effluent Collected (mL)	Final Moisture Content (%) ASTM D2216	Final Percent Solids (%)	Paint Filter Test (Pass/Fail) EPA 9095
DEW-SED-PT-BeltPress	1000	6.06	2.3	974	88.97	52.92	Pass
DEW-SED-PT-Centrifuge	1000	6.06	2.3	930	135.87	42.40	Pass
DEW-SED-PT-FilterPress (100psi)	400	6.06	2.3	370	133.16	42.94	Pass

Notes:
Belt Press testing conducted using Red Twill belt press material from National Filter Media
Filter Press testing conducted using Micronics Polypropylene Mono/Multi Satin 3.3-4.4 CFM Filter Cloth Style 8944
Centrifuge testing was performed at 1,500 revolutions per minute for a period of 10 minutes
All testing conducted on screened material <#200 Sieve
(1) = Selection and dosage of polymer "Solve 137" determined by WaterSolve
PT = Polymer Treated
% = percent
mL=milliliters
lb = pounds

AMEC FW
STRATFORD DEWATERING
KEMRON PROJECT NO. SH0664

TABLE 3
Summary of Geotextile Fabric Testing

Sample Identification	Feed Soilds (%)	Polymer Addition (lb/dry-ton)	Cake Evaluations	
			ASTM D2216	
			Cake Percent Solids (%)	Paint Filter Test (Pass/Fail)
DEW-SED-PT-RDT	6.06	2.3	32.21	Fail
DEW-SED-PT-GDT*	6.06	2.3	49.17	Pass

Notes:
% = percent

Applied Technologies Group,
KEMRON Environmental Services, Inc.

AMEC FW
STRATFORD DEWATERING STUDY
KEMRON PROJECT NO. SH0664

TABLE 4
Summary of Gravity Drainage Testing

Sample Identification	Gravity Drainage Treatment Time (Hrs/Days)	Initial Soil Mass (g)	Final Soil Mass (g)	Effluent Collected (mL)	Initial Percent Solids (%)	Cake Evaluations								
						ASTM D2216	ASTM D7263	Cake Pocket Penetrometer (TSF)	Cake Shear Strength (Kg/cm^2)	Paint Filter Test (Pass/Fail)	Unconfined Compressive Strength ASTM D2166			
						Final Percent Solids (%)	Final Density (lb/ft^3)				Moisture Content (%)	Bulk Density (lb/ft^3)	Dry Density (lb/ft^3)	UCS (lb/in^2)
DEW-SED-GravityDrain	72 Hr / 3 Day	1134.5	1052.0	80.69	50.36	56.32	92.9	0.0	0.10	Fail				F
DEW-SED-GravityDrain	120 Hr / 5.0 Day	1134.5	1034.0	98.69	50.36	56.52								

Notes:

Gravity Drain Testing conducted for 120 hours (5 days)

DEW-SED-Gravity Drain- raw, unscreened sediment with no polymer treatment and 15% water addition by bulk weight

mL= milliliters

g = grams

TSF=tons per square foot

% = percent

Kg/cm^2=kilograms per square centimeter

lbs/ft^3=pounds per cubic foot

lb/in^2 = pounds per square inch

Shear Strength measured using a laboratory vane shear apparatus

Applied Technologies Group,
KEMRON Environmental Services, Inc.

AMEC FW
STRATFORD DEWATERING
KEMRON PROJECT NO. SH0664

TABLE 5

Additional Mechanical Dewatering Evaluations

Sample Identification	Feed Volume (mL)	Feed Solids (%)	Polymer Addition[(1)] (lb/dry-ton)	Effluent Collected (mL)	Final Moisture Content (%) ASTM D2216	Final Percent Solids (%)	Paint Filter Test (Pass/Fail) EPA 9095
DEW-SED-FilterPress (100psi)	400	6.06	N/A	395	51.02	66.22	N/A
DEW-SED-PT-FilterPress (125psi)	400	6.06	2.3	390	102.66	49.39	N/A
DEW-SED-FilterPress (125psi)	400	6.06	N/A	395	51.30	66.10	N/A
DEW-SED-PT-BeltPress	1000	6.06	2.3	974	88.97	52.92	Pass
DEW-SED-PT-Centrifuge	1000	6.06	2.3	930	135.87	42.40	Pass
DEW-SED-PT-FilterPress (100psi)	400	6.06	2.3	370	133.16	42.94	Pass

Notes:
Belt Press testing conducted using Red Twill belt press material from National Filter Media
Filter Press testing conducted using Micronics Polypropylene Mono/Multi Satin 3.3-4.4 CFM Filter Cloth Style 8944
Centrifuge testing was performed at 1,500 revolutions per minute for a period of 10 minutes
All testing conducted on screened material <#200 Sieve
(1) = Selection and dosage of polymer "Solve 137" determined by WaterSolve
PT = Polymer Treated
% = percent
mL=milliliters
lb = pounds

AMEC FW
STRATFORD DEWATERING STUDY
KEMRON Project No. SH0664

TABLE 6

Summary of Solidification Evaluations

KEMRON Sample Number	Untreated Material Type	Reagent Type	Reagent Addition % by Wet Soil wt.	Cure Day	Pocket Penetromer (TSF)	Pocket Torvane kg/cm^2	UCS ASTM D1633 (psi)	ASTM D7263 Bulk Unit Weight (lb/ft^3)	Moisture Content ASTM D2216	
									Moisture Content (%)	Percent Solids (%)
0664-001	DEW-SED-PT-Belt Press	Type I Portland Cement	3.0	1	0.0	0.5				
				3	0.0	0.5				
				5	0.25	2.8				
				8			5.4	90.4	90.60	52.47
0664-002	DEW-SED-PT-Belt Press	Type I Portland Cement	6.0	1	2.0	2.5				
				3	>4.5	6.25				
				5	>4.5	5.5*				
				8			72.0	89.7	85.65	53.87
0664-003	DEW-SED-PT-Belt Press	Type I Portland Cement	8.0	1	2.0	2.5				
				3	4.0	4.5				
				5	>4.5	4.5				
				8			48.1	90.6	80.49	55.41
0664-004	DEW-SED-PT-Belt Press	Mintek Calciment	3.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.25	1.0				
				8			F	91.5	91.11	52.33
0664-005	DEW-SED-PT-Belt Press	Mintek Calciment	6.0	1	0.0	1.0				
				3	0.0	1.0				
				5	0.25	2.5				
				8			10.0	92.6	81.31	55.15
0664-006	DEW-SED-PT-Belt Press	Mintek Calciment	8.0	1	0.0	1.0				
				3	0.0	1.0				
				5	0.25	2.5				
				8			9.8	93.9	82.76	54.72
0664-007	DEW-SED-Gravity Drain	Type I Portland Cement	2.0	1	0.0	1.0				
				3	0.25	1.5				
				5	0.5	2.0				
				8			3.2	91.6	77.58	56.31
0664-008	DEW-SED-Gravity Drain	Type I Portland Cement	4.0	1	1.5	3.5				
				3	4.0	3.5				
				5	>4.5	3.5				
				8			35.8	94.8	77.54	56.32
0664-009	DEW-SED-Gravity Drain	Type I Portland Cement	5.0	1	1.5	3.0				
				3	3.75	4.0				
				5	>4.5	1.5*				
				8			57.2	95.4	72.06	58.12
0664-010	DEW-SED-Gravity Drain	Mintek Calciment	2.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.0	0.0				
				8			F	93.4	81.33	55.15
0664-011	DEW-SED-Gravity Drain	Mintek Calciment	4.0	1	0.0	0.0				
				3	0.0	0.0				
				5	0.5	2.0				
				8			9.1	97.4	73.12	57.76
0664-012	DEW-SED-Gravity Drain	Mintek Calciment	5.0	1	0.0	0.5				
				3	0.0	0.0				
				5	0.5	1.8				
				8			11.0	96.2	76.66	56.60

Notes:
% = Percent
Wt= Weight
s.u. = standard units
lb/ft^3 = pounds per cubic foot
= Grey Shading, Testing not requested
Belt Press feed material is a 6% solids slurry, polymer treated. Dewatered sediment % solids of 49.14%
TSF= Tons per square foot
* pocket torvane could not penetrate the material sufficiently for an accurate test
psi= pounds per square inch
F= Fails under its own weight

Appendix A:
Chain of Custody Record

ESI

EnviroSystems, Inc.
1 Lafayette Road
P.O. Box 778
Hampton, N.H. 03843

Voice: 603-926-3345
FAX: 603-926-3521

ESI Job No:

CHAIN OF CUSTODY DOCUMENTATION

Client:

Contact: Tony DeLano

Page 1 of 1

Report to: Tony DeLano

Project Number:

Invoice to: Tony DeLano

Address: Chelmsford, MA 01824

Project Manager: Tony DeLano

Voice: 978-392-5319

Fax:

Quote No:

Protocol: RCRA SDWA NPDES USCOE Other

Lab Number (assigned by lab)	Your Field ID: (must agree with container)	Date Sampled	Time Sampled	Sampled By	Grab or comp-osit (G/C)	Container Size (ml.)	Container Type (P/G/T)	Field Preser-vation	Matrix S=Solid W=Water	Filter N=Not needed F=Done in field L=Lab to do	Analyses Requested\ Special Instructions:
		11/21/17	1635		G		P	N/P	S	N/A	
	SW-DF-BFF-0001	11/21/17		SDM	G		P	N/P	S	F	Metals/Hg
	SW-DF-BFF-0002					1000/250	G/P	N/P	S	F	PCB Aroclors,
	SW-DF-GTT-0001				G		P	N/P	S	N	Metals/Hg
		11/21/17		SDM	G		P	N/P	W	F	PCB homologs,

Relinquished By: Date: Time: Received By: Date: Time:

Relinquished By: Date: Time: Received at Lab By: Date: Time:

Comments:

Sample Delivery Group No: Page of

Appendix B:

Untreated Physical Properties Data Sheets

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	Homogenized Sediment
TESTING DATE:	10/11/17
TESTED BY:	CKB
TRACKING CODE:	B695_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0608	g	1.0500	g	1.0475	g
3. WT WET SOIL + TARE	40.1177	g	49.6370	g	45.8871	g
4. WT DRY SOIL + TARE	23.5740	g	29.3079	g	27.0180	g
5. WT WATER, Ww	16.5437	g	20.3291	g	18.8691	g
6. WT DRY SOIL, Ws	22.5132	g	28.2579	g	25.9705	g
7. ASTM MOISTURE CONTENT	73.48	%	71.94	%	72.66	%
8. PERCENT SOLIDS	57.64	%	58.16	%	57.92	%
9. AVERAGE ASTM MOISTURE CONTENT	72.69	%				
10. AVERAGE PERCENT SOLIDS	57.91	%				

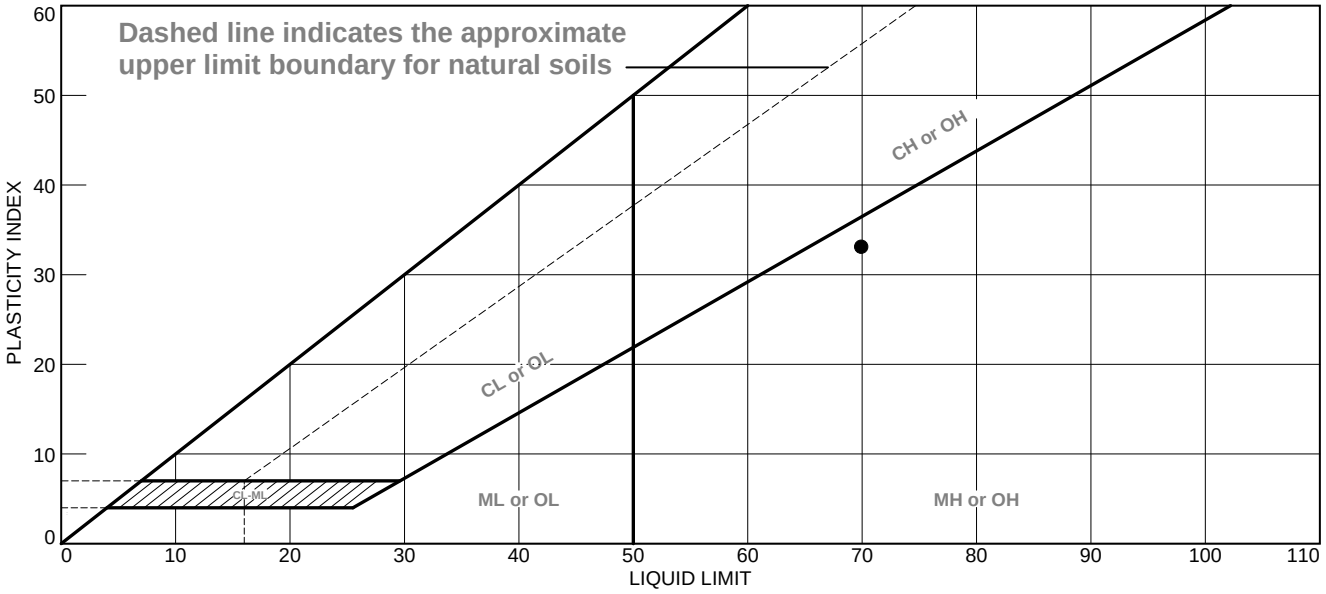
UNIT WEIGHT DETERMINATION

DATA SHEET
ASTM D7263

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	Homogenized Sediment
TESTING DATE:	10/11/17
TESTED BY:	CKB
TRACKING CODE:	B695_UW

UNIT WEIGHT (DENSITY)							
1. SAMPLE NO.	A		B		C		
2. WT OF MOLD (tare weight)	18.13	g	18.13	g	18.13	g	
3. WT OF MOLD + SOIL	348.07	g	339.40	g	343.63	g	
4. WT OF WET SOIL, W	329.94	g	321.27	g	325.50	g	
5. DIAMETER OF SPECIMEN, D	2.00	in	2.00	in	2.00	in	
6. HEIGHT OF SPECIMEN, H	4.00	in	4.00	in	4.00	in	
7. VOLUME OF SPECIMEN	12.57	in^3	12.57	in^3	12.57	in^3	
8. BULK UNIT WEIGHT	100.0	pcf	97.4	pcf	98.7	pcf	
9. BULK SPECIFIC GRAVITY	1.6		1.6		1.6		
10. AVERAGE BULK UNIT WEIGHT	98.7	pcf					
11. AVERAGE BULK SPECIFIC GRAVITY	1.6						

LIQUID AND PLASTIC LIMITS TEST REPORT





	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Dark brown elastic silt with sand	70	37	33	95.9	76.1	MH

Project No. SH0664 **Client:** AMEC Foster Wheeler

Project: Stratford Dewatering

Sample Number: Homogenized Sediment

KEMRON Environmental Services Inc.

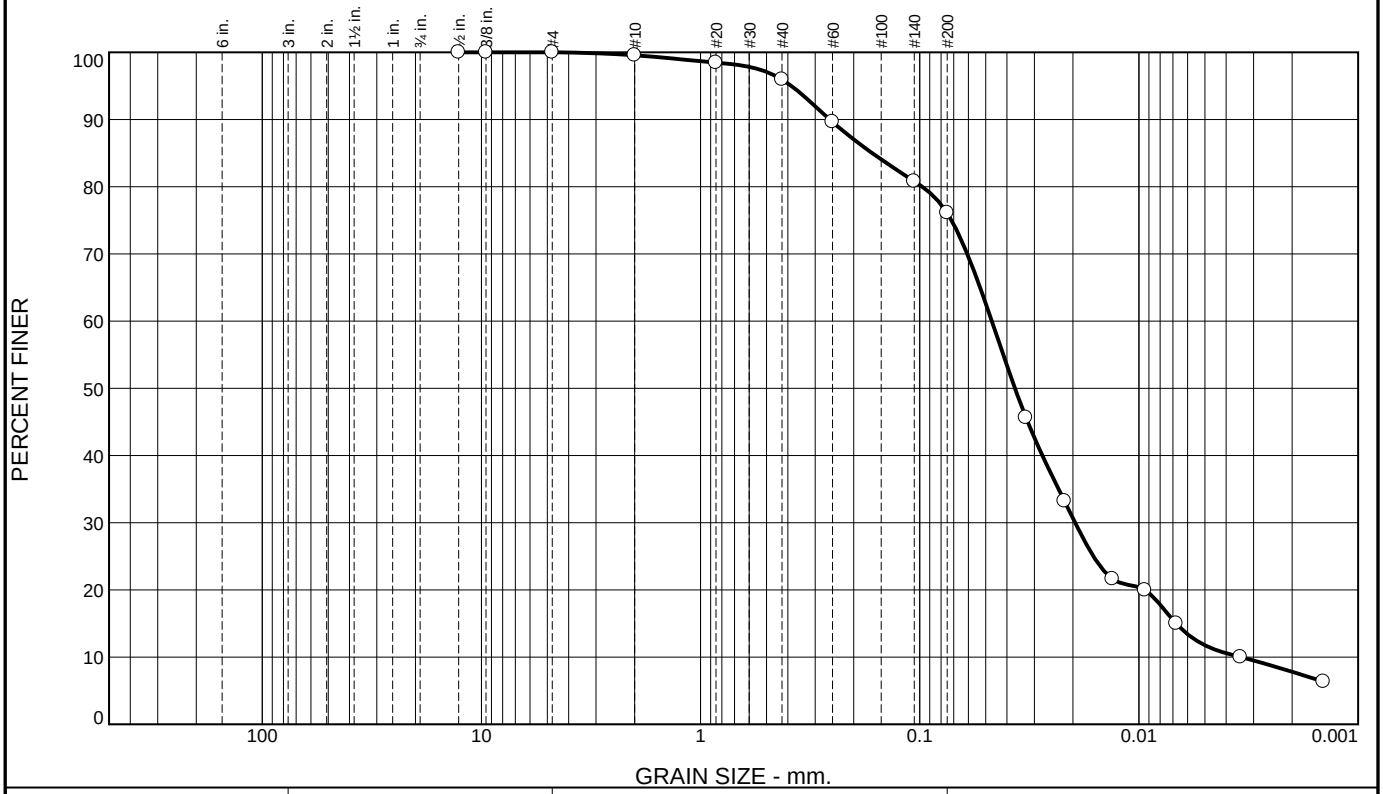
Atlanta, Georgia

Remarks:

Figure B695_AT

Tested By: JDM **Checked By:** TAJ

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.4	3.7	19.8	64.3	11.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.5	100.0		
0.375	100.0		
#4	100.0		
#10	99.6		
#20	98.5		
#40	95.9		
#60	89.6		
#140	80.8		
#200	76.1		
0.0328 mm.	45.6		
0.0219 mm.	33.2		
0.0132 mm.	21.6		
0.0094 mm.	20.0		
0.0068 mm.	15.0		
0.0034 mm.	10.0		
0.0014 mm.	6.3		

* (no specification provided)

Soil Description

Dark brown elastic silt with sand

Atterberg Limits

PL= 37 LL= 70 PI= 33

Coefficients

D_{90}= 0.2575 D_{85}= 0.1649 D_{60}= 0.0469
D_{50}= 0.0368 D_{30}= 0.0195 D_{15}= 0.0068
D_{10}= 0.0034 C_u= 13.70 C_c= 2.38

Classification

USCS= MH AASHTO= A-7-5(28)

Remarks

Sample Number: Homogenized Sediment

Date: 10/11/2017

KEMRON Environmental Services Inc.
Atlanta, Georgia

Client: AMEC Foster Wheeler
Project: Stratford Dewatering
Project No: SH0664 **Figure** B695_GR

Tested By: JDM **Checked By:** TAJ

Appendix C:

WaterSolve Polymer Evaluations Report

DEWATERING PERFORMANCE TRIAL
KEMRON ENVIRONMENTAL SERVICES, INC
STRATFORD DEWATERING

For:
James Moyer
KEMRON ENVIRONMENTAL SERVICES, INC
1349-A Ellsworth Industrial Blvd.
Atlanta, GA 30318

By:
WaterSolve, LLC
5031 68th St., SE
Caledonia, MI 49316
www.gowatersolve.com
616-575-8693

October 24, 2017

1. Scope of Work

WaterSolve, LLC was tasked to perform a Geotube® dewatering performance trial and cone tests on a sample labelled "HOMOGENIZED SEDIMENT". The objectives of these dewatering trials were to identify chemical conditioning program(s), identify polymer flocculent(s), and dosing rate(s) for a potential Geotube® dewatering application. The objectives of subsequent cone tests were to measure total solids (TS) of the flocculated, contained, and dewatered residual after passage through the GT500D Geotube® fabric.

2. Materials & Methods

A gallon sample collected from the Stratford dewatering project was received at WaterSolve's Laboratory (Caledonia, MI) on October 23, 2017. Samples of residual were homogenized and 150-mL samples were placed in graduated, glass jars.

Several polymers (emulsions) were "made-down" at a 0.5% concentration for this dewatering trial. Polymer (33 to 200-ppm) was added to a sample with a 10-mL plastic syringe and moderately tumbled five to seven times. Observations of water release rate, water clarity, and flocculent appearance were recorded on appropriate data sheets (Appendix A). Polymer(s) that flocculated and dewatered these residuals most effectively were re-evaluated with lower doses in order to isolate the most efficient dewatering and flocculating polymer(s). A Hach DR 2800 was used to measure TSS (Total Suspended Solids) after the samples were poured through the Geotube® GT500D fabric with a measurable limit of up to 750-mg/L suspended solids.

Percent total solids (dry weight) of the initial residual sample and dewatered cake sample (captured on GT500D Geotube® fabric) were measured.

3. Results

Chemical conditioning with 137 was determined to flocculate and dewater the residual most effectively compared to the other products (Appendix A). Water release volume and flocculent appearance were excellent when a 2-mL dose of Solve 137 (67-ppm, 2.3-lbs/dry ton) was added to a 150-mL sample.

The provided sample was 5.8-percent dry weight solids. When a 1,000-mL sample was conditioned with Solve 137 and passed through the Geotube® GT500D fabric, percent solids increased to 35.2-percent after sixty minutes of drying time (Appendix C). From this 1,000-mL conditioned sample, 750-mL and 900-mL of water was released in minute and sixty minutes, respectively, after passage though the fabric. The TSS of the filtrate was 7-mg/L.

4. Recommendations

We recommend a product application of Solve 137 (2.3-lbs/dry ton dose) for dewatering the "HOMOGENIZED SEDIMENT" sample in a Geotube® application in order to pass a paint filter test for subsequent disposal. Solve 137 is required to be made-down at 0.5-percent with a polymer make-down unit or aged in batch/feed tanks prior to injection into the residual line. Moderate to high mixing energy is required between the polymer introduction points and the Geotube® containers (e.g., three to five bends in the discharge line and/or inline static mixers). We would anticipate an increase in the Solve 137 dosage, possibly up to 5% more, if mechanical (belt filter press or centrifuge) technologies are used for dewatering.

Expected time to being able pass a Paint Filter Test is unpredictable in a Geotube® container from these bench-scale experiments. An onsite or laboratory hanging bag or Geotube® dewatering trial (GDT) may be used and is recommended if the timeline for achieving project goals of dry weight solids and if Geotube® filtrate characteristics are in question for this application. Additional dewatering evaluations over time are recommended if project objectives for consolidation are greater than passing a Paint Filter Test.

Due to potential variability of the material, daily on-site testing and chemical conditioning verification are recommended during pumping operations.

WaterSolve LLC does not make any implied warranty of any kind. Customer is solely responsible for determining the means and methods of the Product(s) use and whether or not Product(s) is suitable or desirable for Customer's intended uses. Customer agrees not to make any claim against Watersolve LLC based upon, or arising out of or relating to any advice or any technical information given to the Customer by Watersolve LLC for information purposes only and shall indemnify and hold Watersolve LLC harmless from any and all claims asserted by any third party arising out of or related to the Customer's use of Watersolve LLC's Product(s). Any technical information if given by Watersolve LLC to the Customer is without any consideration and use of such information by Customer be at consumer's own risk and shall not relieve the Customer from ultimate liability to ensure Product(s) are used properly per Project and Product(s) specifications.

Page ____ of ____

WaterSolve, LLC

Clearly thinking about your water treatment

DEWATERING PERFORMANCE TRIAL

Date: 12/14/17
Analyst: Dan W

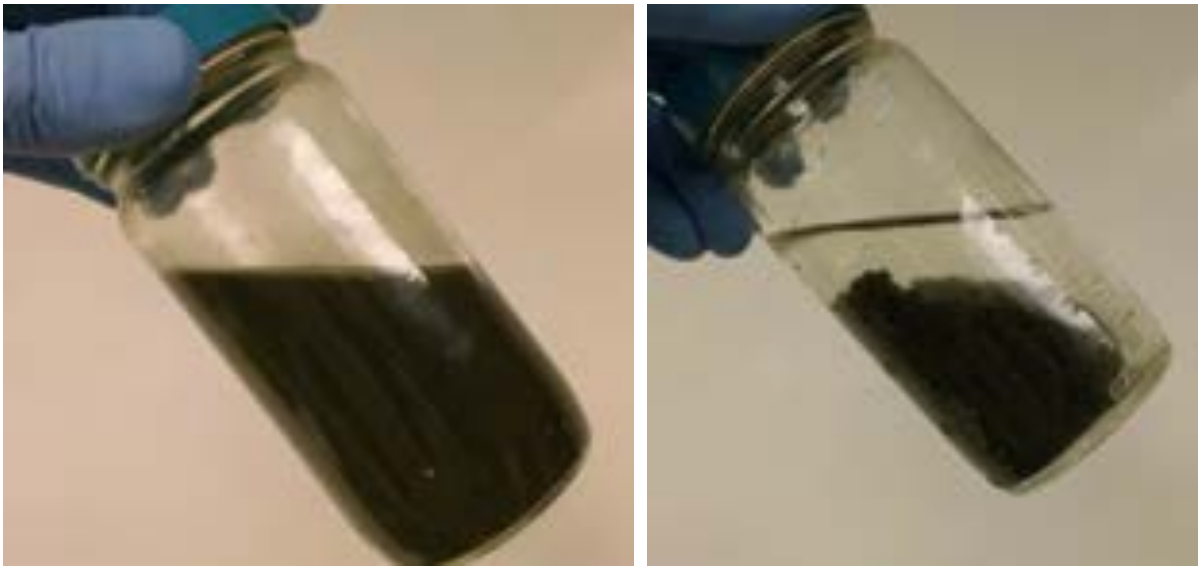
Customer: KCP&L STRATPUMP RR#661
Location:
Equipment in Service:

1=Best 6=Worst

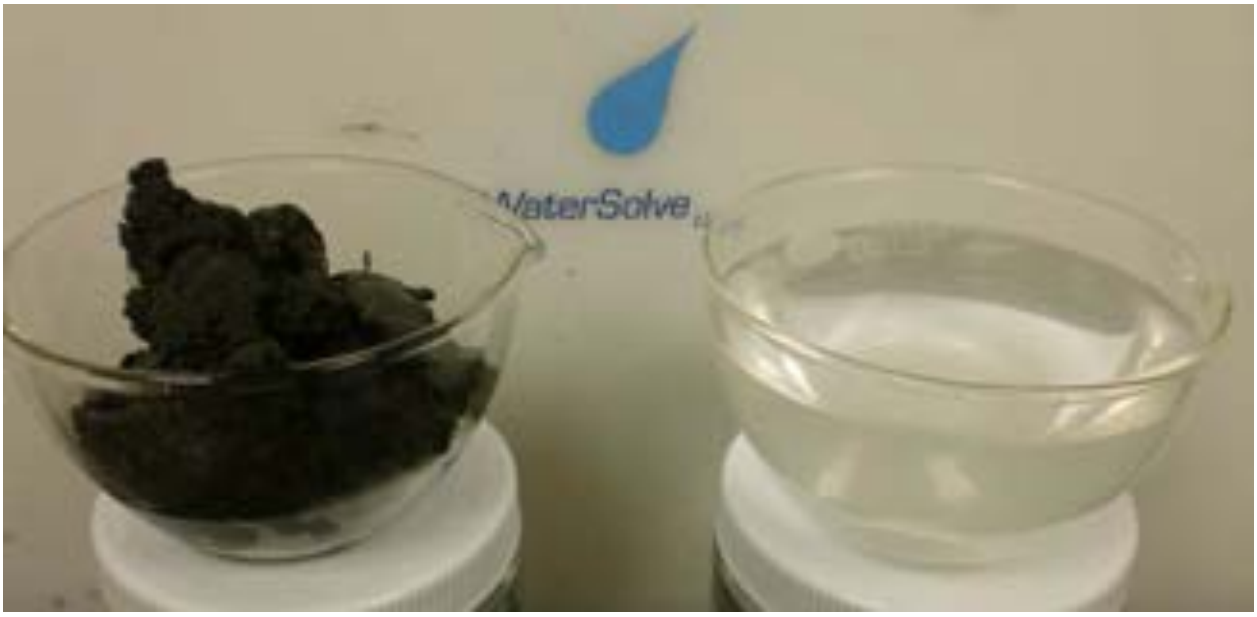
Jar Number	Polymer Name	Polymer Dosage (mL)	Sample Size (mL)	Water Rel. Rate (1-6)	Water Clarity (1-6)	Floc Appearance (1-6)	Comments
	Polymer make-down concentration = 0.5 %						
	Dilution of test sample = 0						
1							
2	9248	2mL	150mL	4	1-2	3-4	
3	9248	4mL	150mL	3	1-2	2	
4	9248	6mL	150mL	1-2	1-2	1-2	- Good floc, but clarity not
5	9248	8mL	150mL	1-2	1-2	1-2	- nice combination
6	9330	1mL	150mL	#2	3	1-2	- quick floc, needs tight shear w/
7	9330	2mL	150mL	2	2	2	w/ 150
8	9248/9330	1mL/1mL	150mL	2	1-2	2	
9							
10	137	2mL	150mL	1-2	1-2	1-2	- lighter floc, but, deal with shear w
11							
12	137	2mL	150mL	2-3	1-2	2-3	
13	137	4mL	150mL	1-2	1-2	1-2	- strong 137 with product
14	2185	4mL	150mL	4	1-2	4	
15	2160	4mL	150mL	2	1-2	2	- 2185 and 137
16	2160	6mL	150mL	3	1-2	3	
17	2186	4mL	150mL	2	1-2	2-3	
18	137	1mL	150mL	2-3	1-2	4	
19	137	2mL	150mL	1-2	1-2	1-2	- Relatively thick GT floc
20	137	3mL	150mL	1-2	1-2	1-2	
21							
22							
23							
24							
25							
26							
27							
28							

Cone Test / RDT: 150 mL sample conditioned with 13.2 mL of 137 poured thru GT500D Geotube® filter.
Filtrate Quality: TSS- 7.8 mg/L Turbidity- _____ NTU
Filtrate collected@ 1min/ 750mL, 60min/ 900mL

Appendix B – Photographs



One hundred fifty milliliter sample prior to conditioning (Left). One hundred fifty milliliter sample conditioned with Solve 137 (Right).



A one thousand milliliter sample conditioned with Solve 137 was poured through the GT500D Geotube® fabric. The captured cake (Left) and filtrate (Right) are shown above.

Appendix C – Percent Solids

Total Solids Determination - Percent Dry Weight

Customer Name/Application KEMRON / STRATFORD PROJECT

Date 10/31/17 Technician DAW Oven Temperature 105°C

Sample ID PROVIDED SAMPLE Dish Number 7 Dilution Ø

Dish (dry) = 50.846 g Dish, Sample (wet) = 148.607 g Dish, Sample (dry) = 56.552 g

Dish, sample (wet) – Dish (dry) = 97.761 (A) Dish, sample (dry) – Dish (dry) = 5.706 (B)

Total Solids B ÷ A x 100 = 5.8 % Dry Weight Solids

Sample ID CAKE TEST CAKE Dish Number ____ Dilution ____

Dish (dry) = ____ g Dish, Sample (wet) = ____ g Dish, Sample (dry) = ____ g

Dish, sample (wet) – Dish (dry) = ____ (A) Dish, sample (dry) – Dish (dry) = ____ (B)

MOISTURE ANALYZER **Total Solids** B ÷ A x 100 = 35.2 % Dry Weight Solids

---

Sample ID ____ Dish Number ____ Dilution ____

Dish (dry) = ____ g Dish, Sample (wet) = ____ g Dish, Sample (dry) = ____ g

Dish, sample (wet) – Dish (dry) = ____ (A) Dish, sample (dry) – Dish (dry) = ____ (B)

Total Solids B ÷ A x 100 = ____ % Dry Weight Solids

Sample ID ____ Dish Number ____ Dilution ____

Dish (dry) = ____ g Dish, Sample (wet) = ____ g Dish, Sample (dry) = ____ g

Dish, sample (wet) – Dish (dry) = ____ (A) Dish, sample (dry) – Dish (dry) = ____ (B)

Total Solids B ÷ A x 100 = ____ % Dry Weight Solids

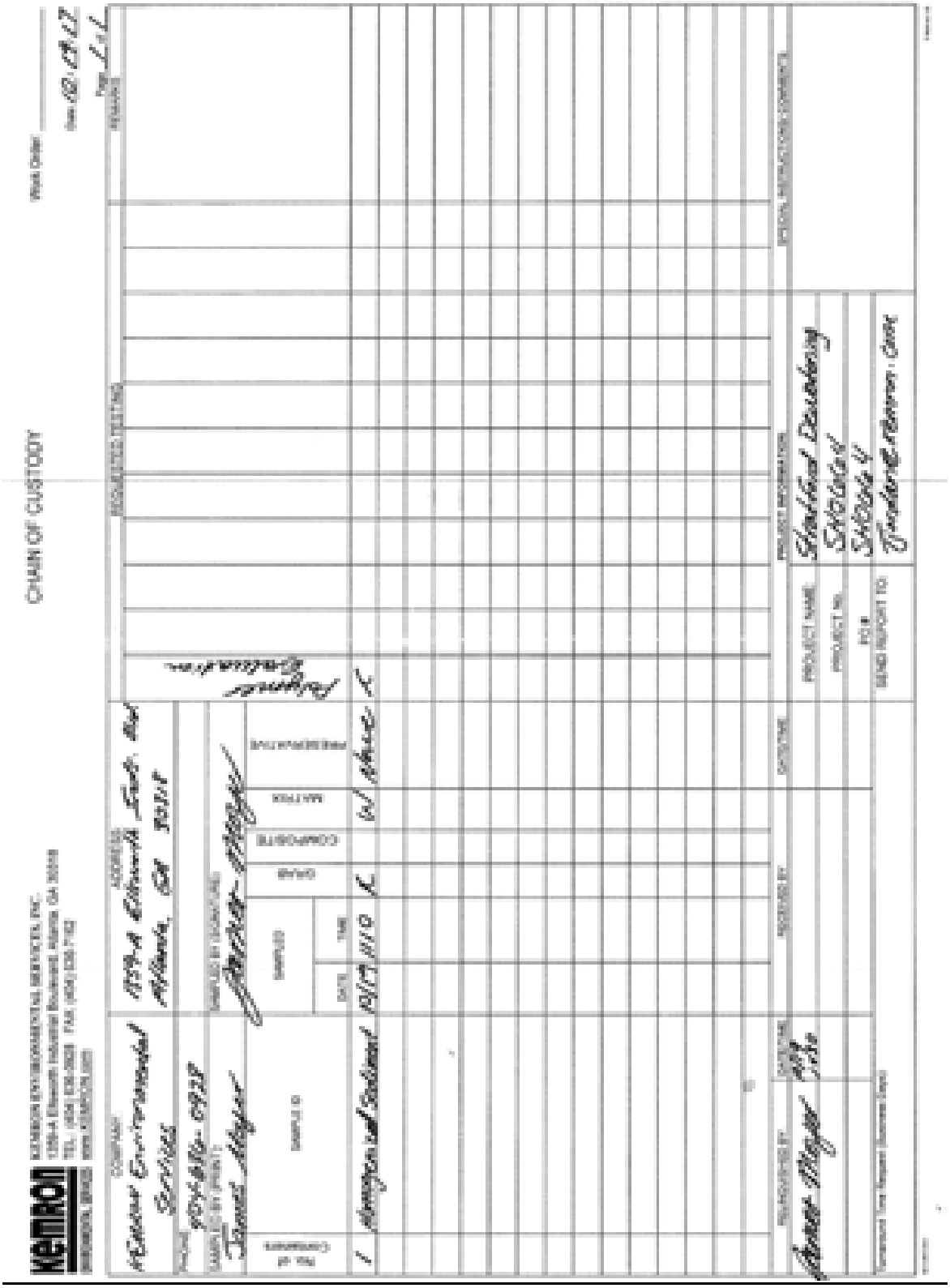
Sample ID ____ Dish Number ____ Dilution ____

Dish (dry) = ____ g Dish, Sample (wet) = ____ g Dish, Sample (dry) = ____ g

Dish, sample (wet) – Dish (dry) = ____ (A) Dish, sample (dry) – Dish (dry) = ____ (B)

Total Solids B ÷ A x 100 = ____ % Dry Weight Solids

Appendix D – CHAIN OF CUSTODY RECORD **<u>SDS - Available upon request.</u>**



Appendix D:

Mechanical Dewatering Evaluations Testing Data Sheets

GRAVITY DRAINAGE AND PRESSURE TEST DATA SHEET

(Crown Press)

PROJECT:	Stratford Dewatering
PROJECT NO.:	SH0664
SAMPLE NO.:	DEW-SED-BeltPress
TESTING DATE:	11/6/2017
TESTED BY:	JDM
TRACKING CODE:	B732_CrownPress

Initial Volume			Gravity Drainage		Pressure Expression		Cake Diameter			
Feed (ml)	**Polymer (ml)**	**Total (ml)**	**Final Time (min)**	**Final Gravity Filtrate (ml)**	**Tension (lbs)**	**Effluent Collected (ml)**	**Axis 1 (in)**	**Axis 2 (in)**	**Axis 3 (in)**	**Axis 4 (in)**
1000	13.3	1013.3	20	920	103.00	49	5.3035	5.3000	4.8065	5.3260
					163.5	52				
					207.5	54				

Measure Cake Solids	Initial Cake Diameter (in)	Final Cake Diameter (in)	Migration Factor
52.92	3.9365	5.1840	1.2475

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-BeltPress
TESTING DATE:	11/06/17
TESTED BY:	JDM
TRACKING CODE:	B732_MC

MOISTURE CONTENT (Dry & Wet Basis)			
1. MOISTURE TIN NO.	A	B	C
2. WT MOISTURE TIN (tare weight)	1.0619 g	1.0460 g	1.0054 g
3. WT WET SOIL + TARE	18.4986 g	17.7747 g	14.5471 g
4. WT DRY SOIL + TARE	10.2892 g	9.9539 g	8.1267 g
5. WT WATER, Ww	8.2094 g	7.8208 g	6.4204 g
6. WT DRY SOIL, Ws	9.2273 g	8.9079 g	7.1213 g
7. ASTM MOISTURE CONTENT	88.97 %	87.80 %	90.16 %
8. PERCENT SOLIDS	52.92 %	53.25 %	52.59 %
9. AVERAGE ASTM MOISTURE CONTENT	88.97 %		
10. AVERAGE PERCENT SOLIDS	52.92 %		

PAINT FILTER TEST

SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering	TESTING DATE:	11/6/2017
PROJECT No.:	SH0664	TESTED BY:	JDM
SAMPLE No.:	DEW-SED-BeltPress	TRACKING CODE:	B732_PaintFilter
TESTING METHOD:	EPA 9095		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	100.57	**g**
LENGTH OF TEST	5.0	**min.**
QUANTITY OF LIQUID	0.00	**g**
RESULTS (PASS / FAIL) *	Pass	

* In accordance with EPA Method 9095, if any liquid from the test material collects after 5 minutes of testing, the material is deemed to contain free liquids, and therefore has failed the paint filter test.

CENTRIFUGATION TESTING

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-Centrifuge
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	11/8/2017
TESTED BY:	JDM
TRACKING CODE:	B734_Centrifuge

TESTING CONDITIONS	
1. CONDITIONER	13.3 mL Solve 137
2. RUN TIME (min)	10
3. INITIAL MATERIAL VOLUME (mL)	1000
4. CENTRIFUGE SPEED (rpm)	1500
5. SUPERNATANT VOLUME (mL)	930
6. CAKE WEIGHT (g)	82.85

FEED PERCENT SOLIDS			
1. SAMPLE No.	A		
2. TARE, WT	49.10 g		
3. TOTAL SAMPLE + TARE, WT	127.14 g		
4. DRY SOLIDS + TARE, WT	53.83 g		
5. PERCENT SOLIDS	6.06 %		

Notes:

2 Total runs completed to generate enough solids to perform requested testing.

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-Centrifuge
TESTING DATE:	11/08/17
TESTED BY:	JDM
TRACKING CODE:	B734_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	0.9517	g	0.9935	g	1.0271	g
3. WT WET SOIL + TARE	25.9742	g	19.2462	g	23.4334	g
4. WT DRY SOIL + TARE	11.4279	g	8.7407	g	10.6369	g
5. WT WATER, Ww	14.5463	g	10.5055	g	12.7965	g
6. WT DRY SOIL, Ws	10.4762	g	7.7472	g	9.6098	g
7. ASTM MOISTURE CONTENT	138.85	%	135.60	%	133.16	%
8. PERCENT SOLIDS	41.87	%	42.44	%	42.89	%
9. AVERAGE ASTM MOISTURE CONTENT	135.87	%				
10. AVERAGE PERCENT SOLIDS	42.40	%				

PAINT FILTER TEST

SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering	TESTING DATE:	11/8/2017
PROJECT No.:	SH0664	TESTED BY:	JDM
SAMPLE No.:	DEW-SED-Centrifuge	TRACKING CODE:	B734_PaintFilter
TESTING METHOD:	EPA 9095		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	100.82	**g**
LENGTH OF TEST	5.0	**min.**
QUANTITY OF LIQUID	0.00	**g**
RESULTS (PASS / FAIL) *	Pass	

* In accordance with EPA Method 9095, if any liquid from the test material collects after 5 minutes of testing, the material is deemed to contain free liquids, and therefore has failed the paint filter test.

FILTER PRESS TEST

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-PT-FilterPress (100psi)
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	11/6/2017
TESTED BY:	JDM
TRACKING CODE:	B733_FP

TESTING CONDITIONS	
1. CONDITIONER	5.3mL Solve 137
2. RUN TIME (min)	6 minutes
3. INITIAL MATERIAL VOLUME (mL)	400
4. GAGE PRESSURE (psi)	100
5. FILTRATE VOLUME (ml)	370
6. CAKE WEIGHT (g)	30.64
7. CAKE THICKNESS (in)	0.2010

FEED PERCENT SOLIDS				
1. SAMPLE No.	A			
2. TARE, WT	49.10	g		
3. TOTAL SAMPLE + TARE, WT	127.14	g		
4. DRY SOLIDS + TARE, WT	53.83	g		
5. PERCENT SOLIDS	6.06	%		

Notes:

4 test runs completed to generate enough solids to perform required testing. 1500mL total filtrate collected. 174g total solids collected

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-PT-FilterPress
TESTING DATE:	11/06/17
TESTED BY:	JDM
TRACKING CODE:	B733_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0737	g	1.0627	g	1.0539	g
3. WT WET SOIL + TARE	14.3103	g	16.0769	g	12.3058	g
4. WT DRY SOIL + TARE	6.8695	g	7.1974	g	6.0246	g
5. WT WATER, Ww	7.4408	g	8.8795	g	6.2812	g
6. WT DRY SOIL, Ws	5.7958	g	6.1347	g	4.9707	g
7. ASTM MOISTURE CONTENT	128.38	%	144.74	%	126.36	%
8. PERCENT SOLIDS	43.79	%	40.86	%	44.18	%
9. AVERAGE ASTM MOISTURE CONTENT	133.16	%				
10. AVERAGE PERCENT SOLIDS	42.94	%				

PAINT FILTER TEST

SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering	TESTING DATE:	11/6/2017
PROJECT No.:	SH0664	TESTED BY:	JDM
SAMPLE No.:	DEW-SED-PT-FilterPress	TRACKING CODE:	B733_PaintFilter
TESTING METHOD:	EPA 9095		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	100.97	**g**
LENGTH OF TEST	5.0	**min.**
QUANTITY OF LIQUID	0.00	**g**
RESULTS (PASS / FAIL) *	Pass	

* In accordance with EPA Method 9095, if any liquid from the test material collects after 5 minutes of testing, the material is deemed to contain free liquids, and therefore has failed the paint filter test.

Appendix E:
Geotube Dewatering Evaluations

RAPID DEWATERING TEST (RDT)

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-RDT
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	11/6/2017
TESTED BY:	JDM
TRACKING CODE:	B735_RDT

TESTING CONDITIONS	
1. CONDITIONER	26.6 mL Solve 137
2. RUN TIME (min)	60
3. INITIAL MATERIAL VOLUME (mL)	2,000
4. FILTRATE VOLUME @ 1 Minute (mL)	1,480
5. FILTRATE VOLUME @ 1 Hour (mL)	1,670

FEED PERCENT SOLIDS				
1. SAMPLE No.	A			
2. TARE, WT	49.10	g		
3. TOTAL SAMPLE + TARE, WT	127.14	g		
4. DRY SOLIDS + TARE, WT	53.83	g		
5. PERCENT SOLIDS	6.06	%		

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-RDT
TESTING DATE:	11/06/17
TESTED BY:	JDM
TRACKING CODE:	B735_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0638	g	1.0953	g	1.0425	g
3. WT WET SOIL + TARE	26.1970	g	27.8081	g	26.0279	g
4. WT DRY SOIL + TARE	9.3046	g	9.6919	g	8.9510	g
5. WT WATER, Ww	16.8924	g	18.1162	g	17.0769	g
6. WT DRY SOIL, Ws	8.2408	g	8.5966	g	7.9085	g
7. ASTM MOISTURE CONTENT	204.98	%	210.74	%	215.93	%
8. PERCENT SOLIDS	32.79	%	32.18	%	31.65	%
9. AVERAGE ASTM MOISTURE CONTENT	210.55	%				
10. AVERAGE PERCENT SOLIDS	32.21	%				

PAINT FILTER TEST

SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering	TESTING DATE:	11/6/2017
PROJECT No.:	SH0664	TESTED BY:	CKB
SAMPLE No.:	DEW-SED-RDT	TRACKING CODE:	B735_PaintFilter
TESTING METHOD:	EPA 9095		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	100.00	**g**
LENGTH OF TEST	5.0	**min.**
QUANTITY OF LIQUID	6.63	**g**
RESULTS (PASS / FAIL) *	Fail	

* In accordance with EPA Method 9095, if any liquid from the test material collects after 5 minutes of testing, the material is deemed to contain free liquids, and therefore has failed the paint filter test.

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0654
SAMPLE No.:	DEW-SED-GDT
TESTING DATE:	11/20/17
TESTED BY:	JDM
TRACKING CODE:	B810_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	0.9855	g	0.9645	g	1.0157	g
3. WT WET SOIL + TARE	20.9628	g	21.5456	g	21.2474	g
4. WT DRY SOIL + TARE	10.6870	g	11.3526	g	10.8223	g
5. WT WATER, Ww	10.2758	g	10.1930	g	10.4251	g
6. WT DRY SOIL, Ws	9.7015	g	10.3881	g	9.8066	g
7. ASTM MOISTURE CONTENT	105.92	%	98.12	%	106.31	%
8. PERCENT SOLIDS	48.56	%	50.47	%	48.47	%
9. AVERAGE ASTM MOISTURE CONTENT	103.45	%				
10. AVERAGE PERCENT SOLIDS	49.17	%				

PAINT FILTER TEST

SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering	TESTING DATE:	11/20/2017
PROJECT No.:	SH0664	TESTED BY:	JDM
SAMPLE No.:	DEW-SED-GDT	TRACKING CODE:	B810_PaintFilter
TESTING METHOD:	EPA 9095		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	100.99	**g**
LENGTH OF TEST	5.0	**min.**
QUANTITY OF LIQUID	0.00	**g**
RESULTS (PASS / FAIL) *	Pass	

* In accordance with EPA Method 9095, if any liquid from the test material collects after 5 minutes of testing, the material is deemed to contain free liquids, and therefore has failed the paint filter test.

Appendix F:
Gravity Drainage Evaluations

GRAVITY DRAINAGE TESTING

DATA SHEET

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-GravityDrain
MATERIAL TYPE	Sediment (+15% Water)
TESTING DATE:	11/28/2017
TESTED BY:	JDM
TRACKING CODI	B793_GD

SET-UP INFORMATION GRAVITY DRAINAGE TESTING	
1. FUNNEL	140.20 g
2. FUNNEL + SOIL (INITIAL)	1274.70 g
3. FUNNEL + SOIL (FINAL)	1172.88 g
4. BEAKER	523.74 g
5. BEAKER + EFFLUENT	623.12 g
6. SOIL (INITIAL)	1134.50 g
7. SOIL (FINAL)	1032.68 g
8. EFFLUENT	99.38 g

MONITORING INFORMATION		
TIME (MIN)	**EFFLUENT (g)**	**VISUAL OBSERVATIONS**
1	0.00	
2	0.00	
5	0.00	Effluent beginning to collect
10	0.60	
15	2.50	
30	5.50	
60	7.20	Effluent clear in color
240	29.85	
1440	71.37	
2880	76.64	
4320	80.69	Effluent slightly yellow in color
5760	96.78	
7200	98.69	
8220	99.38	

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-GravityDrain
TESTING DATE:	11/28/17
TESTED BY:	JDM
TRACKING CODE:	B793_MC(Pre)

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	0.9986	g	0.9775	g	1.0019	g
3. WT WET SOIL + TARE	22.5568	g	28.5557	g	25.9456	g
4. WT DRY SOIL + TARE	11.8955	g	14.6770	g	13.6855	g
5. WT WATER, Ww	10.6613	g	13.8787	g	12.2601	g
6. WT DRY SOIL, Ws	10.8969	g	13.6995	g	12.6836	g
7. ASTM MOISTURE CONTENT	97.84	%	101.31	%	96.66	%
8. PERCENT SOLIDS	50.55	%	49.68	%	50.85	%
9. AVERAGE ASTM MOISTURE CONTENT	98.60	%				
10. AVERAGE PERCENT SOLIDS	50.36	%				

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-GravityDrain
TESTING DATE:	12/04/17
TESTED BY:	JDM
TRACKING CODE:	B793_MC(72 Hour)

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0166	g	0.9913	g	0.9915	g
3. WT WET SOIL + TARE	28.2832	g	25.5579	g	33.2675	g
4. WT DRY SOIL + TARE	16.2938	g	14.4658	g	19.7337	g
5. WT WATER, Ww	11.9894	g	11.0921	g	13.5338	g
6. WT DRY SOIL, Ws	15.2772	g	13.4745	g	18.7422	g
7. ASTM MOISTURE CONTENT	78.48	%	82.32	%	72.21	%
8. PERCENT SOLIDS	56.03	%	54.85	%	58.07	%
9. AVERAGE ASTM MOISTURE CONTENT	77.67	%				
10. AVERAGE PERCENT SOLIDS	56.32	%				

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-GravityDrain
TESTING DATE:	12/15/17
TESTED BY:	JDM
TRACKING CODE:	B793_MC(120 Hour)

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0319	g	1.0051	g	1.0587	g
3. WT WET SOIL + TARE	35.2781	g	44.9434	g	54.8687	g
4. WT DRY SOIL + TARE	20.5734	g	25.7671	g	31.2654	g
5. WT WATER, Ww	14.7047	g	19.1763	g	23.6033	g
6. WT DRY SOIL, Ws	19.5415	g	24.7620	g	30.2067	g
7. ASTM MOISTURE CONTENT	75.25	%	77.44	%	78.14	%
8. PERCENT SOLIDS	57.06	%	56.36	%	56.14	%
9. AVERAGE ASTM MOISTURE CONTENT	76.94	%				
10. AVERAGE PERCENT SOLIDS	56.52	%				

Appendix G:

Additional Mechanical Dewatering Testing Data Sheets

FILTER PRESS TEST

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-FilterPress(100psi)
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	1/12/2018
TESTED BY:	JDM
TRACKING CODE:	B874_FP

TESTING CONDITIONS	
1. CONDITIONER	None
2. RUN TIME (min)	24
3. INITIAL MATERIAL VOLUME (mL)	400
4. GAGE PRESSURE (psi)	100
5. FILTRATE VOLUME (ml)	395
6. CAKE WEIGHT (g)	31.84
7. CAKE THICKNESS (in)	0.1862

FEED PERCENT SOLIDS				
1. SAMPLE No.	A			
2. TARE, WT	49.10	g		
3. TOTAL SAMPLE + TARE, WT	127.14	g		
4. DRY SOLIDS + TARE, WT	53.83	g		
5. PERCENT SOLIDS	6.06	%		

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-FilterPress (100psi)
TESTING DATE:	01/12/18
TESTED BY:	JDM
TRACKING CODE:	B874_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	0.9948	g	1.0350	g	0.9937	g
3. WT WET SOIL + TARE	11.2750	g	10.3641	g	11.8399	g
4. WT DRY SOIL + TARE	7.7915	g	7.3037	g	8.0827	g
5. WT WATER, Ww	3.4835	g	3.0604	g	3.7572	g
6. WT DRY SOIL, Ws	6.7967	g	6.2687	g	7.0890	g
7. ASTM MOISTURE CONTENT	51.25	%	48.82	%	53.00	%
8. PERCENT SOLIDS	66.11	%	67.20	%	65.36	%
9. AVERAGE ASTM MOISTURE CONTENT	51.02	%				
10. AVERAGE PERCENT SOLIDS	66.22	%				

FILTER PRESS TEST

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-PT-FilterPress(125psi)
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	1/12/2018
TESTED BY:	JDM
TRACKING CODE:	B875_FP

TESTING CONDITIONS	
1. CONDITIONER	5.3 mL Solve 137
2. RUN TIME (min)	4
3. INITIAL MATERIAL VOLUME (mL)	400
4. GAGE PRESSURE (psi)	125
5. FILTRATE VOLUME (ml)	390
6. CAKE WEIGHT (g)	37.53
7. CAKE THICKNESS (in)	0.2510

FEED PERCENT SOLIDS				
1. SAMPLE No.	A			
2. TARE, WT	49.10	g		
3. TOTAL SAMPLE + TARE, WT	127.14	g		
4. DRY SOLIDS + TARE, WT	53.83	g		
5. PERCENT SOLIDS	6.06	%		

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-PT-FilterPress (125psi)
TESTING DATE:	01/12/18
TESTED BY:	JDM
TRACKING CODE:	B875_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0414	g	1.0148	g	0.9925	g
3. WT WET SOIL + TARE	12.6948	g	15.1150	g	12.8690	g
4. WT DRY SOIL + TARE	7.0456	g	7.9011	g	6.6717	g
5. WT WATER, Ww	5.6492	g	7.2139	g	6.1973	g
6. WT DRY SOIL, Ws	6.0042	g	6.8863	g	5.6792	g
7. ASTM MOISTURE CONTENT	94.09	%	104.76	%	109.12	%
8. PERCENT SOLIDS	51.52	%	48.84	%	47.82	%
9. AVERAGE ASTM MOISTURE CONTENT	102.66	%				
10. AVERAGE PERCENT SOLIDS	49.39	%				

FILTER PRESS TEST

REPORT FORM

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-FilterPress(125psi)
MATERIAL TYPE:	Homogenized Sediment Slurry
TESTING DATE:	1/12/2018
TESTED BY:	JDM
TRACKING CODE:	B876_FP

TESTING CONDITIONS	
1. CONDITIONER	None
2. RUN TIME (min)	25
3. INITIAL MATERIAL VOLUME (mL)	400
4. GAGE PRESSURE (psi)	125
5. FILTRATE VOLUME (ml)	395
6. CAKE WEIGHT (g)	28.11
7. CAKE THICKNESS (in)	0.1704

FEED PERCENT SOLIDS				
1. SAMPLE No.	A			
2. TARE, WT	49.10 g			
3. TOTAL SAMPLE + TARE, WT	127.14 g			
4. DRY SOLIDS + TARE, WT	53.83 g			
5. PERCENT SOLIDS	6.06 %			

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-FilterPress (125psi)
TESTING DATE:	01/12/18
TESTED BY:	JDM
TRACKING CODE:	B876_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0081	g	1.0597	g	0.9919	g
3. WT WET SOIL + TARE	10.6529	g	9.0925	g	11.1854	g
4. WT DRY SOIL + TARE	7.3134	g	6.3577	g	7.8180	g
5. WT WATER, Ww	3.3395	g	2.7348	g	3.3674	g
6. WT DRY SOIL, Ws	6.3053	g	5.2980	g	6.8261	g
7. ASTM MOISTURE CONTENT	52.96	%	51.62	%	49.33	%
8. PERCENT SOLIDS	65.38	%	65.95	%	66.97	%
9. AVERAGE ASTM MOISTURE CONTENT	51.30	%				
10. AVERAGE PERCENT SOLIDS	66.10	%				

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	DEW-SED-BeltPress
TESTING DATE:	01/12/18
TESTED BY:	JDM
TRACKING CODE:	B879_MC

MOISTURE CONTENT (Dry & Wet Basis)					
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.0406	g	1.0292	g	0.9754	g
3. WT WET SOIL + TARE	29.8718	g	18.1338	g	23.6987	g
4. WT DRY SOIL + TARE	15.4515	g	9.1567	g	12.3199	g
5. WT WATER, Ww	14.4203	g	8.9771	g	11.3788	g
6. WT DRY SOIL, Ws	14.4109	g	8.1275	g	11.3445	g
7. ASTM MOISTURE CONTENT	100.07	%	110.45	%	100.30	%
8. PERCENT SOLIDS	49.98	%	47.52	%	49.92	%
9. AVERAGE ASTM MOISTURE CONTENT	103.61	%				
10. AVERAGE PERCENT SOLIDS	49.14	%				

Appendix H:
Mixture Design Sheets

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-001
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	3.00 %	22.5 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.00	0.0	0.25		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	0.5	0.5	2.8		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-002
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	6.00 %	45.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	2.00	>4.5	>4.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	2.50	6.25	5.5*		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-003
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	8.00 %	60.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	2.00	4.0	>4.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	2.50	4.5	4.5		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-004
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Mintek Calciment	3.00 %	22.5 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.00	0.0	0.25		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	0.00	0.0	1.0		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-005
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Mintek Calciment	6.00 %	45.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.00	0.0	0.25		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	1.0	1.0	2.5		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-006
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-BeltPress**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Mintek Calciment	8.00 %	60.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days
Paint Filter @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.00	0.0	0.25		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	1.00	1.0	2.5		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-007
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	2.00 %	15.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.0	0.25	0.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	1.0	1.5	2.0		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-008
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	4.00 %	30.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	1.50	4.0	>4.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	3.5	3.5	3.5		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-009
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Type I Portland Cement	5.00 %	37.5 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	1.50	3.75	>4.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	3.0	4.0	1.5*		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-010
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Calciment	2.00 %	15.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.0	0.0	0.0		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	0.0	0.0	0.0		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-011
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Calciment	4.00 %	30.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.0	0.0	0.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	0.0	0.0	2.0		

MIX DEVELOPMENT DATA SHEET

PROJECT:	Stratford Dewatering	MIX No.	
PROJECT No.:	SH0664		0664-012
MIXING DATE:	10-Jan-18	MIXED BY:	JDM

UNTREATED MATERIAL TYPE		**DEW-SED-GravityDrain**
WEIGHT OF UNTREATED MATERIAL		**750 g**
REAGENT TYPE AND LOT NUMBER	ADDITION RATE	WEIGHT
Calciment	5.00 %	37.5 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
	%	0.0 g
Water Addition	%	0.0 g

OBSERVATIONS / NOTES

Moisture Content @ 7 Days
Bulk Density @ 7 Days
Pocket Penetrometer @ 1, 3 & 5 Days
Torvane @ 1, 3 & 5 Days
UCS @ 7 Days

PENETROMETER ANALYSES					
CURE TIME (Days)	1	3	5		
PENETROMETER (tons/ft^2)	0.00	0.0	0.5		
POCKET VANE SHEAR ANALYSES					
CURE TIME (Days)	1	3	5		
TORVANE (Kg/cm^2)	0.50	0.0	1.8		

Appendix I:
Solidification Phase
Testing Data Sheets

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-001
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B882_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	1	
2. WT MOISTURE TIN (tare weight)	69.45	g
3. WT WET SOIL + TARE	117.90	g
4. WT DRY SOIL + TARE	94.87	g
5. WT WATER, Ww	23.03	g
6. WT DRY SOIL, Ws	25.42	g
7. ASTM MOISTURE CONTENT, W	**90.60**	**%**
8. PERCENT SOLIDS	**52.47**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-001		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B882_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	1	
2. WT MOISTURE TIN (tare weight)	69.45	g
3. WT WET SOIL + TARE	117.90	g
4. WT DRY SOIL + TARE	94.87	g
5. WT WATER, Ww	23.03	g
6. WT DRY SOIL, Ws	25.42	g
7. MOISTURE CONTENT, W	**90.60**	**%**

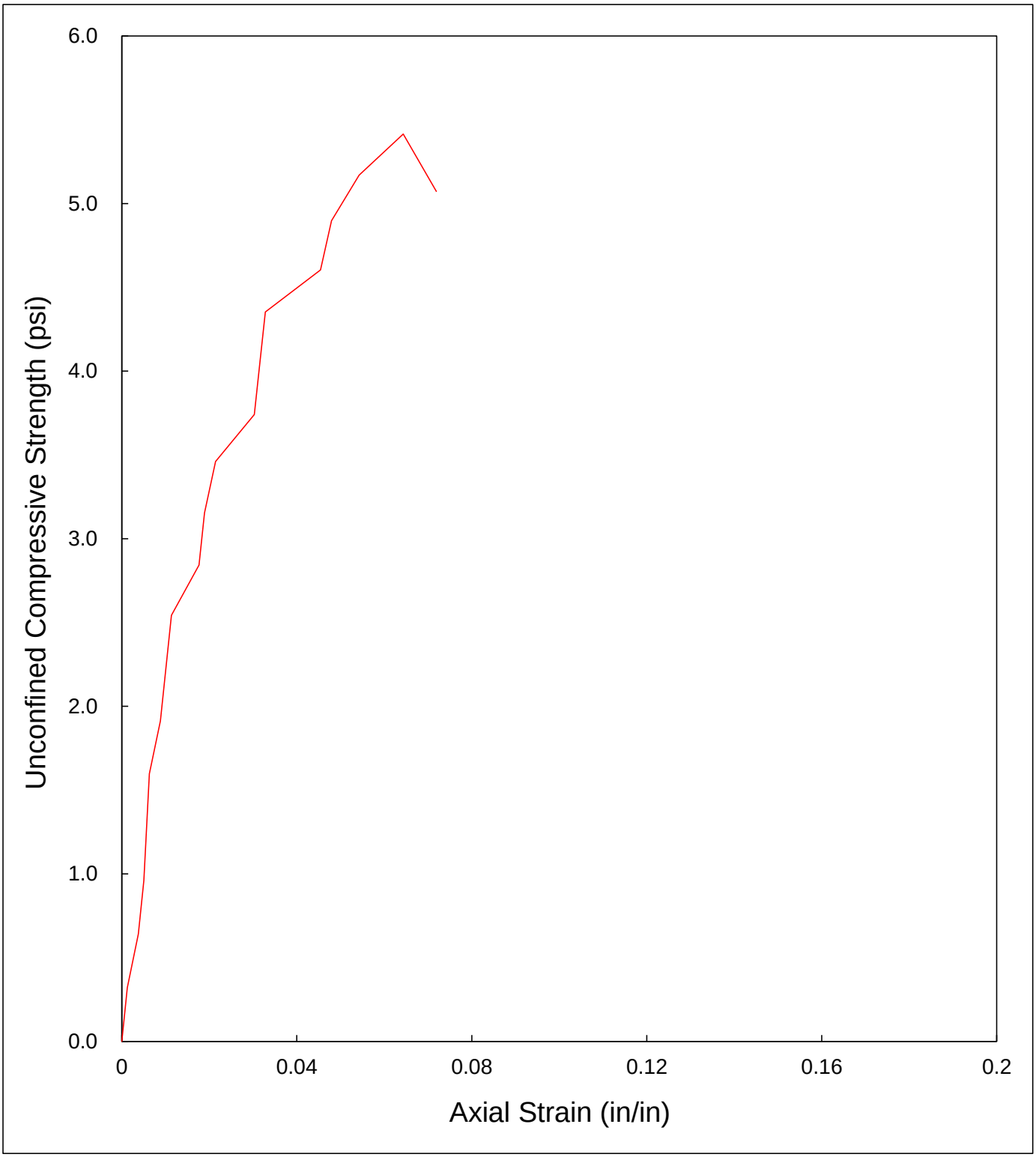
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.95	in.
No. 2	1.99	in.	3.98	in.
No. 3	1.99	in.	3.96	in.
Average	**1.99**	**in.**	**3.96**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***292.42***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.33	in^3
Initial Bulk Unit Weight,	90.4	lb/ft^3
Initial Dry Unit Weight	47.4	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	5.4	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.110	0.0000	0.0
1	0.005	0.005	3.114	0.0013	0.3
2	0.015	0.015	3.122	0.0038	0.6
3	0.020	0.020	3.126	0.0050	1.0
5	0.025	0.025	3.130	0.0063	1.6
6	0.035	0.035	3.138	0.0088	1.9
7	0.040	0.040	3.142	0.0101	2.2
8	0.045	0.045	3.146	0.0114	2.5
9	0.070	0.070	3.166	0.0177	2.8
10	0.075	0.075	3.170	0.0189	3.2
11	0.085	0.085	3.178	0.0214	3.5
12	0.120	0.120	3.207	0.0303	3.7
13	0.125	0.125	3.212	0.0315	4.0
14	0.130	0.130	3.216	0.0328	4.4
15	0.180	0.180	3.258	0.0454	4.6
16	0.190	0.190	3.267	0.0479	4.9
17	0.215	0.215	3.289	0.0542	5.2
18	0.255	0.255	3.324	0.0643	5.4
17	0.285	0.285	3.351	0.0719	5.1

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-001



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-001		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B882_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	90.6	**%**
BULK UNIT WEIGHT	90.4	lb/ft^3
DRY UNIT WEIGHT	47.4	lb/ft^3
UCS *	5.4	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-002
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B883_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	2	
2. WT MOISTURE TIN (tare weight)	76.48	g
3. WT WET SOIL + TARE	109.08	g
4. WT DRY SOIL + TARE	94.04	g
5. WT WATER, Ww	15.04	g
6. WT DRY SOIL, Ws	17.56	g
7. ASTM MOISTURE CONTENT, W	**85.65**	**%**
8. PERCENT SOLIDS	**53.87**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-002		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B883_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	2	
2. WT MOISTURE TIN (tare weight)	76.48	g
3. WT WET SOIL + TARE	109.08	g
4. WT DRY SOIL + TARE	94.04	g
5. WT WATER, Ww	15.04	g
6. WT DRY SOIL, Ws	17.56	g
7. MOISTURE CONTENT, W	**85.65**	**%**

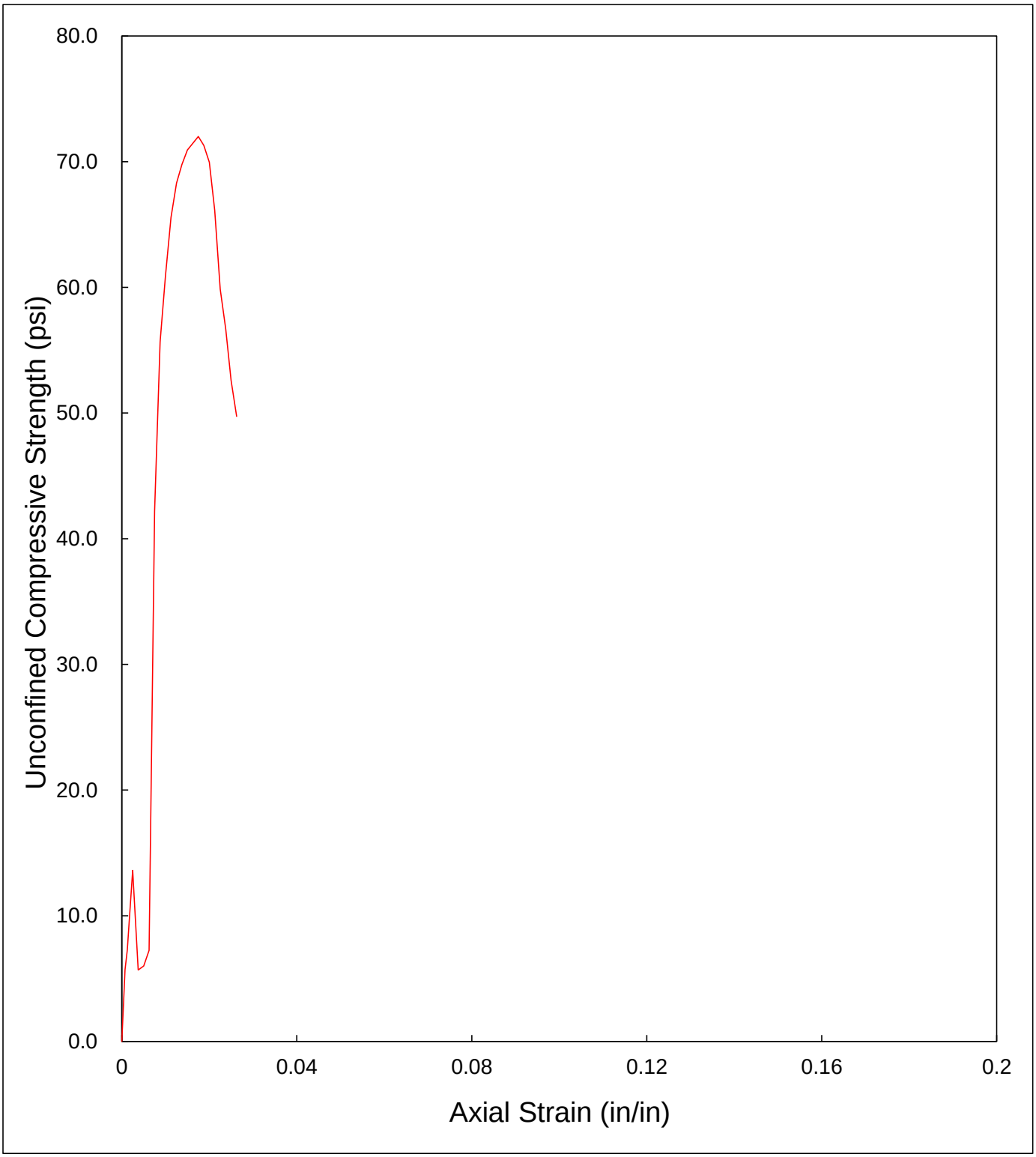
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		*LENGTH*	
No. 1	2.02	in.	4.06	in.
No. 2	2.00	in.	3.96	in.
No. 3	1.99	in.	3.98	in.
Average	**2.00**	**in.**	**4.00**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***297.00***	***g***
Initial Area, Ao	3.15	in^2
Initial Volume, Vo	12.61	in^3
Initial Bulk Unit Weight,	89.7	lb/ft^3
Initial Dry Unit Weight	48.3	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	72.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.152	0.0000	0.0
18	0.003	0.003	3.154	0.0008	5.7
23	0.005	0.005	3.156	0.0013	7.3
31	0.007	0.007	3.158	0.0018	9.8
43	0.010	0.010	3.160	0.0025	13.6
18	0.015	0.015	3.164	0.0038	5.7
19	0.020	0.020	3.168	0.0050	6.0
23	0.025	0.025	3.172	0.0063	7.3
134	0.030	0.030	3.176	0.0075	42.2
177	0.035	0.035	3.180	0.0088	55.7
194	0.040	0.040	3.184	0.0100	60.9
209	0.045	0.045	3.188	0.0113	65.6
218	0.050	0.050	3.192	0.0125	68.3
223	0.055	0.055	3.196	0.0138	69.8
227	0.060	0.060	3.200	0.0150	70.9
229	0.065	0.065	3.204	0.0163	71.5
231	0.070	0.070	3.208	0.0175	72.0
229	0.075	0.075	3.212	0.0188	71.3
225	0.080	0.080	3.216	0.0200	70.0
213	0.085	0.085	3.221	0.0213	66.1
193	0.090	0.090	3.225	0.0225	59.9
183	0.095	0.095	3.229	0.0238	56.7
170	0.100	0.100	3.233	0.0250	52.6
161	0.105	0.105	3.237	0.0263	49.7

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-002



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-002		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B883_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	85.6	**%**
BULK UNIT WEIGHT	89.7	lb/ft^3
DRY UNIT WEIGHT	48.3	lb/ft^3
UCS *	72.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-003
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B884_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	3	
2. WT MOISTURE TIN (tare weight)	77.40	g
3. WT WET SOIL + TARE	131.69	g
4. WT DRY SOIL + TARE	107.48	g
5. WT WATER, Ww	24.21	g
6. WT DRY SOIL, Ws	30.08	g
7. ASTM MOISTURE CONTENT, W	**80.49**	**%**
8. PERCENT SOLIDS	**55.41**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-003		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B884_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	3	
2. WT MOISTURE TIN (tare weight)	77.40	g
3. WT WET SOIL + TARE	131.69	g
4. WT DRY SOIL + TARE	107.48	g
5. WT WATER, Ww	24.21	g
6. WT DRY SOIL, Ws	30.08	g
7. MOISTURE CONTENT, W	**80.49**	**%**

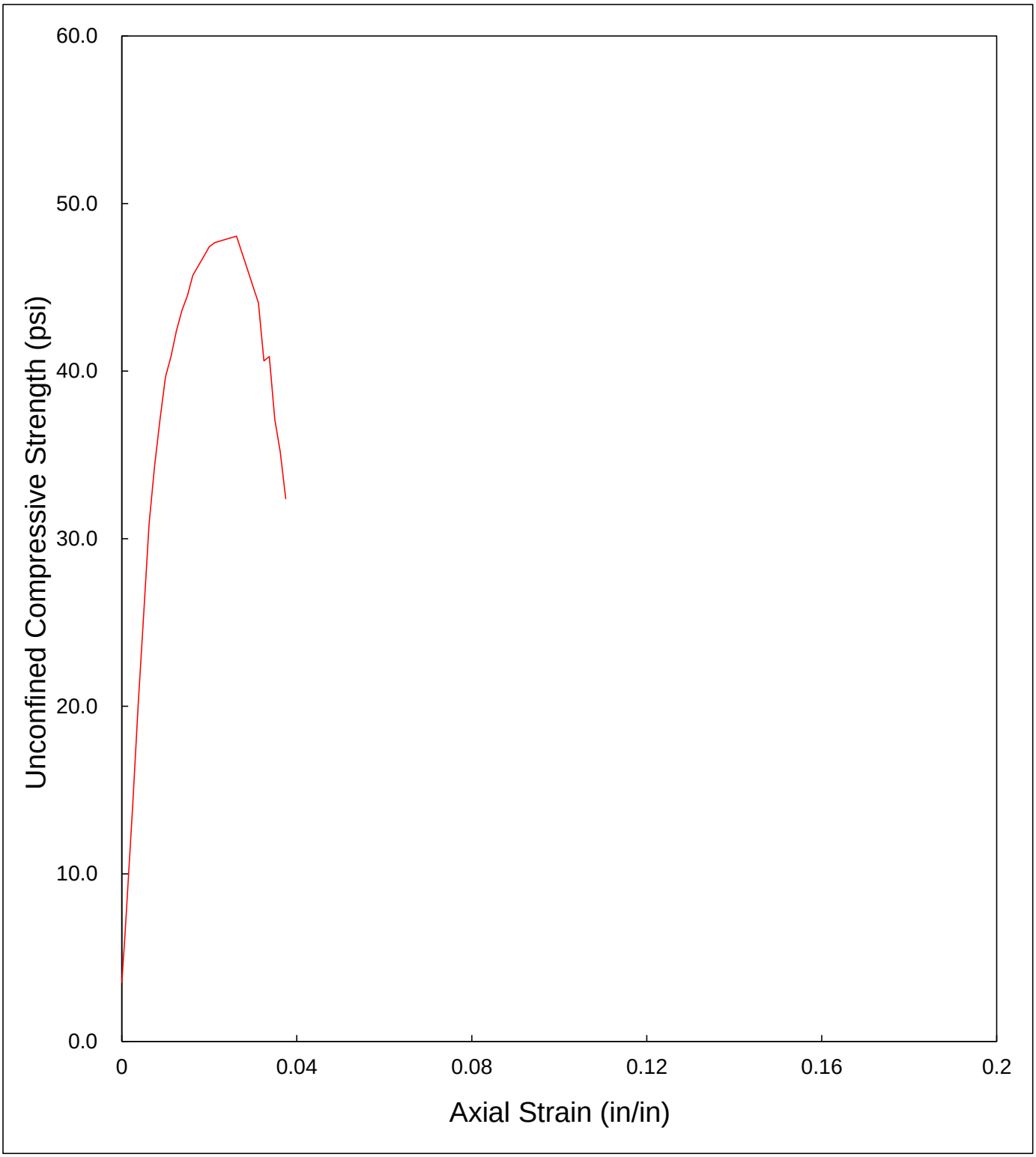
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	4.00	in.
No. 2	1.99	in.	4.00	in.
No. 3	2.00	in.	4.01	in.
Average	**1.99**	**in.**	**4.00**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***297.20***	***g***
Initial Area, Ao	3.12	in^2
Initial Volume, Vo	12.49	in^3
Initial Bulk Unit Weight,	90.6	lb/ft^3
Initial Dry Unit Weight	50.2	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	48.1	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
11	0.000	0.000	3.121	0.0000	3.5
20	0.003	0.003	3.123	0.0007	6.4
44	0.010	0.010	3.128	0.0025	14.1
63	0.015	0.015	3.132	0.0037	20.1
80	0.020	0.020	3.136	0.0050	25.5
97	0.025	0.025	3.140	0.0062	30.9
108	0.030	0.030	3.144	0.0075	34.3
117	0.035	0.035	3.148	0.0087	37.2
125	0.040	0.040	3.152	0.0100	39.7
129	0.045	0.045	3.156	0.0112	40.9
134	0.050	0.050	3.160	0.0125	42.4
138	0.055	0.055	3.164	0.0137	43.6
141	0.060	0.060	3.168	0.0150	44.5
145	0.065	0.065	3.172	0.0162	45.7
147	0.070	0.070	3.176	0.0175	46.3
149	0.075	0.075	3.180	0.0187	46.9
151	0.080	0.080	3.184	0.0200	47.4
152	0.085	0.085	3.188	0.0212	47.7
153	0.095	0.095	3.197	0.0237	47.9
154	0.105	0.105	3.205	0.0262	48.1
151	0.110	0.110	3.209	0.0275	47.1
148	0.115	0.115	3.213	0.0287	46.1
145	0.120	0.120	3.217	0.0300	45.1
142	0.125	0.125	3.221	0.0312	44.1
131	0.130	0.130	3.225	0.0325	40.6
132	0.135	0.135	3.230	0.0337	40.9
120	0.140	0.140	3.234	0.0350	37.1
114	0.145	0.145	3.238	0.0362	35.2
105	0.150	0.150	3.242	0.0375	32.4

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-003



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-003		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B884_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	80.5	**%**
BULK UNIT WEIGHT	90.6	lb/ft^3
DRY UNIT WEIGHT	50.2	lb/ft^3
UCS *	48.1	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-004
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B885_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	4	
2. WT MOISTURE TIN (tare weight)	76.80	g
3. WT WET SOIL + TARE	109.46	g
4. WT DRY SOIL + TARE	93.89	g
5. WT WATER, Ww	15.57	g
6. WT DRY SOIL, Ws	17.09	g
7. ASTM MOISTURE CONTENT, W	**91.11**	**%**
8. PERCENT SOLIDS	**52.33**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-004		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B885_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	4	
2. WT MOISTURE TIN (tare weight)	76.80	g
3. WT WET SOIL + TARE	109.46	g
4. WT DRY SOIL + TARE	93.89	g
5. WT WATER, Ww	15.57	g
6. WT DRY SOIL, Ws	17.09	g
7. MOISTURE CONTENT, W	**91.11**	**%**

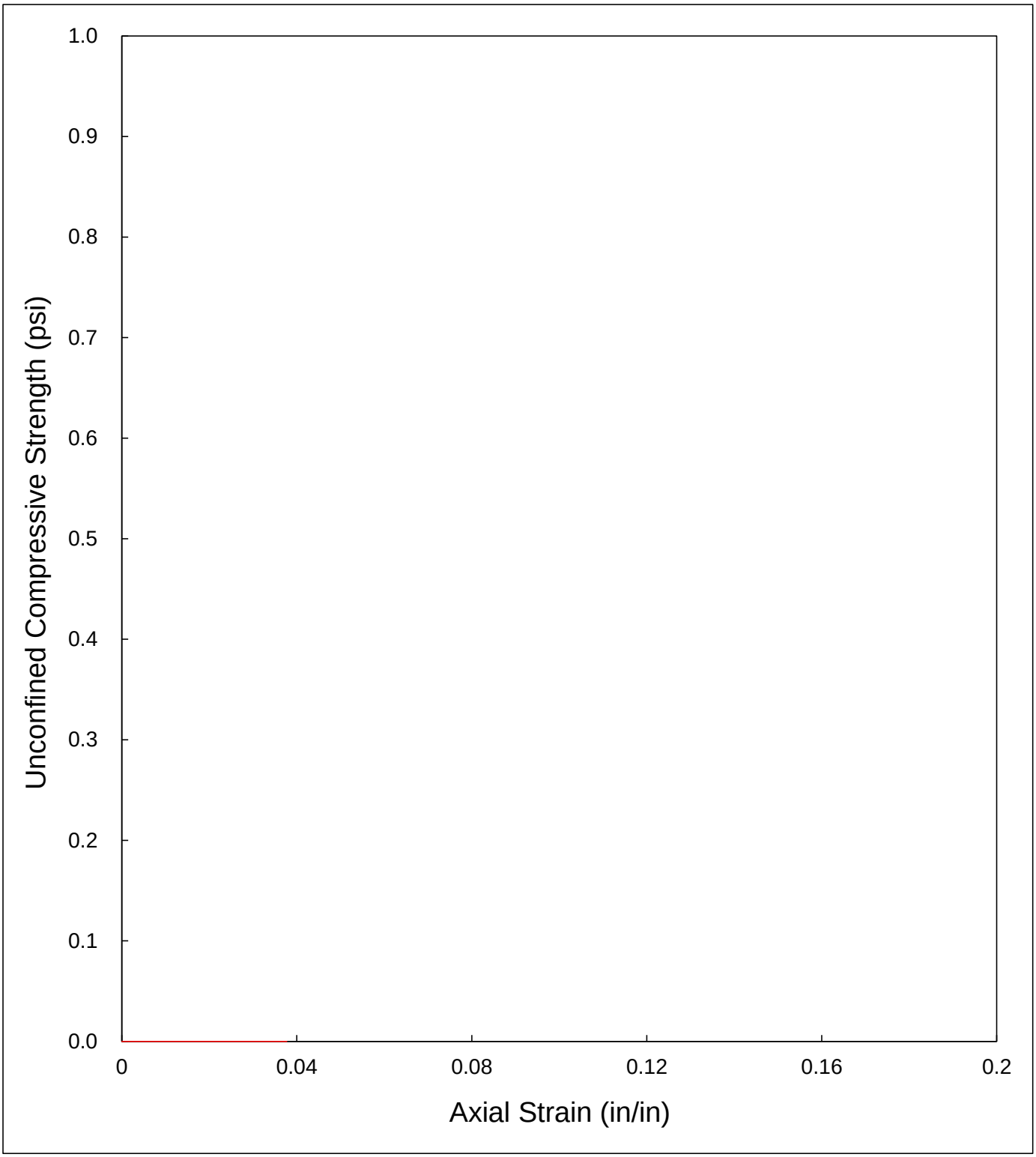
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.96	in.
No. 2	1.98	in.	3.98	in.
No. 3	2.00	in.	3.99	in.
Average	**1.99**	**in.**	**3.98**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***297.20***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.37	in^3
Initial Bulk Unit Weight,	91.5	lb/ft^3
Initial Dry Unit Weight	47.9	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	0.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.110	0.0000	0.0
	0.003	0.003	3.113	0.0008	0.0
	0.005	0.005	3.114	0.0013	0.0
	0.007	0.007	3.116	0.0018	0.0
	0.010	0.010	3.118	0.0025	0.0
	0.015	0.015	3.122	0.0038	0.0
	0.020	0.020	3.126	0.0050	0.0
	0.025	0.025	3.130	0.0063	0.0
	0.030	0.030	3.134	0.0075	0.0
	0.035	0.035	3.138	0.0088	0.0
	0.040	0.040	3.142	0.0101	0.0
	0.045	0.045	3.146	0.0113	0.0
	0.050	0.050	3.150	0.0126	0.0
	0.055	0.055	3.154	0.0138	0.0
	0.060	0.060	3.158	0.0151	0.0
	0.065	0.065	3.162	0.0163	0.0
	0.070	0.070	3.166	0.0176	0.0
	0.075	0.075	3.170	0.0189	0.0
	0.080	0.080	3.174	0.0201	0.0
	0.085	0.085	3.178	0.0214	0.0
	0.095	0.095	3.186	0.0239	0.0
	0.105	0.105	3.195	0.0264	0.0
	0.110	0.110	3.199	0.0277	0.0
	0.115	0.115	3.203	0.0289	0.0
	0.120	0.120	3.207	0.0302	0.0
	0.125	0.125	3.211	0.0314	0.0
	0.130	0.130	3.215	0.0327	0.0
	0.135	0.135	3.220	0.0339	0.0
	0.140	0.140	3.224	0.0352	0.0
	0.145	0.145	3.228	0.0365	0.0
	0.150	0.150	3.232	0.0377	0.0

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-004



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-004		
TESTING DATE:	18-Jan-10	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B885_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	91.1	**%**
BULK UNIT WEIGHT	91.5	lb/ft^3
DRY UNIT WEIGHT	47.9	lb/ft^3
UCS *	0.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-005
TESTING DATE:	1-18-18
TESTED BY:	LCJ
TRACKING CODE:	B886_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	5	
2. WT MOISTURE TIN (tare weight)	77.63	g
3. WT WET SOIL + TARE	104.99	g
4. WT DRY SOIL + TARE	92.72	g
5. WT WATER, Ww	12.27	g
6. WT DRY SOIL, Ws	15.09	g
7. ASTM MOISTURE CONTENT, W	**81.31**	**%**
8. PERCENT SOLIDS	**55.15**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-005		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ	TRACKING CODE:	B886_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	5	
2. WT MOISTURE TIN (tare weight)	77.63	g
3. WT WET SOIL + TARE	104.99	g
4. WT DRY SOIL + TARE	92.72	g
5. WT WATER, Ww	12.27	g
6. WT DRY SOIL, Ws	15.09	g
7. MOISTURE CONTENT, W	**81.31**	**%**

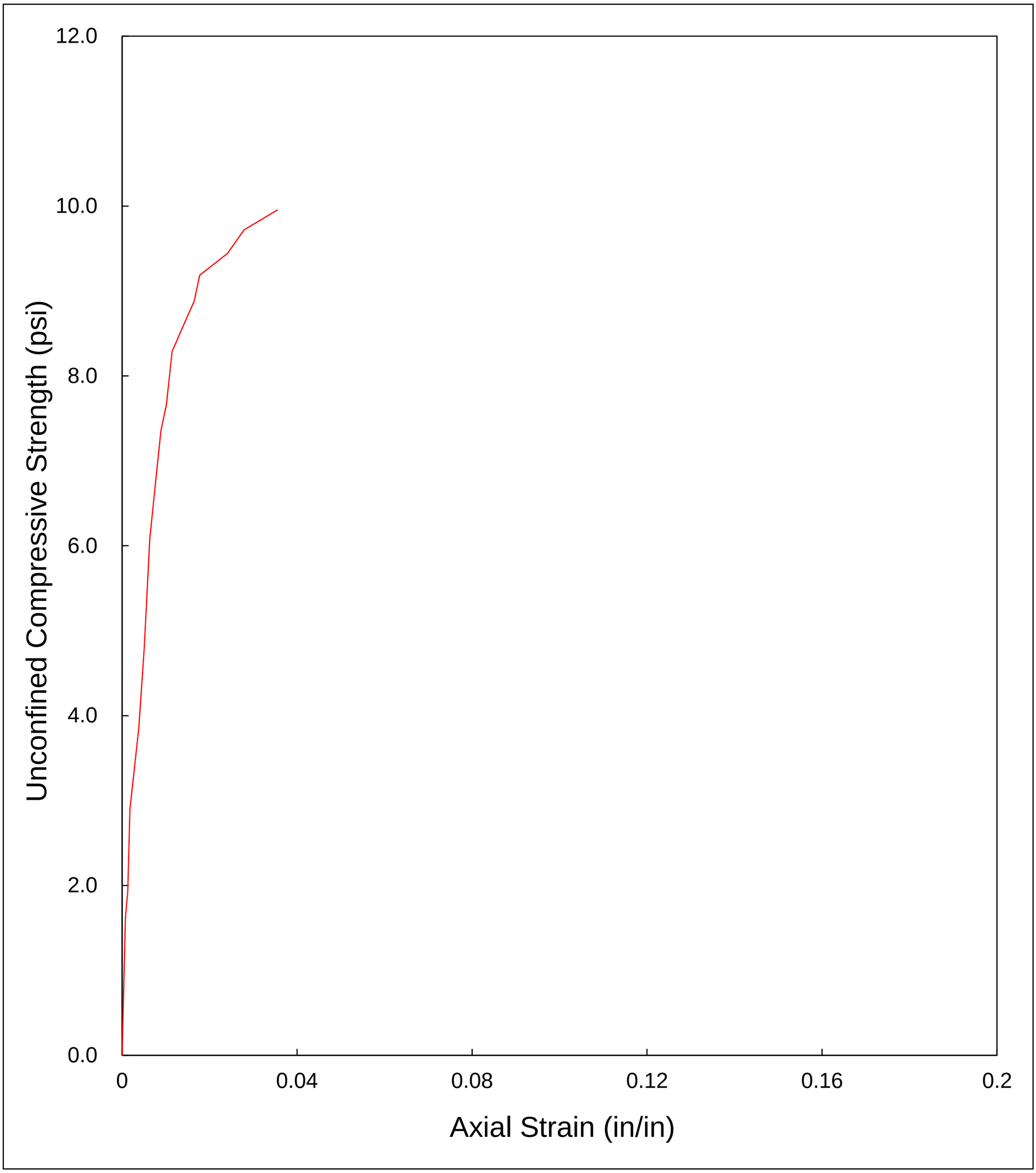
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.96	in.
No. 2	1.99	in.	3.94	in.
No. 3	1.98	in.	3.94	in.
Average	**1.99**	**in.**	**3.95**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***297.30***	***g***
Initial Area, Ao	3.10	in^2
Initial Volume, Vo	12.23	in^3
Initial Bulk Unit Weight,	92.6	lb/ft^3
Initial Dry Unit Weight	51.1	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	10.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.101	0.0000	0.0
5	0.003	0.003	3.103	0.0008	1.6
6	0.005	0.005	3.105	0.0013	1.9
9	0.007	0.007	3.106	0.0018	2.9
12	0.015	0.015	3.113	0.0038	3.9
15	0.020	0.020	3.117	0.0051	4.8
19	0.025	0.025	3.121	0.0063	6.1
21	0.030	0.030	3.125	0.0076	6.7
23	0.035	0.035	3.129	0.0089	7.4
24	0.040	0.040	3.133	0.0101	7.7
26	0.045	0.045	3.137	0.0114	8.3
27	0.055	0.055	3.145	0.0139	8.6
28	0.065	0.065	3.153	0.0165	8.9
29	0.070	0.070	3.157	0.0177	9.2
30	0.095	0.095	3.177	0.0241	9.4
31	0.110	0.110	3.190	0.0279	9.7
32	0.140	0.140	3.215	0.0355	10.0
30	0.150	0.150	3.223	0.0380	9.3
29	0.160	0.160	3.232	0.0406	9.0
28	0.165	0.165	3.236	0.0418	8.7
26	0.175	0.175	3.245	0.0444	8.0
25	0.180	0.180	3.249	0.0456	7.7

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-005



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-005		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ	TRACKING CODE:	B886_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	81.3	**%**
BULK UNIT WEIGHT	92.6	lb/ft^3
DRY UNIT WEIGHT	51.1	lb/ft^3
**UCS * **	10.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-006
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B887_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	6	
2. WT MOISTURE TIN (tare weight)	77.00	g
3. WT WET SOIL + TARE	138.90	g
4. WT DRY SOIL + TARE	110.87	g
5. WT WATER, Ww	28.03	g
6. WT DRY SOIL, Ws	33.87	g
7. ASTM MOISTURE CONTENT, W	**82.76**	**%**
8. PERCENT SOLIDS	**54.72**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-006		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B887_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	6	
2. WT MOISTURE TIN (tare weight)	77.00	g
3. WT WET SOIL + TARE	138.90	g
4. WT DRY SOIL + TARE	110.87	g
5. WT WATER, Ww	28.03	g
6. WT DRY SOIL, Ws	33.87	g
7. MOISTURE CONTENT, W	**82.76**	**%**

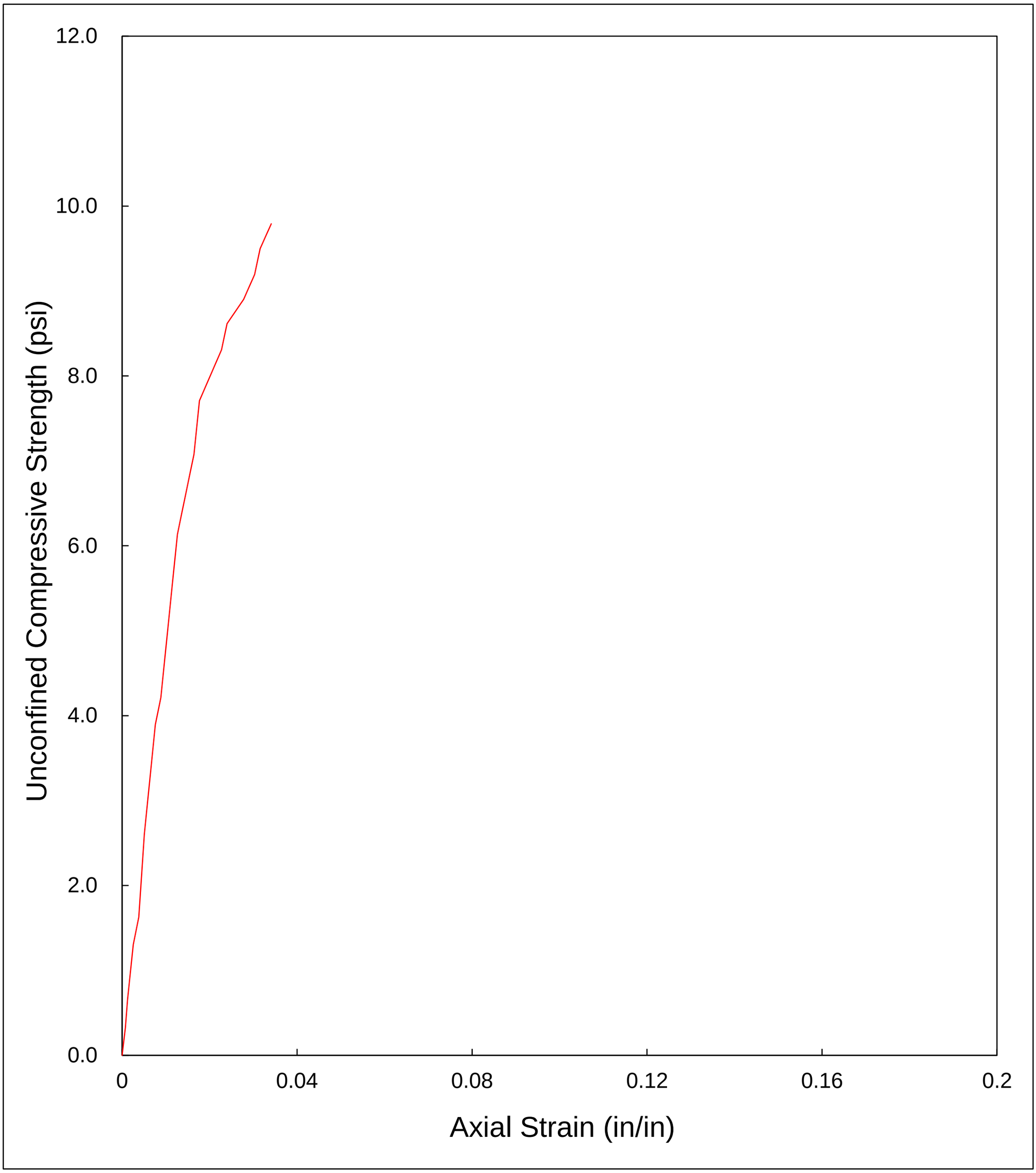
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.97	in.	3.95	in.
No. 2	1.98	in.	3.99	in.
No. 3	1.97	in.	3.94	in.
Average	**1.97**	**in.**	**3.96**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***298.43***	***g***
Initial Area, Ao	3.06	in^2
Initial Volume, Vo	12.11	in^3
Initial Bulk Unit Weight,	93.9	lb/ft^3
Initial Dry Unit Weight	51.4	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	9.8	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.058	0.0000	0.0
1	0.003	0.003	3.061	0.0008	0.3
2	0.005	0.005	3.062	0.0013	0.7
4	0.010	0.010	3.066	0.0025	1.3
5	0.015	0.015	3.070	0.0038	1.6
8	0.020	0.020	3.074	0.0051	2.6
10	0.025	0.025	3.078	0.0063	3.2
12	0.030	0.030	3.082	0.0076	3.9
13	0.035	0.035	3.086	0.0088	4.2
15	0.040	0.040	3.090	0.0101	4.9
17	0.045	0.045	3.094	0.0114	5.5
19	0.050	0.050	3.097	0.0126	6.1
20	0.055	0.055	3.101	0.0139	6.4
21	0.060	0.060	3.105	0.0152	6.8
22	0.065	0.065	3.109	0.0164	7.1
24	0.070	0.070	3.113	0.0177	7.7
25	0.080	0.080	3.121	0.0202	8.0
26	0.090	0.090	3.130	0.0227	8.3
27	0.095	0.095	3.134	0.0240	8.6
28	0.110	0.110	3.146	0.0278	8.9
29	0.120	0.120	3.154	0.0303	9.2
30	0.125	0.125	3.158	0.0316	9.5
31	0.135	0.135	3.166	0.0341	9.8
30	0.140	0.140	3.170	0.0354	9.5
29	0.200	0.200	3.221	0.0505	9.0
28	0.215	0.215	3.234	0.0543	8.7
27	0.220	0.220	3.238	0.0556	8.3
26	0.300	0.300	3.309	0.0758	7.9

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-006



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-006		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B887_US

TESTING PARAMETER AND RESULTS

MOISTURE CONTENT	82.8	**%**
BULK UNIT WEIGHT	93.9	lb/ft^3
DRY UNIT WEIGHT	51.4	lb/ft^3
UCS *	9.8	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-007
TESTING DATE:	1-18-18
TESTED BY:	LCJ
TRACKING CODE:	B888_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	7	
2. WT MOISTURE TIN (tare weight)	76.24	g
3. WT WET SOIL + TARE	107.60	g
4. WT DRY SOIL + TARE	93.90	g
5. WT WATER, Ww	13.70	g
6. WT DRY SOIL, Ws	17.66	g
7. ASTM MOISTURE CONTENT, W	**77.58**	**%**
8. PERCENT SOLIDS	**56.31**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-007		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ	TRACKING CODE:	B888_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	7	
2. WT MOISTURE TIN (tare weight)	76.24	g
3. WT WET SOIL + TARE	107.60	g
4. WT DRY SOIL + TARE	93.90	g
5. WT WATER, Ww	13.70	g
6. WT DRY SOIL, Ws	17.66	g
7. MOISTURE CONTENT, W	**77.58**	**%**

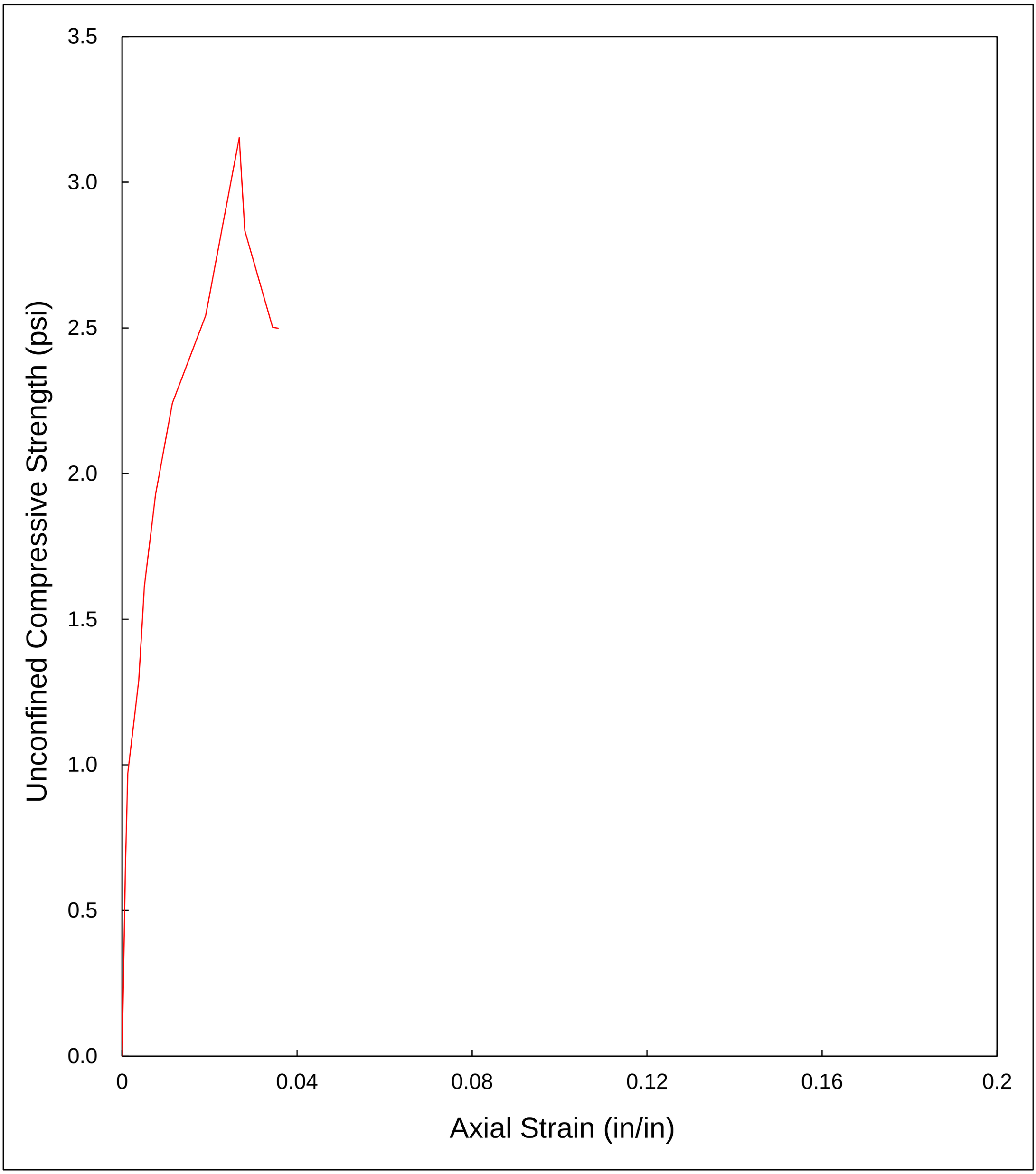
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.98	in.	3.92	in.
No. 2	1.97	in.	3.91	in.
No. 3	1.99	in.	3.94	in.
Average	**1.98**	**in.**	**3.92**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***291.29***	***g***
Initial Area, Ao	3.09	in^2
Initial Volume, Vo	12.11	in^3
Initial Bulk Unit Weight,	91.6	lb/ft^3
Initial Dry Unit Weight	51.6	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	3.2	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.087	0.0000	0.0
2	0.003	0.003	3.089	0.0008	0.6
3	0.005	0.005	3.091	0.0013	1.0
4	0.015	0.015	3.099	0.0038	1.3
5	0.020	0.020	3.103	0.0051	1.6
6	0.030	0.030	3.111	0.0076	1.9
7	0.045	0.045	3.123	0.0115	2.2
8	0.075	0.075	3.147	0.0191	2.5
9	0.090	0.090	3.159	0.0229	2.8
10	0.105	0.105	3.172	0.0268	3.2
9	0.110	0.110	3.176	0.0280	2.8
8	0.135	0.135	3.197	0.0344	2.5
8	0.140	0.140	3.201	0.0357	2.5

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-007



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-007		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ	TRACKING CODE:	B888_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	77.6	**%**
BULK UNIT WEIGHT	91.6	lb/ft³
DRY UNIT WEIGHT	51.6	lb/ft³
**UCS * **	3.2	lb/in²

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-008
TESTING DATE:	1-18-18
TESTED BY:	EM
TRACKING CODE:	B889_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	8	
2. WT MOISTURE TIN (tare weight)	63.27	g
3. WT WET SOIL + TARE	119.09	g
4. WT DRY SOIL + TARE	94.71	g
5. WT WATER, Ww	24.38	g
6. WT DRY SOIL, Ws	31.44	g
7. ASTM MOISTURE CONTENT, W	**77.54**	**%**
8. PERCENT SOLIDS	**56.32**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-008		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B889_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	8	
2. WT MOISTURE TIN (tare weight)	63.27	g
3. WT WET SOIL + TARE	119.09	g
4. WT DRY SOIL + TARE	94.71	g
5. WT WATER, Ww	24.38	g
6. WT DRY SOIL, Ws	31.44	g
7. MOISTURE CONTENT, W	**77.54**	**%**

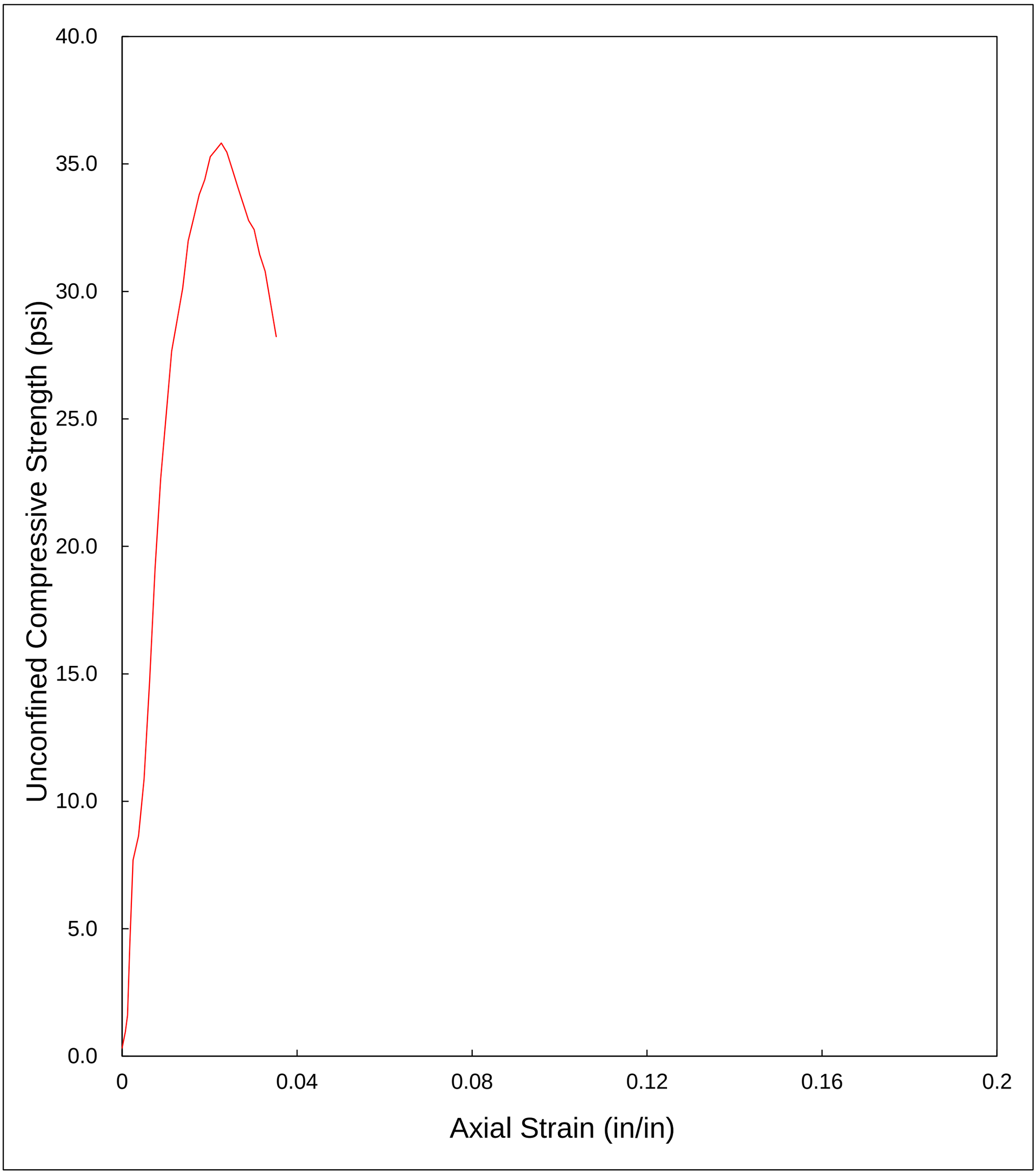
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.96	in.
No. 2	1.99	in.	3.98	in.
No. 3	1.99	in.	3.98	in.
Average	**1.99**	**in.**	**3.97**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***307.58***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.36	in^3
Initial Bulk Unit Weight,	94.8	lb/ft^3
Initial Dry Unit Weight	53.4	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	35.8	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
1	0.000	0.000	3.110	0.0000	0.3
3	0.003	0.003	3.113	0.0008	1.0
5	0.005	0.005	3.114	0.0013	1.6
14	0.007	0.007	3.116	0.0018	4.5
24	0.010	0.010	3.118	0.0025	7.7
27	0.015	0.015	3.122	0.0038	8.6
34	0.020	0.020	3.126	0.0050	10.9
46	0.025	0.025	3.130	0.0063	14.7
60	0.030	0.030	3.134	0.0076	19.1
71	0.035	0.035	3.138	0.0088	22.6
79	0.040	0.040	3.142	0.0101	25.1
87	0.045	0.045	3.146	0.0113	27.7
91	0.050	0.050	3.150	0.0126	28.9
95	0.055	0.055	3.154	0.0138	30.1
101	0.060	0.060	3.158	0.0151	32.0
104	0.065	0.065	3.162	0.0164	32.9
107	0.070	0.070	3.166	0.0176	33.8
109	0.075	0.075	3.170	0.0189	34.4
112	0.080	0.080	3.174	0.0201	35.3
113	0.085	0.085	3.178	0.0214	35.6
114	0.090	0.090	3.182	0.0227	35.8
113	0.095	0.095	3.186	0.0239	35.5
111	0.100	0.100	3.191	0.0252	34.8
109	0.105	0.105	3.195	0.0264	34.1
107	0.110	0.110	3.199	0.0277	33.4
105	0.115	0.115	3.203	0.0289	32.8
104	0.120	0.120	3.207	0.0302	32.4
101	0.125	0.125	3.211	0.0315	31.5
99	0.130	0.130	3.215	0.0327	30.8
95	0.135	0.135	3.220	0.0340	29.5
91	0.140	0.140	3.224	0.0352	28.2

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-008



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-008		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B889_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	77.5	**%**
BULK UNIT WEIGHT	94.8	lb/ft^3
DRY UNIT WEIGHT	53.4	lb/ft^3
**UCS * **	35.8	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-009
TESTING DATE:	1-18-18
TESTED BY:	EM/LCJ
TRACKING CODE:	B890_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	9	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	116.64	g
4. WT DRY SOIL + TARE	100.26	g
5. WT WATER, Ww	16.38	g
6. WT DRY SOIL, Ws	22.73	g
7. ASTM MOISTURE CONTENT, W	**72.06**	**%**
8. PERCENT SOLIDS	**58.12**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-008		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B889_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	8	
2. WT MOISTURE TIN (tare weight)	63.27	g
3. WT WET SOIL + TARE	119.09	g
4. WT DRY SOIL + TARE	94.71	g
5. WT WATER, Ww	24.38	g
6. WT DRY SOIL, Ws	31.44	g
7. MOISTURE CONTENT, W	**77.54**	**%**

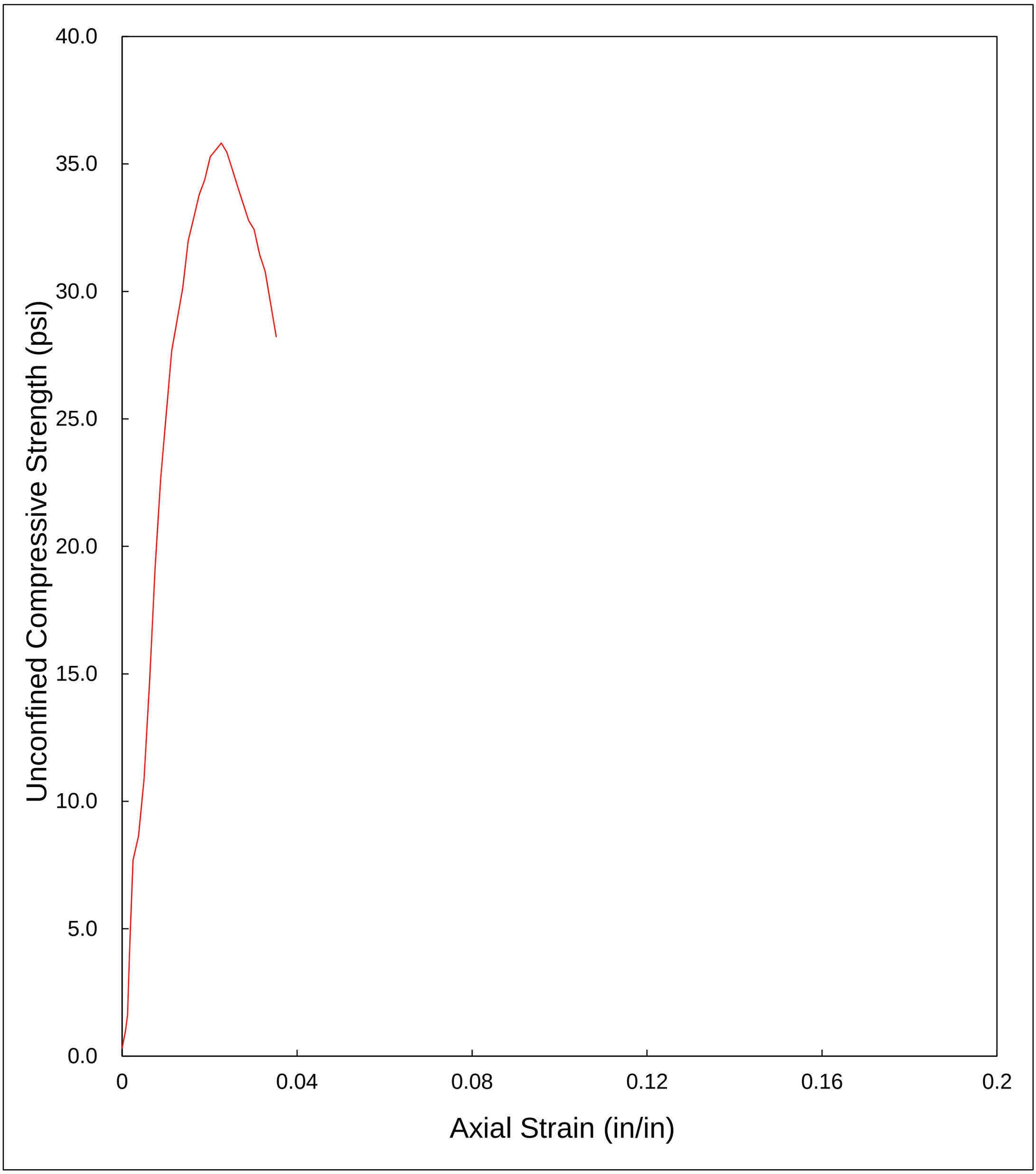
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.96	in.
No. 2	1.99	in.	3.98	in.
No. 3	1.99	in.	3.98	in.
Average	**1.99**	**in.**	**3.97**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***307.58***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.36	in^3
Initial Bulk Unit Weight,	94.8	lb/ft^3
Initial Dry Unit Weight	53.4	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	35.8	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
1	0.000	0.000	3.110	0.0000	0.3
3	0.003	0.003	3.113	0.0008	1.0
5	0.005	0.005	3.114	0.0013	1.6
14	0.007	0.007	3.116	0.0018	4.5
24	0.010	0.010	3.118	0.0025	7.7
27	0.015	0.015	3.122	0.0038	8.6
34	0.020	0.020	3.126	0.0050	10.9
46	0.025	0.025	3.130	0.0063	14.7
60	0.030	0.030	3.134	0.0076	19.1
71	0.035	0.035	3.138	0.0088	22.6
79	0.040	0.040	3.142	0.0101	25.1
87	0.045	0.045	3.146	0.0113	27.7
91	0.050	0.050	3.150	0.0126	28.9
95	0.055	0.055	3.154	0.0138	30.1
101	0.060	0.060	3.158	0.0151	32.0
104	0.065	0.065	3.162	0.0164	32.9
107	0.070	0.070	3.166	0.0176	33.8
109	0.075	0.075	3.170	0.0189	34.4
112	0.080	0.080	3.174	0.0201	35.3
113	0.085	0.085	3.178	0.0214	35.6
114	0.090	0.090	3.182	0.0227	35.8
113	0.095	0.095	3.186	0.0239	35.5
111	0.100	0.100	3.191	0.0252	34.8
109	0.105	0.105	3.195	0.0264	34.1
107	0.110	0.110	3.199	0.0277	33.4
105	0.115	0.115	3.203	0.0289	32.8
104	0.120	0.120	3.207	0.0302	32.4
101	0.125	0.125	3.211	0.0315	31.5
99	0.130	0.130	3.215	0.0327	30.8
95	0.135	0.135	3.220	0.0340	29.5
91	0.140	0.140	3.224	0.0352	28.2

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-008



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-008		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM	TRACKING CODE:	B889_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	77.5	**%**
BULK UNIT WEIGHT	94.8	lb/ft^3
DRY UNIT WEIGHT	53.4	lb/ft^3
**UCS * **	35.8	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-009
TESTING DATE:	1-18-18
TESTED BY:	EM/LCJ
TRACKING CODE:	B890_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	9	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	116.64	g
4. WT DRY SOIL + TARE	100.26	g
5. WT WATER, Ww	16.38	g
6. WT DRY SOIL, Ws	22.73	g
7. ASTM MOISTURE CONTENT, W	**72.06**	**%**
8. PERCENT SOLIDS	**58.12**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-009		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM/LCJ	TRACKING CODE:	B890_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	9	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	116.64	g
4. WT DRY SOIL + TARE	100.26	g
5. WT WATER, Ww	16.38	g
6. WT DRY SOIL, Ws	22.73	g
7. MOISTURE CONTENT, W	**72.06**	**%**

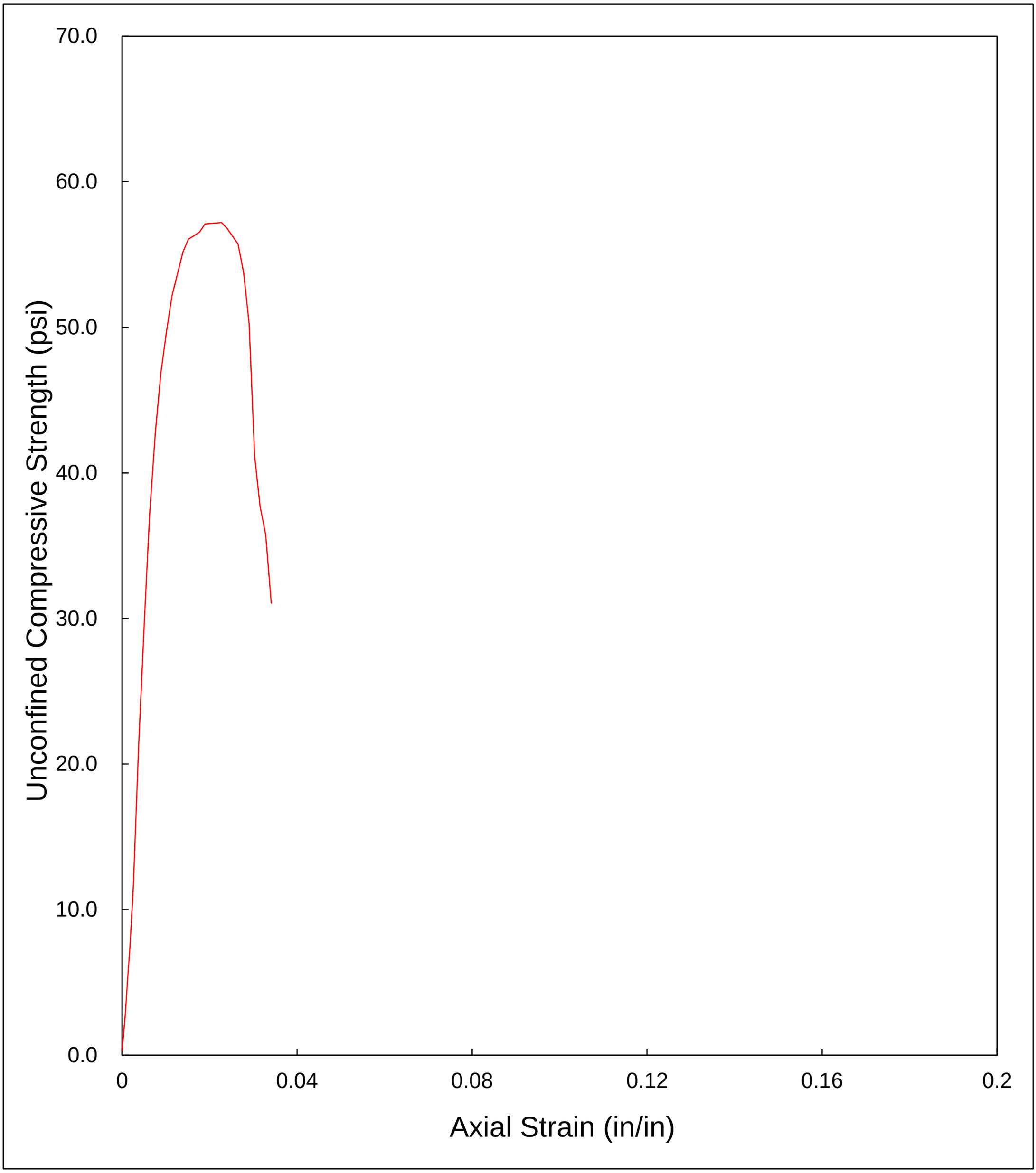
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.96	in.
No. 2	1.99	in.	3.96	in.
No. 3	1.99	in.	3.96	in.
Average	**1.99**	**in.**	**3.96**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***308.44***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.32	in^3
Initial Bulk Unit Weight,	95.4	lb/ft^3
Initial Dry Unit Weight	55.4	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	57.2	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
1	0.000	0.000	3.110	0.0000	0.3
9	0.003	0.003	3.113	0.0008	2.9
16	0.005	0.005	3.114	0.0013	5.1
23	0.007	0.007	3.116	0.0018	7.4
36	0.010	0.010	3.118	0.0025	11.5
67	0.015	0.015	3.122	0.0038	21.5
93	0.020	0.020	3.126	0.0051	29.8
117	0.025	0.025	3.130	0.0063	37.4
134	0.030	0.030	3.134	0.0076	42.8
147	0.035	0.035	3.138	0.0088	46.8
156	0.040	0.040	3.142	0.0101	49.7
164	0.045	0.045	3.146	0.0114	52.1
169	0.050	0.050	3.150	0.0126	53.7
174	0.055	0.055	3.154	0.0139	55.2
177	0.060	0.060	3.158	0.0152	56.0
178	0.065	0.065	3.162	0.0164	56.3
179	0.070	0.070	3.166	0.0177	56.5
181	0.075	0.075	3.170	0.0189	57.1
182	0.090	0.090	3.183	0.0227	57.2
181	0.095	0.095	3.187	0.0240	56.8
178	0.105	0.105	3.195	0.0265	55.7
172	0.110	0.110	3.199	0.0278	53.8
161	0.115	0.115	3.203	0.0290	50.3
132	0.120	0.120	3.207	0.0303	41.2
121	0.125	0.125	3.212	0.0316	37.7
115	0.130	0.130	3.216	0.0328	35.8
100	0.135	0.135	3.220	0.0341	31.1

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-009



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-009		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM/LCJ	TRACKING CODE:	B890_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	72.1	**%**
BULK UNIT WEIGHT	95.4	lb/ft³
DRY UNIT WEIGHT	55.4	lb/ft³
UCS *	57.2	lb/in²

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-010
TESTING DATE:	1-18-18
TESTED BY:	LCJ/EM
TRACKING CODE:	B891_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	10	
2. WT MOISTURE TIN (tare weight)	76.46	g
3. WT WET SOIL + TARE	109.10	g
4. WT DRY SOIL + TARE	94.46	g
5. WT WATER, Ww	14.64	g
6. WT DRY SOIL, Ws	18.00	g
7. ASTM MOISTURE CONTENT, W	**81.33**	**%**
8. PERCENT SOLIDS	**55.15**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT: Stratford Dewatering
PROJECT No.: SH0664 (8 Day)
SAMPLE No.: SH0664-010
TESTING DATE: 18-Jan-18
TESTED BY: LCJ/EM

LOADING RATE: 0.0400 in./min
TRACKING CODE: B891_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	10	
2. WT MOISTURE TIN (tare weight)	76.46	g
3. WT WET SOIL + TARE	109.10	g
4. WT DRY SOIL + TARE	94.46	g
5. WT WATER, Ww	14.64	g
6. WT DRY SOIL, Ws	18.00	g
7. MOISTURE CONTENT, W	**81.33**	**%**

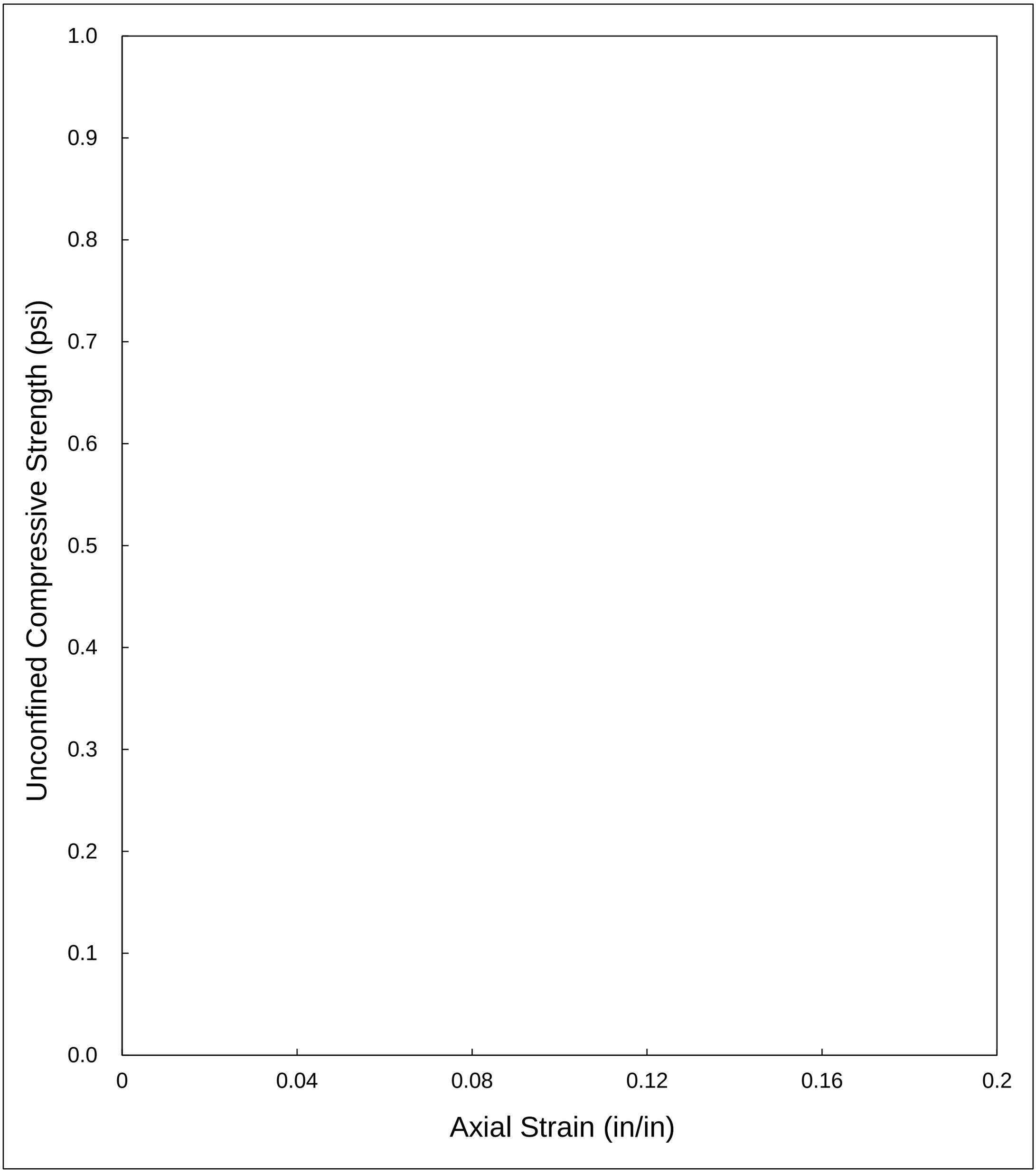
SOIL SPECIMEN DIMENSIONS		
	DIAMETER	***LENGTH***
No. 1	in.	in.
No. 2	in.	in.
No. 3	in.	in.
Average	**0.00 in.**	**0.00 in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo		***g***
Initial Area, Ao	0.00	in^2
Initial Volume, Vo	0.00	in^3
Initial Bulk Unit Weight,	#DIV/0!	lb/ft^3
Initial Dry Unit Weight	#DIV/0!	lb/ft^3
15 % Strain (0.15 Lo)	0.00	in.
UCS	#DIV/0!	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	#DIV/0!	#DIV/0!	#DIV/0!
	0.003	0.003	#DIV/0!	#DIV/0!	#DIV/0!
	0.005	0.005	#DIV/0!	#DIV/0!	#DIV/0!
	0.007	0.007	#DIV/0!	#DIV/0!	#DIV/0!
	0.010	0.010	#DIV/0!	#DIV/0!	#DIV/0!
	0.015	0.015	#DIV/0!	#DIV/0!	#DIV/0!
	0.020	0.020	#DIV/0!	#DIV/0!	#DIV/0!
	0.025	0.025	#DIV/0!	#DIV/0!	#DIV/0!
	0.030	0.030	#DIV/0!	#DIV/0!	#DIV/0!
	0.035	0.035	#DIV/0!	#DIV/0!	#DIV/0!
	0.040	0.040	#DIV/0!	#DIV/0!	#DIV/0!
	0.045	0.045	#DIV/0!	#DIV/0!	#DIV/0!
	0.050	0.050	#DIV/0!	#DIV/0!	#DIV/0!
	0.055	0.055	#DIV/0!	#DIV/0!	#DIV/0!
	0.060	0.060	#DIV/0!	#DIV/0!	#DIV/0!
	0.065	0.065	#DIV/0!	#DIV/0!	#DIV/0!
	0.070	0.070	#DIV/0!	#DIV/0!	#DIV/0!
	0.075	0.075	#DIV/0!	#DIV/0!	#DIV/0!
	0.080	0.080	#DIV/0!	#DIV/0!	#DIV/0!
	0.085	0.085	#DIV/0!	#DIV/0!	#DIV/0!
	0.090	0.090	#DIV/0!	#DIV/0!	#DIV/0!
	0.095	0.095	#DIV/0!	#DIV/0!	#DIV/0!
	0.100	0.100	#DIV/0!	#DIV/0!	#DIV/0!
	0.105	0.105	#DIV/0!	#DIV/0!	#DIV/0!
	0.110	0.110	#DIV/0!	#DIV/0!	#DIV/0!
	0.115	0.115	#DIV/0!	#DIV/0!	#DIV/0!
	0.120	0.120	#DIV/0!	#DIV/0!	#DIV/0!
		0.000	#DIV/0!	#DIV/0!	#DIV/0!
		0.000	#DIV/0!	#DIV/0!	#DIV/0!
		0.000	#DIV/0!	#DIV/0!	#DIV/0!
		0.000	#DIV/0!	#DIV/0!	#DIV/0!

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-010



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-010		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ/EM	TRACKING CODE:	B891_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	81.3	**%**
BULK UNIT WEIGHT	#DIV/0!	lb/ft³
DRY UNIT WEIGHT	#DIV/0!	lb/ft³
**UCS * **	#DIV/0!	lb/in²

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-011
TESTING DATE:	1-18-18
TESTED BY:	LCJ/EM
TRACKING CODE:	B892_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	11	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	106.25	g
4. WT DRY SOIL + TARE	94.12	g
5. WT WATER, Ww	12.13	g
6. WT DRY SOIL, Ws	16.59	g
7. ASTM MOISTURE CONTENT, W	**73.12**	**%**
8. PERCENT SOLIDS	**57.76**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-011		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM/LCJ	TRACKING CODE:	B892_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	11	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	106.25	g
4. WT DRY SOIL + TARE	94.12	g
5. WT WATER, Ww	12.13	g
6. WT DRY SOIL, Ws	16.59	g
7. MOISTURE CONTENT, W	**73.12**	**%**

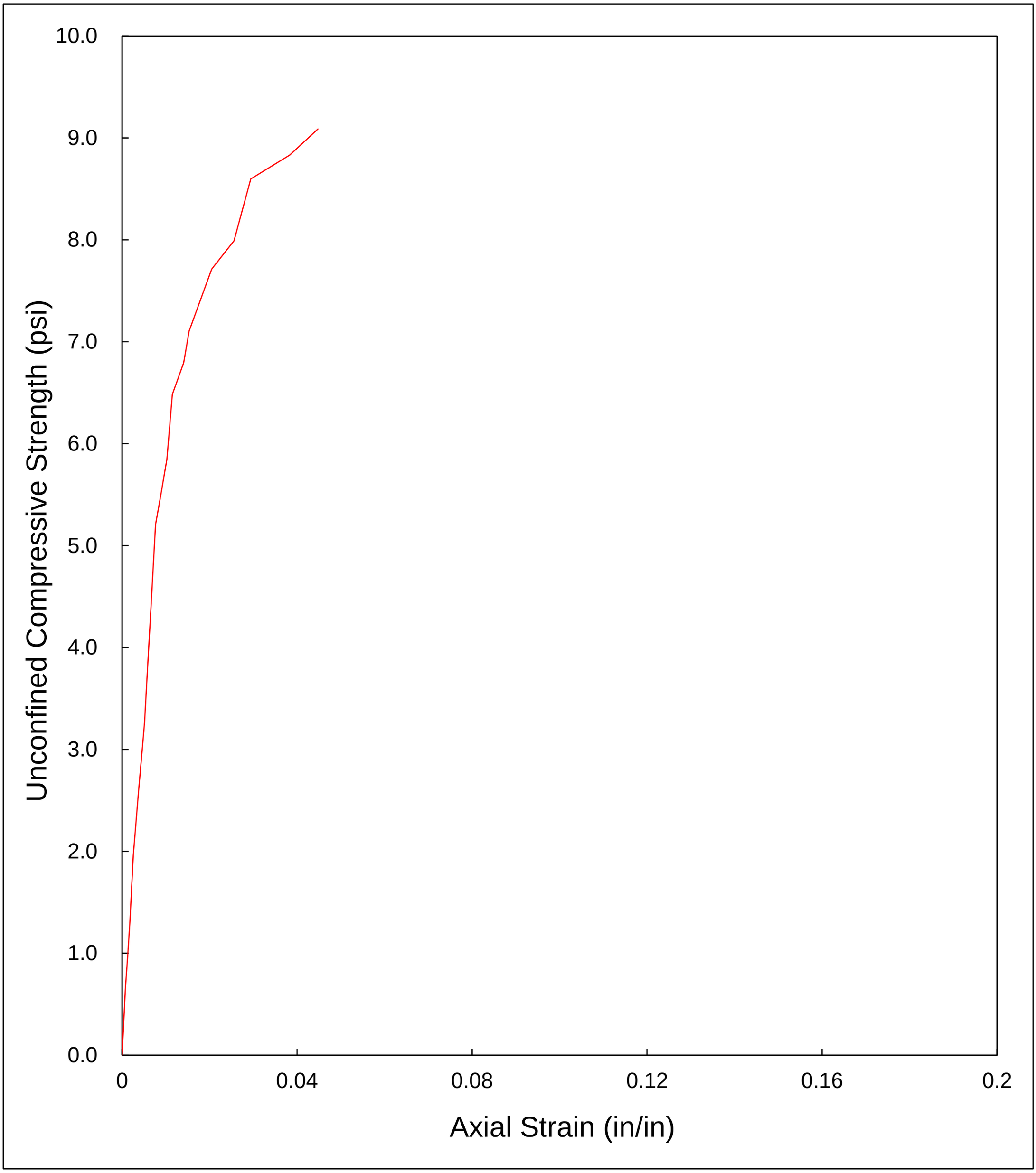
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.97	in.	3.89	in.
No. 2	1.98	in.	3.93	in.
No. 3	1.97	in.	3.90	in.
Average	**1.97**	**in.**	**3.91**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***304.59***	***g***
Initial Area, Ao	3.05	in^2
Initial Volume, Vo	11.91	in^3
Initial Bulk Unit Weight,	97.4	lb/ft^3
Initial Dry Unit Weight	56.3	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	9.1	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.048	0.0000	0.0
2	0.003	0.003	3.050	0.0008	0.7
3	0.005	0.005	3.052	0.0013	1.0
4	0.007	0.007	3.054	0.0018	1.3
6	0.010	0.010	3.056	0.0026	2.0
8	0.015	0.015	3.060	0.0038	2.6
10	0.020	0.020	3.064	0.0051	3.3
13	0.025	0.025	3.068	0.0064	4.2
16	0.030	0.030	3.072	0.0077	5.2
17	0.035	0.035	3.076	0.0090	5.5
18	0.040	0.040	3.080	0.0102	5.8
20	0.045	0.045	3.084	0.0115	6.5
21	0.055	0.055	3.092	0.0141	6.8
22	0.060	0.060	3.096	0.0153	7.1
23	0.070	0.070	3.104	0.0179	7.4
24	0.080	0.080	3.112	0.0205	7.7
25	0.100	0.100	3.128	0.0256	8.0
27	0.115	0.115	3.140	0.0294	8.6
28	0.150	0.150	3.170	0.0384	8.8
29	0.175	0.175	3.191	0.0448	9.1

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-011



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-011		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	EM/LCJ	TRACKING CODE:	B892_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	73.1	**%**
BULK UNIT WEIGHT	97.4	lb/ft^3
DRY UNIT WEIGHT	56.3	lb/ft^3
UCS *	9.1	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Stratford Dewatering
PROJECT No.:	SH0664 (8 Day)
SAMPLE No.:	SH0664-012
TESTING DATE:	1-18-18
TESTED BY:	LCJ/EM
TRACKING CODE:	B893_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	12	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	158.76	g
4. WT DRY SOIL + TARE	123.51	g
5. WT WATER, Ww	35.25	g
6. WT DRY SOIL, Ws	45.98	g
7. ASTM MOISTURE CONTENT, W	**76.66**	**%**
8. PERCENT SOLIDS	**56.60**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-012		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ/EM	TRACKING CODE:	B893_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.	12	
2. WT MOISTURE TIN (tare weight)	77.53	g
3. WT WET SOIL + TARE	158.76	g
4. WT DRY SOIL + TARE	123.51	g
5. WT WATER, Ww	35.25	g
6. WT DRY SOIL, Ws	45.98	g
7. MOISTURE CONTENT, W	**76.66**	**%**

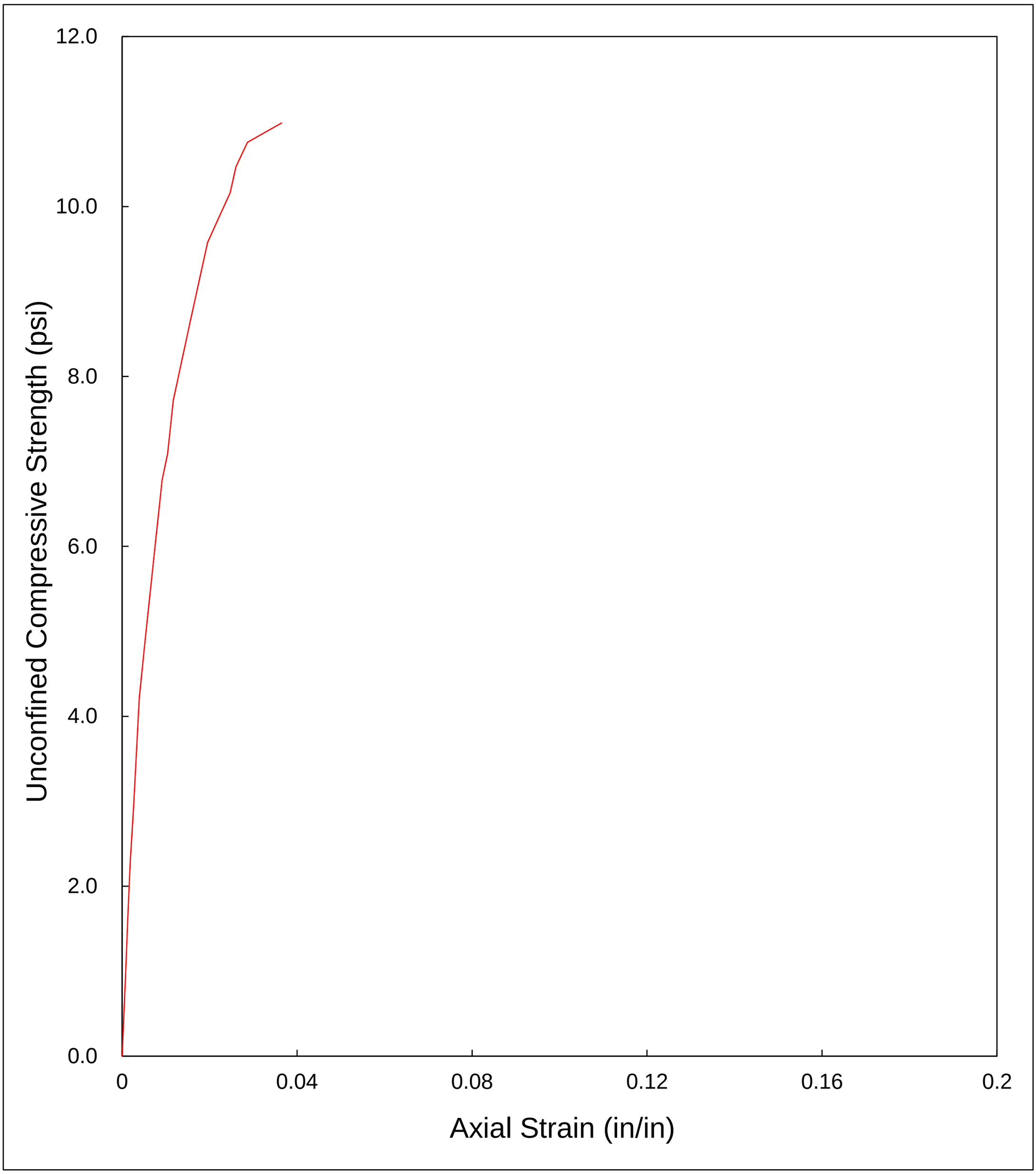
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.84	in.
No. 2	1.99	in.	3.86	in.
No. 3	1.95	in.	3.83	in.
Average	**1.98**	**in.**	**3.84**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***298.08***	***g***
Initial Area, Ao	3.07	in^2
Initial Volume, Vo	11.80	in^3
Initial Bulk Unit Weight,	96.2	lb/ft^3
Initial Dry Unit Weight	54.5	lb/ft^3
15 % Strain (0.15 Lo)	0.58	in.
UCS	11.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.071	0.0000	0.0
3	0.003	0.003	3.073	0.0008	1.0
5	0.005	0.005	3.075	0.0013	1.6
7	0.007	0.007	3.076	0.0018	2.3
9	0.010	0.010	3.079	0.0026	2.9
13	0.015	0.015	3.083	0.0039	4.2
15	0.020	0.020	3.087	0.0052	4.9
17	0.025	0.025	3.091	0.0065	5.5
19	0.030	0.030	3.095	0.0078	6.1
21	0.035	0.035	3.099	0.0091	6.8
22	0.040	0.040	3.103	0.0104	7.1
24	0.045	0.045	3.107	0.0117	7.7
27	0.060	0.060	3.119	0.0156	8.7
28	0.065	0.065	3.124	0.0169	9.0
29	0.070	0.070	3.128	0.0182	9.3
30	0.075	0.075	3.132	0.0195	9.6
31	0.085	0.085	3.140	0.0221	9.9
32	0.095	0.095	3.149	0.0247	10.2
33	0.100	0.100	3.153	0.0260	10.5
34	0.110	0.110	3.161	0.0286	10.8
35	0.140	0.140	3.187	0.0364	11.0

UNCONFINED COMPRESSION TESTING

Sample No. SH0664-012



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664 (8 Day)		
SAMPLE No.:	SH0664-012		
TESTING DATE:	18-Jan-18	LOADING RATE:	0.0400 in./min
TESTED BY:	LCJ/EM	TRACKING CODE:	B893_US

TESTING PARAMETER AND RESULTS

MOISTURE CONTENT	76.7	**%**
BULK UNIT WEIGHT	96.2	lb/ft³
DRY UNIT WEIGHT	54.5	lb/ft³
**UCS * **	11.0	lb/in²

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-001(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B924_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	1	
2. WT MOISTURE TIN (tare weight)	48.86	g
3. WT WET SOIL + TARE	83.69	g
4. WT DRY SOIL + TARE	67.07	g
5. WT WATER, Ww	16.62	g
6. WT DRY SOIL, Ws	18.21	g
7. ASTM MOISTURE CONTENT, W	**91.27**	**%**
8. PERCENT SOLIDS	**52.28**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH664		
SAMPLE No.:	664-001 (28 Day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B924_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	48.86	g
3. WT WET SOIL + TARE	83.69	g
4. WT DRY SOIL + TARE	67.07	g
5. WT WATER, Ww	16.62	g
6. WT DRY SOIL, Ws	18.21	g
7. MOISTURE CONTENT, W	**91.27**	**%**

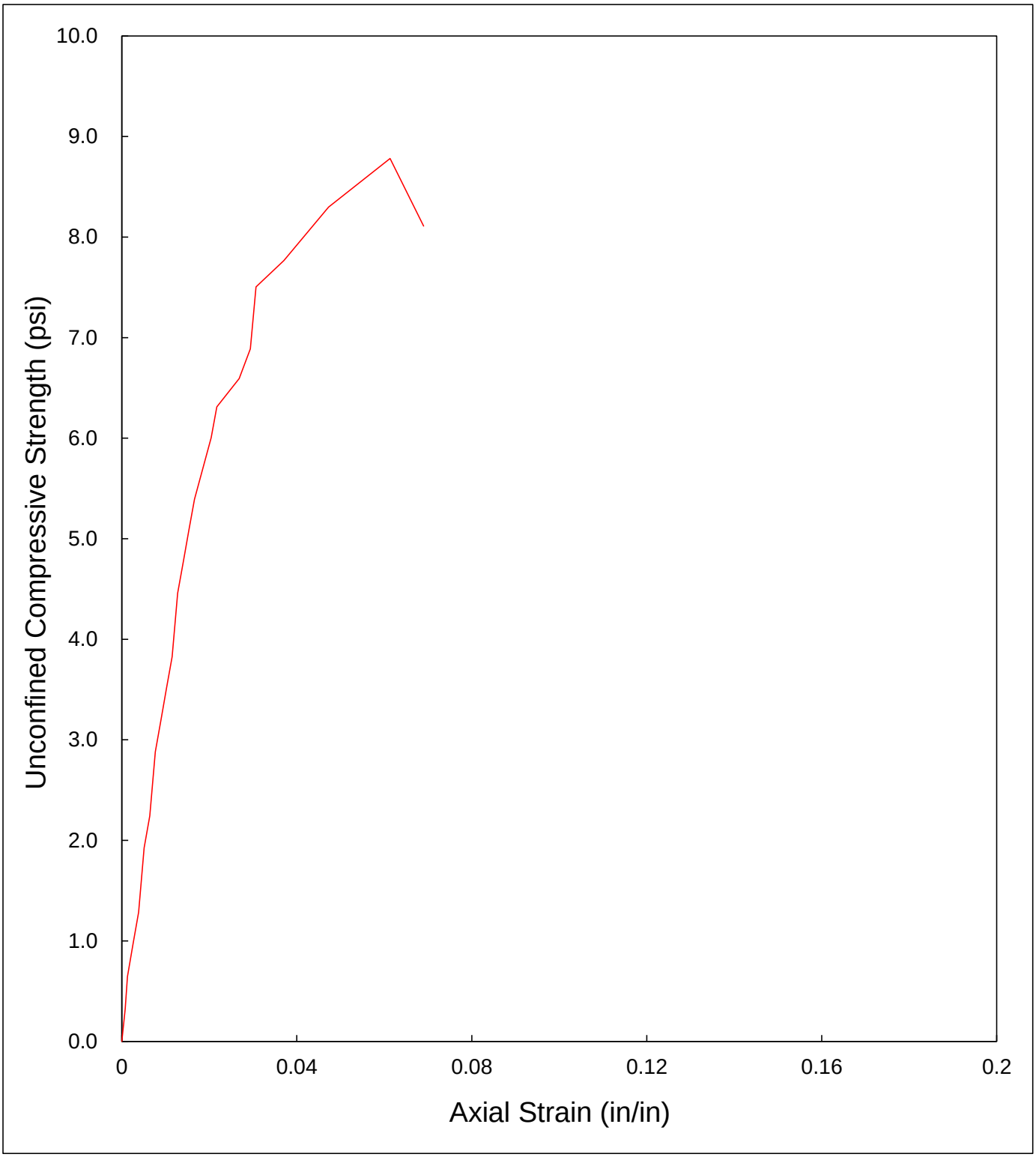
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.91	in.
No. 2	1.99	in.	3.91	in.
No. 3	1.98	in.	3.92	in.
Average	**1.99**	**in.**	**3.91**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***290.25***	***g***
Initial Area, Ao	3.10	in^2
Initial Volume, Vo	12.13	in^3
Initial Bulk Unit Weight,	91.1	lb/ft^3
Initial Dry Unit Weight	47.7	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	8.8	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.100	0.0000	0.0
1	0.003	0.003	3.102	0.0008	0.3
2	0.005	0.005	3.104	0.0013	0.6
3	0.010	0.010	3.108	0.0026	1.0
4	0.015	0.015	3.112	0.0038	1.3
6	0.020	0.020	3.116	0.0051	1.9
7	0.025	0.025	3.120	0.0064	2.2
9	0.030	0.030	3.124	0.0077	2.9
10	0.035	0.035	3.128	0.0089	3.2
11	0.040	0.040	3.132	0.0102	3.5
12	0.045	0.045	3.136	0.0115	3.8
14	0.050	0.050	3.140	0.0128	4.5
15	0.055	0.055	3.144	0.0141	4.8
16	0.060	0.060	3.148	0.0153	5.1
17	0.065	0.065	3.152	0.0166	5.4
19	0.080	0.080	3.165	0.0204	6.0
20	0.085	0.085	3.169	0.0217	6.3
21	0.105	0.105	3.185	0.0268	6.6
22	0.115	0.115	3.194	0.0294	6.9
24	0.120	0.120	3.198	0.0307	7.5
25	0.145	0.145	3.219	0.0371	7.8
27	0.185	0.185	3.254	0.0473	8.3
29	0.240	0.240	3.302	0.0613	8.8
27	0.270	0.270	3.330	0.0690	8.1
26	0.290	0.290	3.348	0.0741	7.8
25	0.295	0.295	3.353	0.0754	7.5
24	0.300	0.300	3.357	0.0767	7.1

UNCONFINED COMPRESSION TESTING

Sample No. 664-001 (28 Day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH664		
SAMPLE No.:	664-001 (28 Day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B924_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	91.3	**%**
BULK UNIT WEIGHT	91.1	lb/ft^3
DRY UNIT WEIGHT	47.7	lb/ft^3
UCS *	8.8	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-002(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B925_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	2	
2. WT MOISTURE TIN (tare weight)	48.98	g
3. WT WET SOIL + TARE	74.11	g
4. WT DRY SOIL + TARE	62.54	g
5. WT WATER, Ww	11.57	g
6. WT DRY SOIL, Ws	13.56	g
7. ASTM MOISTURE CONTENT, W	**85.32**	**%**
8. PERCENT SOLIDS	**53.96**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-002 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B925_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	48.98	g
3. WT WET SOIL + TARE	74.11	g
4. WT DRY SOIL + TARE	62.54	g
5. WT WATER, Ww	11.57	g
6. WT DRY SOIL, Ws	13.56	g
7. MOISTURE CONTENT, W	**85.32**	**%**

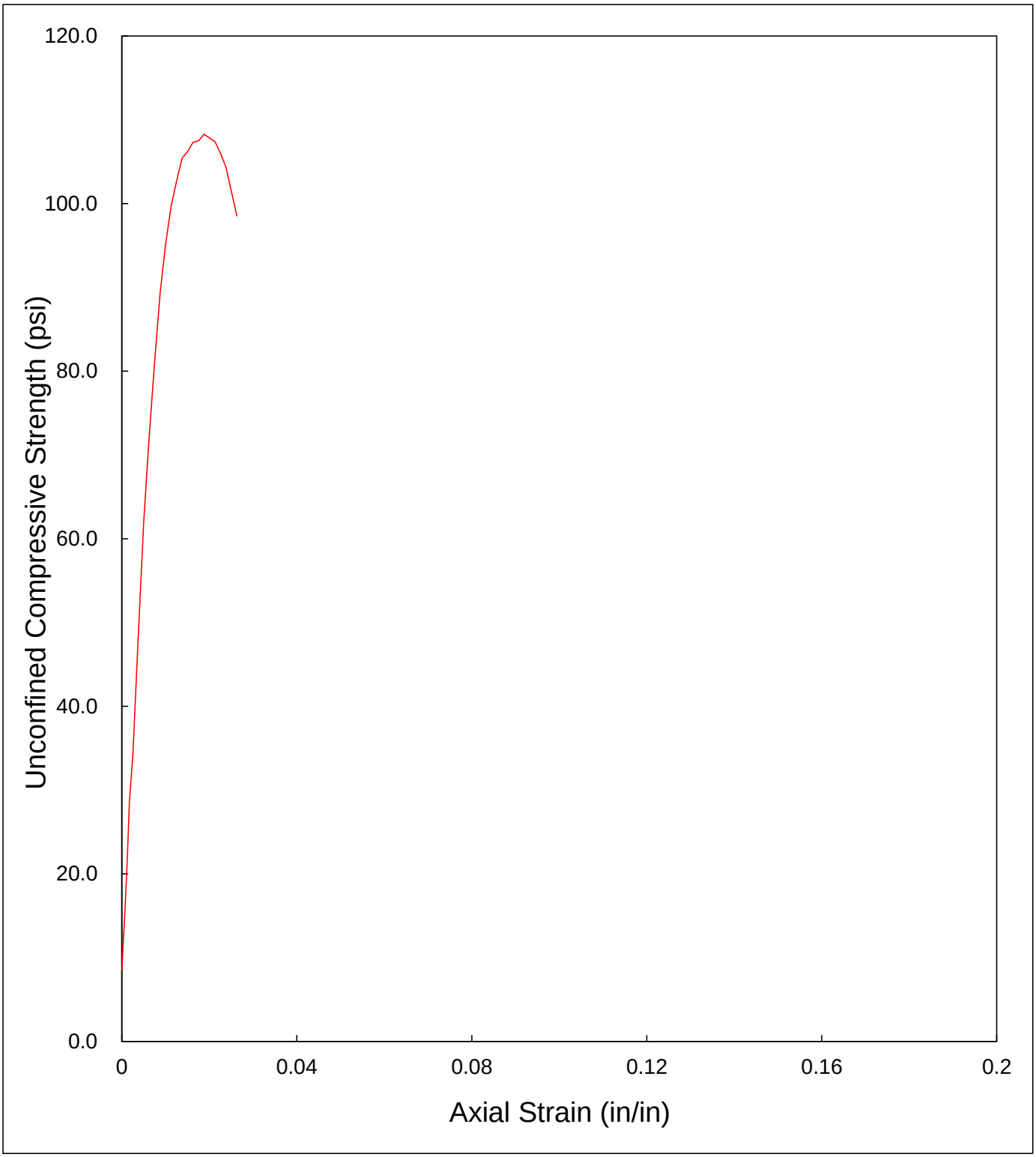
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	2.00	in.	4.00	in.
No. 2	2.01	in.	3.98	in.
No. 3	2.01	in.	3.99	in.
Average	**2.01**	**in.**	**3.99**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***295.50***	***g***
Initial Area, Ao	3.16	in^2
Initial Volume, Vo	12.62	in^3
Initial Bulk Unit Weight,	89.2	lb/ft^3
Initial Dry Unit Weight	48.1	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	108.3	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
27	0.000	0.000	3.163	0.0000	8.5
50	0.003	0.003	3.165	0.0008	15.8
69	0.005	0.005	3.167	0.0013	21.8
91	0.007	0.007	3.168	0.0018	28.7
108	0.010	0.010	3.171	0.0025	34.1
153	0.015	0.015	3.175	0.0038	48.2
197	0.020	0.020	3.179	0.0050	62.0
230	0.025	0.025	3.183	0.0063	72.3
259	0.030	0.030	3.187	0.0075	81.3
285	0.035	0.035	3.191	0.0088	89.3
304	0.040	0.040	3.195	0.0100	95.2
319	0.045	0.045	3.199	0.0113	99.7
329	0.050	0.050	3.203	0.0125	102.7
338	0.055	0.055	3.207	0.0138	105.4
341	0.060	0.060	3.211	0.0150	106.2
345	0.065	0.065	3.215	0.0163	107.3
346	0.070	0.070	3.219	0.0175	107.5
349	0.075	0.075	3.223	0.0188	108.3
348	0.080	0.080	3.227	0.0201	107.8
347	0.085	0.085	3.231	0.0213	107.4
343	0.090	0.090	3.236	0.0226	106.0
338	0.095	0.095	3.240	0.0238	104.3
329	0.100	0.100	3.244	0.0251	101.4
320	0.105	0.105	3.248	0.0263	98.5

UNCONFINED COMPRESSION TESTING

Sample No. 664-002 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-002 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B925_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	85.3	**%**
BULK UNIT WEIGHT	89.2	lb/ft^3
DRY UNIT WEIGHT	48.1	lb/ft^3
UCS *	108.3	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-003(28-Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B926_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	3	
2. WT MOISTURE TIN (tare weight)	50.99	g
3. WT WET SOIL + TARE	80.89	g
4. WT DRY SOIL + TARE	67.53	g
5. WT WATER, Ww	13.36	g
6. WT DRY SOIL, Ws	16.54	g
7. ASTM MOISTURE CONTENT, W	**80.77**	**%**
8. PERCENT SOLIDS	**55.32**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-003 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B926_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	50.99	g
3. WT WET SOIL + TARE	80.89	g
4. WT DRY SOIL + TARE	67.53	g
5. WT WATER, Ww	13.36	g
6. WT DRY SOIL, Ws	16.54	g
7. MOISTURE CONTENT, W	**80.77**	**%**

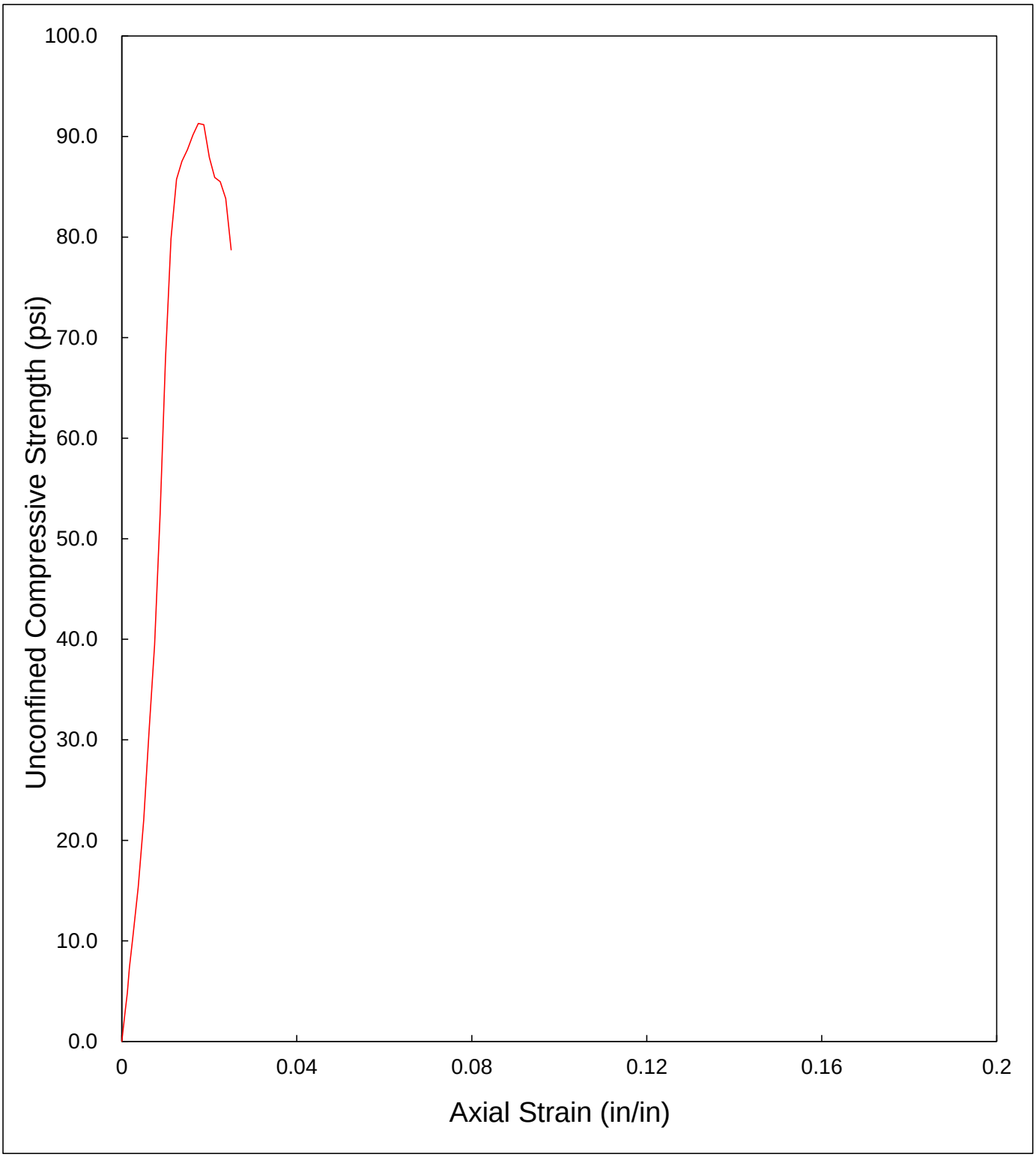
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	4.00	in.
No. 2	2.00	in.	4.01	in.
No. 3	1.99	in.	3.99	in.
Average	**1.99**	**in.**	**4.00**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***293.57***	***g***
Initial Area, Ao	3.12	in^2
Initial Volume, Vo	12.48	in^3
Initial Bulk Unit Weight,	89.6	lb/ft^3
Initial Dry Unit Weight	49.6	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	91.3	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.121	0.0000	0.0
9	0.003	0.003	3.123	0.0008	2.9
15	0.005	0.005	3.125	0.0013	4.8
23	0.007	0.007	3.126	0.0018	7.4
32	0.010	0.010	3.129	0.0025	10.2
48	0.015	0.015	3.132	0.0038	15.3
69	0.020	0.020	3.136	0.0050	22.0
97	0.025	0.025	3.140	0.0063	30.9
124	0.030	0.030	3.144	0.0075	39.4
165	0.035	0.035	3.148	0.0088	52.4
214	0.040	0.040	3.152	0.0100	67.9
252	0.045	0.045	3.156	0.0113	79.8
271	0.050	0.050	3.160	0.0125	85.8
277	0.055	0.055	3.164	0.0138	87.5
281	0.060	0.060	3.168	0.0150	88.7
286	0.065	0.065	3.172	0.0163	90.2
290	0.070	0.070	3.176	0.0175	91.3
290	0.075	0.075	3.180	0.0188	91.2
280	0.080	0.080	3.184	0.0200	87.9
274	0.085	0.085	3.188	0.0213	85.9
273	0.090	0.090	3.193	0.0225	85.5
268	0.095	0.095	3.197	0.0238	83.8
252	0.100	0.100	3.201	0.0250	78.7

UNCONFINED COMPRESSION TESTING

Sample No. 664-003 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-003 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B926_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	80.8	**%**
BULK UNIT WEIGHT	89.6	lb/ft^3
DRY UNIT WEIGHT	49.6	lb/ft^3
UCS *	91.3	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Straffor Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-004(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B927_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	4	
2. WT MOISTURE TIN (tare weight)	50.04	g
3. WT WET SOIL + TARE	100.96	g
4. WT DRY SOIL + TARE	76.18	g
5. WT WATER, Ww	24.78	g
6. WT DRY SOIL, Ws	26.14	g
7. ASTM MOISTURE CONTENT, W	**94.80**	**%**
8. PERCENT SOLIDS	**51.34**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-004 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B927_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	50.04	g
3. WT WET SOIL + TARE	100.96	g
4. WT DRY SOIL + TARE	76.18	g
5. WT WATER, Ww	24.78	g
6. WT DRY SOIL, Ws	26.14	g
7. MOISTURE CONTENT, W	**94.80**	**%**

Note: Soft, no strength
Fails under its own weight

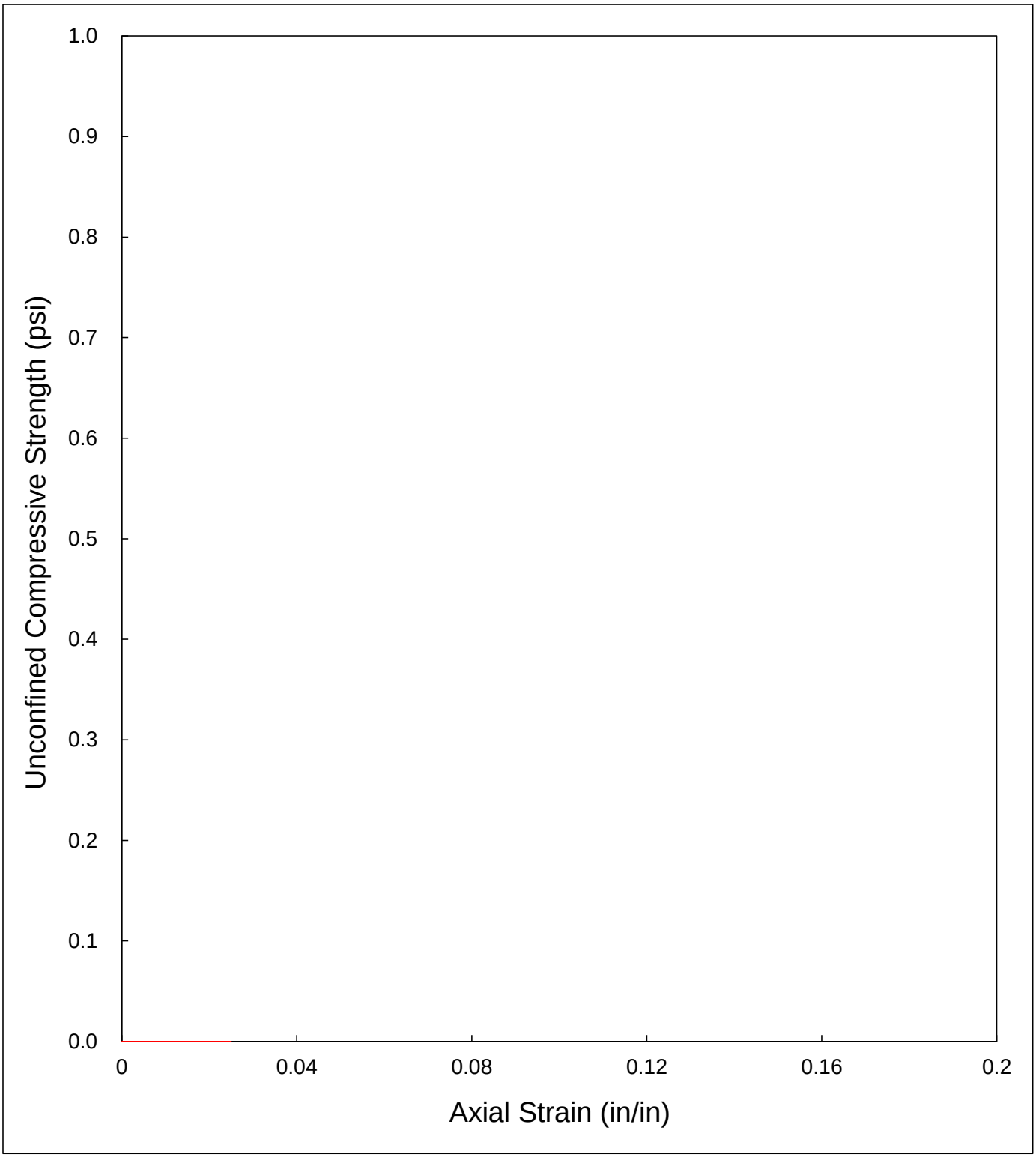
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	4.00	in.
No. 2	2.00	in.	4.01	in.
No. 3	2.00	in.	3.99	in.
Average	**2.00**	**in.**	**4.00**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***290.84***	***g***
Initial Area, Ao	3.13	in^2
Initial Volume, Vo	12.52	in^3
Initial Bulk Unit Weight,	88.5	lb/ft^3
Initial Dry Unit Weight	45.4	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	0.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.131	0.0000	0.0
	0.003	0.003	3.133	0.0008	0.0
	0.005	0.005	3.135	0.0013	0.0
	0.007	0.007	3.137	0.0018	0.0
	0.010	0.010	3.139	0.0025	0.0
	0.015	0.015	3.143	0.0038	0.0
	0.020	0.020	3.147	0.0050	0.0
	0.025	0.025	3.151	0.0063	0.0
	0.030	0.030	3.155	0.0075	0.0
	0.035	0.035	3.159	0.0088	0.0
	0.040	0.040	3.163	0.0100	0.0
	0.045	0.045	3.167	0.0113	0.0
	0.050	0.050	3.171	0.0125	0.0
	0.055	0.055	3.175	0.0138	0.0
	0.060	0.060	3.179	0.0150	0.0
	0.065	0.065	3.183	0.0163	0.0
	0.070	0.070	3.187	0.0175	0.0
	0.075	0.075	3.191	0.0188	0.0
	0.080	0.080	3.195	0.0200	0.0
	0.085	0.085	3.199	0.0213	0.0
	0.090	0.090	3.203	0.0225	0.0
	0.095	0.095	3.207	0.0238	0.0
	0.100	0.100	3.211	0.0250	0.0

UNCONFINED COMPRESSION TESTING

Sample No. 664-004 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-004 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B927_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	94.8	**%**
BULK UNIT WEIGHT	88.5	lb/ft^3
DRY UNIT WEIGHT	45.4	lb/ft^3
UCS *	0.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-005(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B928_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	5	
2. WT MOISTURE TIN (tare weight)	49.77	g
3. WT WET SOIL + TARE	91.90	g
4. WT DRY SOIL + TARE	72.52	g
5. WT WATER, Ww	19.38	g
6. WT DRY SOIL, Ws	22.75	g
7. ASTM MOISTURE CONTENT, W	**85.19**	**%**
8. PERCENT SOLIDS	**54.00**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-005 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B928_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.77	g
3. WT WET SOIL + TARE	91.90	g
4. WT DRY SOIL + TARE	72.52	g
5. WT WATER, Ww	19.38	g
6. WT DRY SOIL, Ws	22.75	g
7. MOISTURE CONTENT, W	**85.19**	**%**

Note:

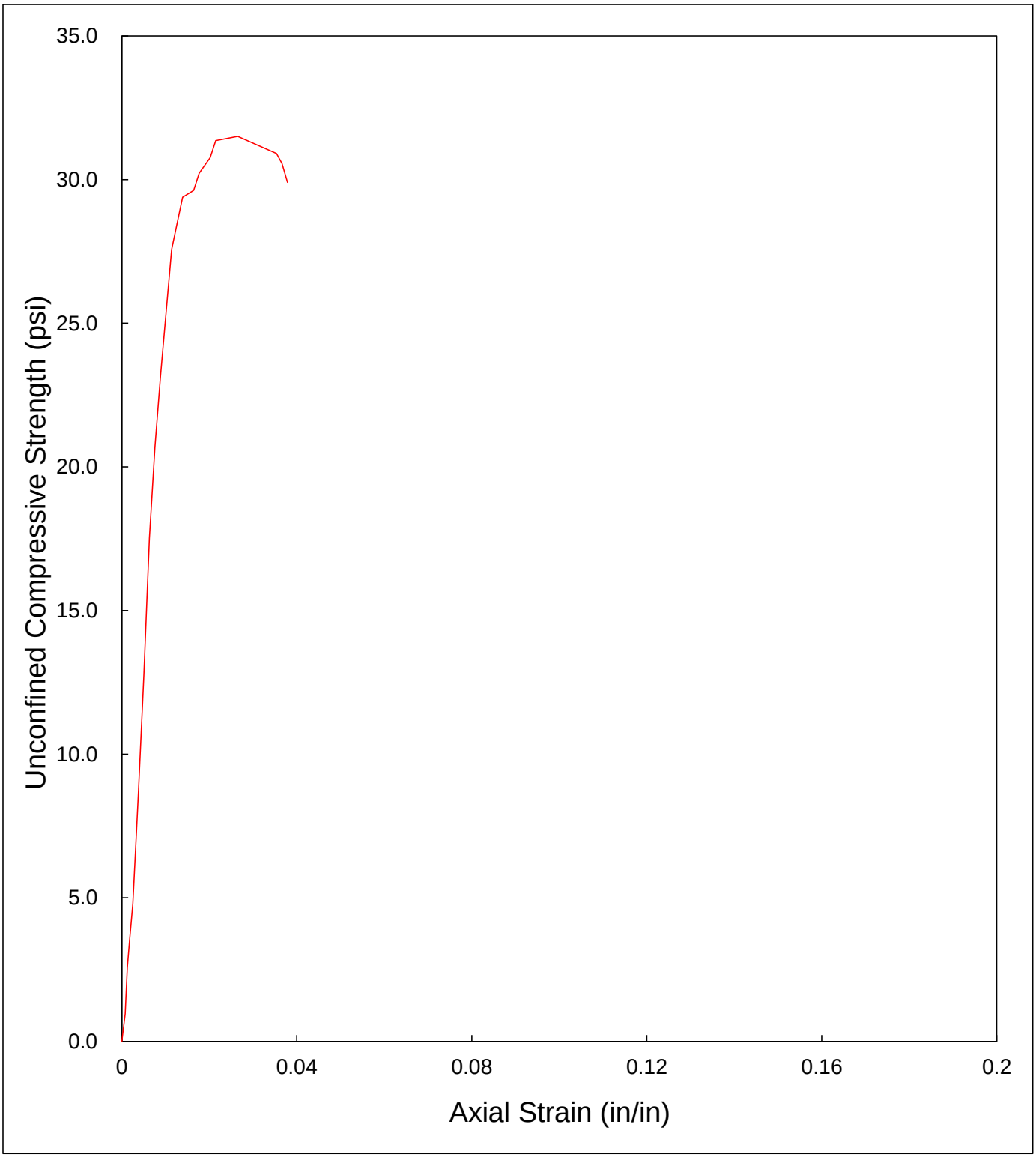
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		*LENGTH*	
No. 1	1.99	in.	3.96	in.
No. 2	1.99	in.	3.97	in.
No. 3	2.00	in.	3.95	in.
Average	**1.99**	**in.**	**3.96**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***298.66***	***g***
Initial Area, Ao	3.12	in^2
Initial Volume, Vo	12.36	in^3
Initial Bulk Unit Weight,	92.1	lb/ft^3
Initial Dry Unit Weight	49.7	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	31.5	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.121	0.0000	0.0
3	0.003	0.003	3.123	0.0008	1.0
8	0.005	0.005	3.125	0.0013	2.6
11	0.007	0.007	3.126	0.0018	3.5
15	0.010	0.010	3.129	0.0025	4.8
27	0.015	0.015	3.133	0.0038	8.6
40	0.020	0.020	3.137	0.0051	12.8
55	0.025	0.025	3.141	0.0063	17.5
65	0.030	0.030	3.145	0.0076	20.7
73	0.035	0.035	3.149	0.0088	23.2
80	0.040	0.040	3.153	0.0101	25.4
87	0.045	0.045	3.157	0.0114	27.6
90	0.050	0.050	3.161	0.0126	28.5
93	0.055	0.055	3.165	0.0139	29.4
94	0.065	0.065	3.173	0.0164	29.6
96	0.070	0.070	3.177	0.0177	30.2
97	0.075	0.075	3.181	0.0189	30.5
98	0.080	0.080	3.185	0.0202	30.8
100	0.085	0.085	3.189	0.0215	31.4
101	0.105	0.105	3.206	0.0265	31.5
100	0.140	0.140	3.235	0.0354	30.9
99	0.145	0.145	3.239	0.0366	30.6
97	0.150	0.150	3.244	0.0379	29.9
94	0.155	0.155	3.248	0.0391	28.9
90	0.160	0.160	3.252	0.0404	27.7
72	0.170	0.170	3.261	0.0429	22.1

UNCONFINED COMPRESSION TESTING

Sample No. 664-005 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	664-005 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B928_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	85.2	**%**
BULK UNIT WEIGHT	92.1	lb/ft^3
DRY UNIT WEIGHT	49.7	lb/ft^3
UCS *	31.5	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-006(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B929_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	6	
2. WT MOISTURE TIN (tare weight)	48.46	g
3. WT WET SOIL + TARE	87.49	g
4. WT DRY SOIL + TARE	69.71	g
5. WT WATER, Ww	17.78	g
6. WT DRY SOIL, Ws	21.25	g
7. ASTM MOISTURE CONTENT, W	**83.67**	**%**
8. PERCENT SOLIDS	**54.45**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	SH0664-006 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B929_US

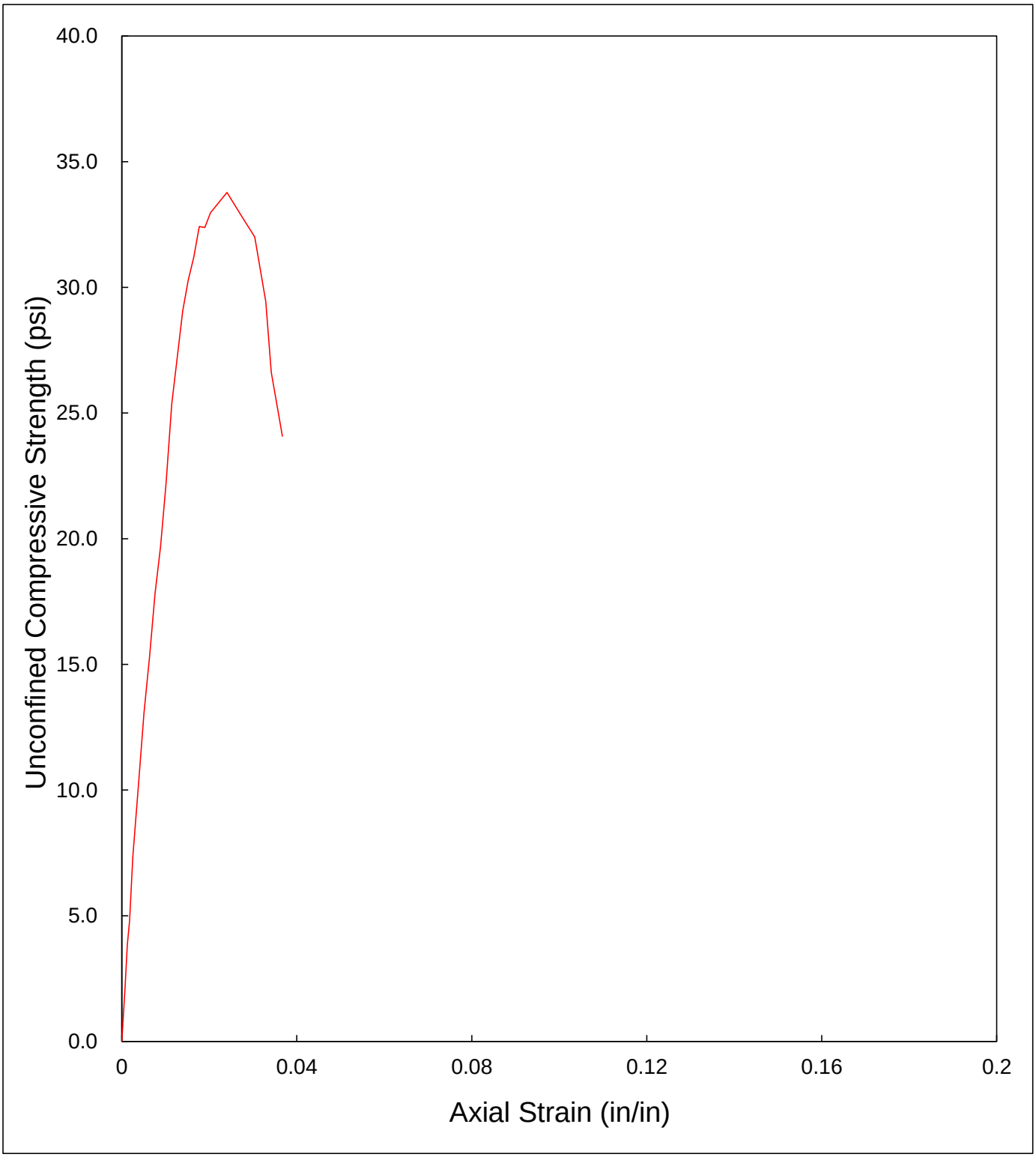
MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	48.46	g
3. WT WET SOIL + TARE	87.49	g
4. WT DRY SOIL + TARE	69.71	g
5. WT WATER, Ww	17.78	g
6. WT DRY SOIL, Ws	21.25	g
7. MOISTURE CONTENT, W	**83.67**	**%**

SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.97	in.
No. 2	1.99	in.	3.94	in.
No. 3	2.00	in.	3.94	in.
Average	**1.99**	**in.**	**3.95**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***297.74***	***g***
Initial Area, Ao	3.12	in^2
Initial Volume, Vo	12.33	in^3
Initial Bulk Unit Weight,	92.0	lb/ft^3
Initial Dry Unit Weight	50.1	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	33.8	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.121	0.0000	0.0
7	0.003	0.003	3.123	0.0008	2.2
12	0.005	0.005	3.125	0.0013	3.8
15	0.007	0.007	3.126	0.0018	4.8
23	0.010	0.010	3.129	0.0025	7.4
32	0.015	0.015	3.133	0.0038	10.2
41	0.020	0.020	3.137	0.0051	13.1
48	0.025	0.025	3.141	0.0063	15.3
56	0.030	0.030	3.145	0.0076	17.8
62	0.035	0.035	3.149	0.0089	19.7
70	0.040	0.040	3.153	0.0101	22.2
80	0.045	0.045	3.157	0.0114	25.3
86	0.050	0.050	3.161	0.0127	27.2
92	0.055	0.055	3.165	0.0139	29.1
96	0.060	0.060	3.169	0.0152	30.3
99	0.065	0.065	3.173	0.0165	31.2
103	0.070	0.070	3.177	0.0177	32.4
103	0.075	0.075	3.181	0.0190	32.4
105	0.080	0.080	3.185	0.0203	33.0
106	0.085	0.085	3.189	0.0215	33.2
107	0.090	0.090	3.193	0.0228	33.5
108	0.095	0.095	3.198	0.0241	33.8
107	0.100	0.100	3.202	0.0253	33.4
106	0.105	0.105	3.206	0.0266	33.1
105	0.110	0.110	3.210	0.0278	32.7
104	0.115	0.115	3.214	0.0291	32.4
103	0.120	0.120	3.218	0.0304	32.0
99	0.125	0.125	3.223	0.0316	30.7
95	0.130	0.130	3.227	0.0329	29.4
86	0.135	0.135	3.231	0.0342	26.6
78	0.145	0.145	3.240	0.0367	24.1

UNCONFINED COMPRESSION TESTING
Sample No. SH0664-006 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	SH0664-006 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B929_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	83.7	**%**
BULK UNIT WEIGHT	92.0	lb/ft^3
DRY UNIT WEIGHT	50.1	lb/ft^3
UCS *	33.8	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-007(28-Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B930_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	7	
2. WT MOISTURE TIN (tare weight)	52.75	g
3. WT WET SOIL + TARE	88.90	g
4. WT DRY SOIL + TARE	72.36	g
5. WT WATER, Ww	16.54	g
6. WT DRY SOIL, Ws	19.61	g
7. ASTM MOISTURE CONTENT, W	**84.34**	**%**
8. PERCENT SOLIDS	**54.25**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	SH0664-007 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B930_US

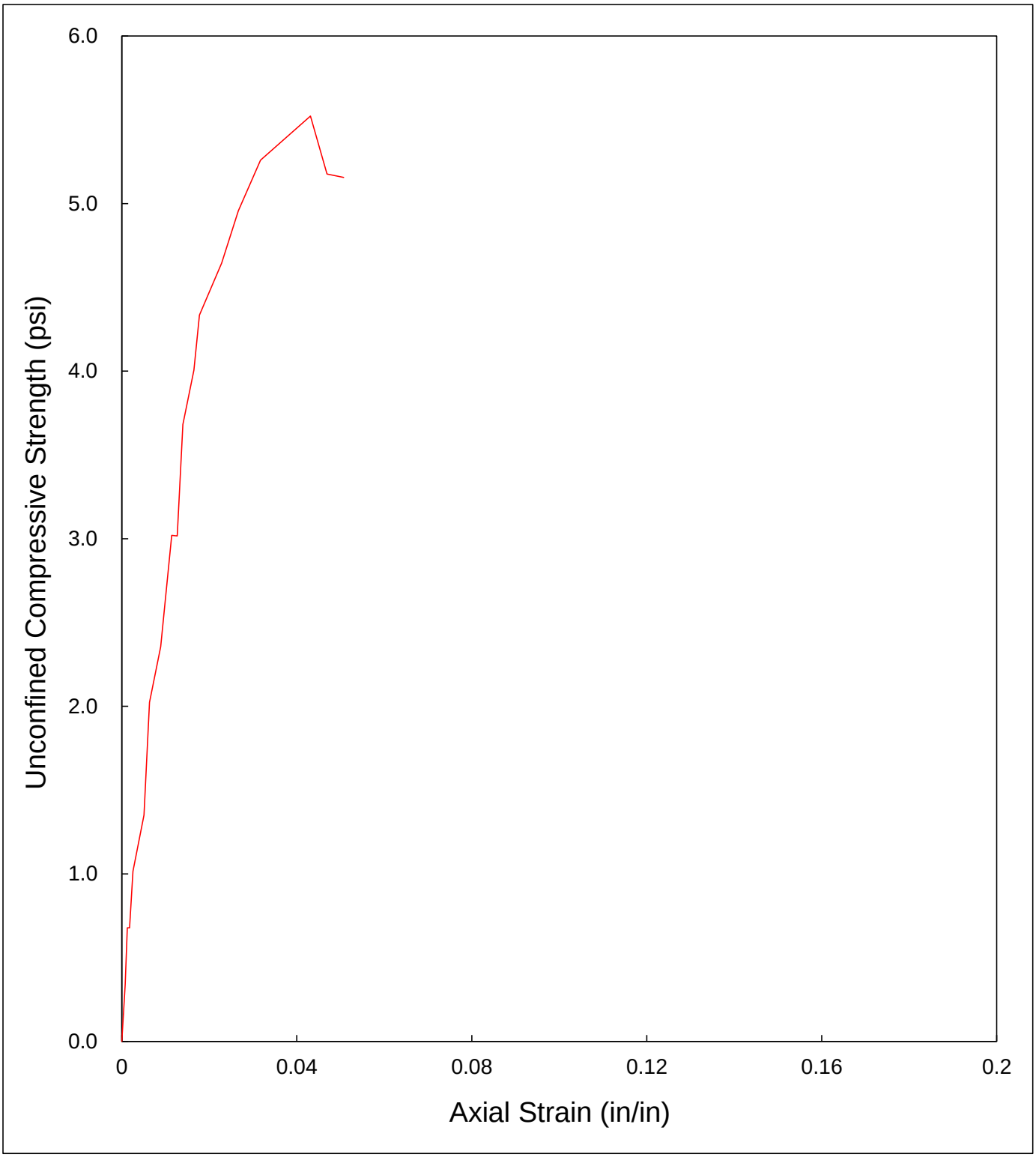
MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	52.75	g
3. WT WET SOIL + TARE	88.90	g
4. WT DRY SOIL + TARE	72.36	g
5. WT WATER, Ww	16.54	g
6. WT DRY SOIL, Ws	19.61	g
7. MOISTURE CONTENT, W	**84.34**	**%**

SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.97	in.	3.94	in.
No. 2	1.98	in.	3.93	in.
No. 3	1.86	in.	3.96	in.
Average	**1.94**	**in.**	**3.94**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***296.20***	***g***
Initial Area, Ao	2.95	in^2
Initial Volume, Vo	11.62	in^3
Initial Bulk Unit Weight,	97.1	lb/ft^3
Initial Dry Unit Weight	52.7	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	5.5	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	2.946	0.0000	0.0
1	0.003	0.003	2.948	0.0008	0.3
2	0.005	0.005	2.950	0.0013	0.7
2	0.007	0.007	2.951	0.0018	0.7
3	0.010	0.010	2.953	0.0025	1.0
4	0.020	0.020	2.961	0.0051	1.4
6	0.025	0.025	2.965	0.0063	2.0
7	0.035	0.035	2.972	0.0089	2.4
8	0.040	0.040	2.976	0.0101	2.7
9	0.045	0.045	2.980	0.0114	3.0
9	0.050	0.050	2.984	0.0127	3.0
11	0.055	0.055	2.987	0.0139	3.7
12	0.065	0.065	2.995	0.0165	4.0
13	0.070	0.070	2.999	0.0178	4.3
14	0.090	0.090	3.015	0.0228	4.6
15	0.105	0.105	3.026	0.0266	5.0
16	0.125	0.125	3.042	0.0317	5.3
17	0.170	0.170	3.078	0.0431	5.5
16	0.185	0.185	3.091	0.0469	5.2
16	0.200	0.200	3.103	0.0507	5.2

UNCONFINED COMPRESSION TESTING
Sample No. SH0664-007 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	SH0664-007 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B930_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	84.3	**%**
BULK UNIT WEIGHT	97.1	lb/ft^3
DRY UNIT WEIGHT	52.7	lb/ft^3
UCS *	5.5	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-008(28 Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B931_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	8	
2. WT MOISTURE TIN (tare weight)	49.77	g
3. WT WET SOIL + TARE	90.85	g
4. WT DRY SOIL + TARE	72.74	g
5. WT WATER, Ww	18.11	g
6. WT DRY SOIL, Ws	22.97	g
7. ASTM MOISTURE CONTENT, W	**78.84**	**%**
8. PERCENT SOLIDS	**55.92**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-008 (28 day)		
TESTING DATE:	TAJ	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B931_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.77	g
3. WT WET SOIL + TARE	90.85	g
4. WT DRY SOIL + TARE	72.74	g
5. WT WATER, Ww	18.11	g
6. WT DRY SOIL, Ws	22.97	g
7. MOISTURE CONTENT, W	**78.84**	**%**

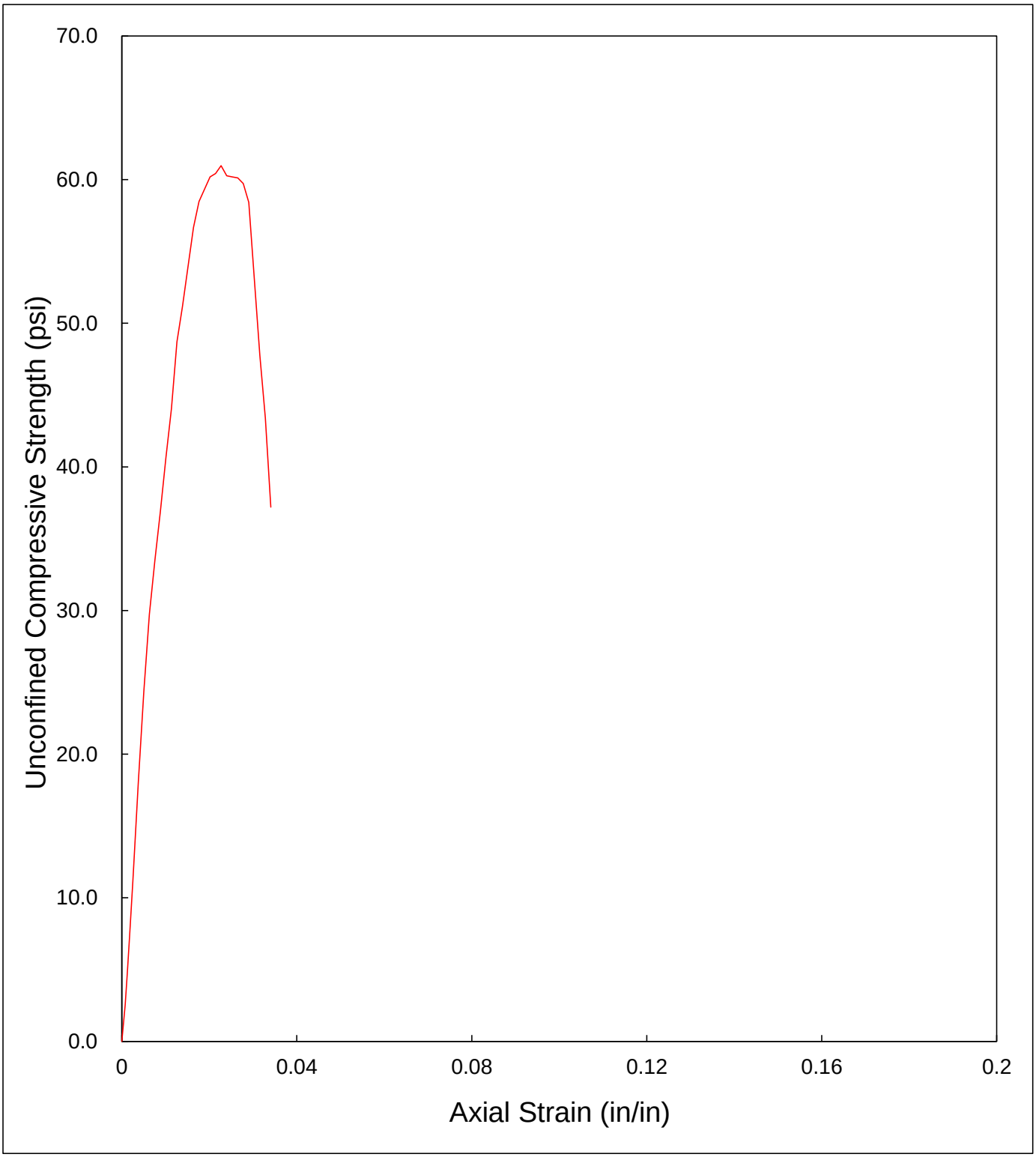
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	2.00	in.	3.98	in.
No. 2	2.01	in.	3.96	in.
No. 3	1.99	in.	3.95	in.
Average	**2.00**	**in.**	**3.96**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***303.00***	***g***
Initial Area, Ao	3.14	in^2
Initial Volume, Vo	12.45	in^3
Initial Bulk Unit Weight,	92.7	lb/ft^3
Initial Dry Unit Weight	51.8	lb/ft^3
15 % Strain (0.15 Lo)	0.59	in.
UCS	61.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.142	0.0000	0.0
8	0.003	0.003	3.144	0.0008	2.5
15	0.005	0.005	3.146	0.0013	4.8
23	0.007	0.007	3.147	0.0018	7.3
35	0.010	0.010	3.150	0.0025	11.1
57	0.015	0.015	3.154	0.0038	18.1
77	0.020	0.020	3.158	0.0050	24.4
94	0.025	0.025	3.162	0.0063	29.7
106	0.030	0.030	3.166	0.0076	33.5
117	0.035	0.035	3.170	0.0088	36.9
129	0.040	0.040	3.174	0.0101	40.6
140	0.045	0.045	3.178	0.0114	44.1
155	0.050	0.050	3.182	0.0126	48.7
163	0.055	0.055	3.186	0.0139	51.2
172	0.060	0.060	3.190	0.0151	53.9
181	0.065	0.065	3.194	0.0164	56.7
187	0.070	0.070	3.198	0.0177	58.5
190	0.075	0.075	3.202	0.0189	59.3
193	0.080	0.080	3.206	0.0202	60.2
194	0.085	0.085	3.210	0.0214	60.4
196	0.090	0.090	3.215	0.0227	61.0
194	0.095	0.095	3.219	0.0240	60.3
194	0.100	0.100	3.223	0.0252	60.2
194	0.105	0.105	3.227	0.0265	60.1
193	0.110	0.110	3.231	0.0278	59.7
189	0.115	0.115	3.235	0.0290	58.4
172	0.120	0.120	3.240	0.0303	53.1
155	0.125	0.125	3.244	0.0315	47.8
141	0.130	0.130	3.248	0.0328	43.4
121	0.135	0.135	3.252	0.0341	37.2

UNCONFINED COMPRESSION TESTING

Sample No. 0664-008 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-008 (28 day)		
TESTING DATE:	TAJ	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B931_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	78.8	**%**
BULK UNIT WEIGHT	92.7	lb/ft^3
DRY UNIT WEIGHT	51.8	lb/ft^3
UCS *	61.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-009(28-Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B932_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	9	
2. WT MOISTURE TIN (tare weight)	49.07	g
3. WT WET SOIL + TARE	83.78	g
4. WT DRY SOIL + TARE	69.04	g
5. WT WATER, Ww	14.74	g
6. WT DRY SOIL, Ws	19.97	g
7. ASTM MOISTURE CONTENT, W	**73.81**	**%**
8. PERCENT SOLIDS	**57.53**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-009 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B932_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.07	g
3. WT WET SOIL + TARE	83.78	g
4. WT DRY SOIL + TARE	69.04	g
5. WT WATER, Ww	14.74	g
6. WT DRY SOIL, Ws	19.97	g
7. MOISTURE CONTENT, W	**73.81**	**%**

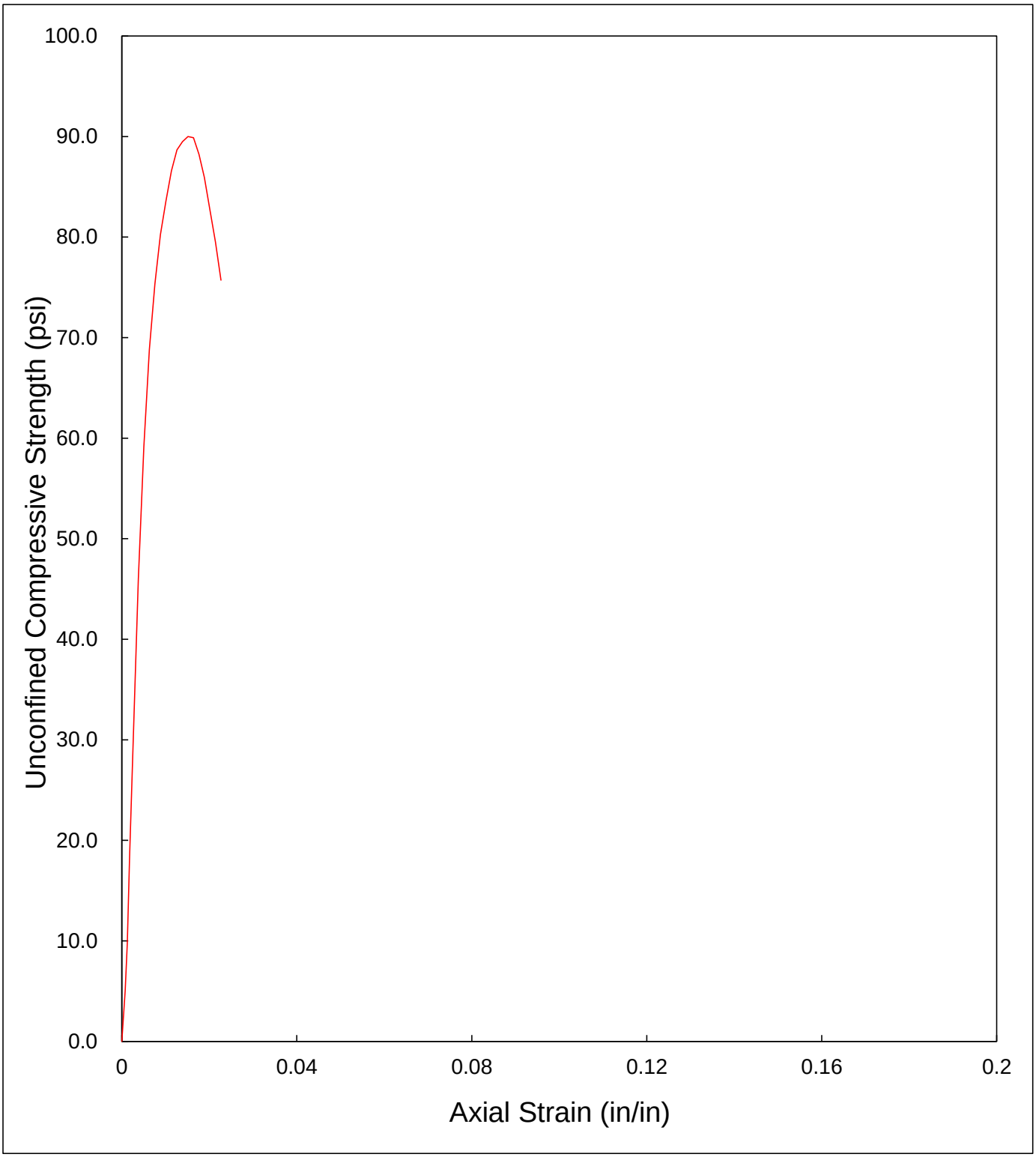
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	2.00	in.	3.97	in.
No. 2	2.01	in.	3.97	in.
No. 3	2.01	in.	3.97	in.
Average	**2.01**	**in.**	**3.97**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***311.59***	***g***
Initial Area, Ao	3.16	in^2
Initial Volume, Vo	12.56	in^3
Initial Bulk Unit Weight,	94.5	lb/ft^3
Initial Dry Unit Weight	54.4	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	90.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.163	0.0000	0.0
16	0.003	0.003	3.165	0.0008	5.1
31	0.005	0.005	3.167	0.0013	9.8
58	0.007	0.007	3.168	0.0018	18.3
91	0.010	0.010	3.171	0.0025	28.7
146	0.015	0.015	3.175	0.0038	46.0
188	0.020	0.020	3.179	0.0050	59.1
219	0.025	0.025	3.183	0.0063	68.8
240	0.030	0.030	3.187	0.0076	75.3
256	0.035	0.035	3.191	0.0088	80.2
267	0.040	0.040	3.195	0.0101	83.6
277	0.045	0.045	3.199	0.0113	86.6
284	0.050	0.050	3.203	0.0126	88.7
287	0.055	0.055	3.207	0.0139	89.5
289	0.060	0.060	3.211	0.0151	90.0
289	0.065	0.065	3.215	0.0164	89.9
284	0.070	0.070	3.219	0.0176	88.2
277	0.075	0.075	3.223	0.0189	85.9
267	0.080	0.080	3.228	0.0202	82.7
257	0.085	0.085	3.232	0.0214	79.5
245	0.090	0.090	3.236	0.0227	75.7

UNCONFINED COMPRESSION TESTING

Sample No. 0664-009 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-009 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B932_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	73.8	**%**
BULK UNIT WEIGHT	94.5	lb/ft^3
DRY UNIT WEIGHT	54.4	lb/ft^3
UCS *	90.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

MOISTURE CONTENT DETERMINATION

REPORT FORM

ASTM D 2216

PROJECT:	Strafford Dewatering
PROJECT No.:	SH0664
SAMPLE No.:	0664-010(28-Day)
TESTING DATE:	7-Feb-18
TESTED BY:	TAJ
TRACKING CODE:	B933_MC2

MOISTURE CONTENT (Dry & Wet Basis)		
1. MOISTURE TIN NO.	10	
2. WT MOISTURE TIN (tare weight)	49.23	g
3. WT WET SOIL + TARE	82.95	g
4. WT DRY SOIL + TARE	67.46	g
5. WT WATER, Ww	15.49	g
6. WT DRY SOIL, Ws	18.23	g
7. ASTM MOISTURE CONTENT, W	**84.97**	**%**
8. PERCENT SOLIDS	**54.06**	**%**

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-010 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B933_US

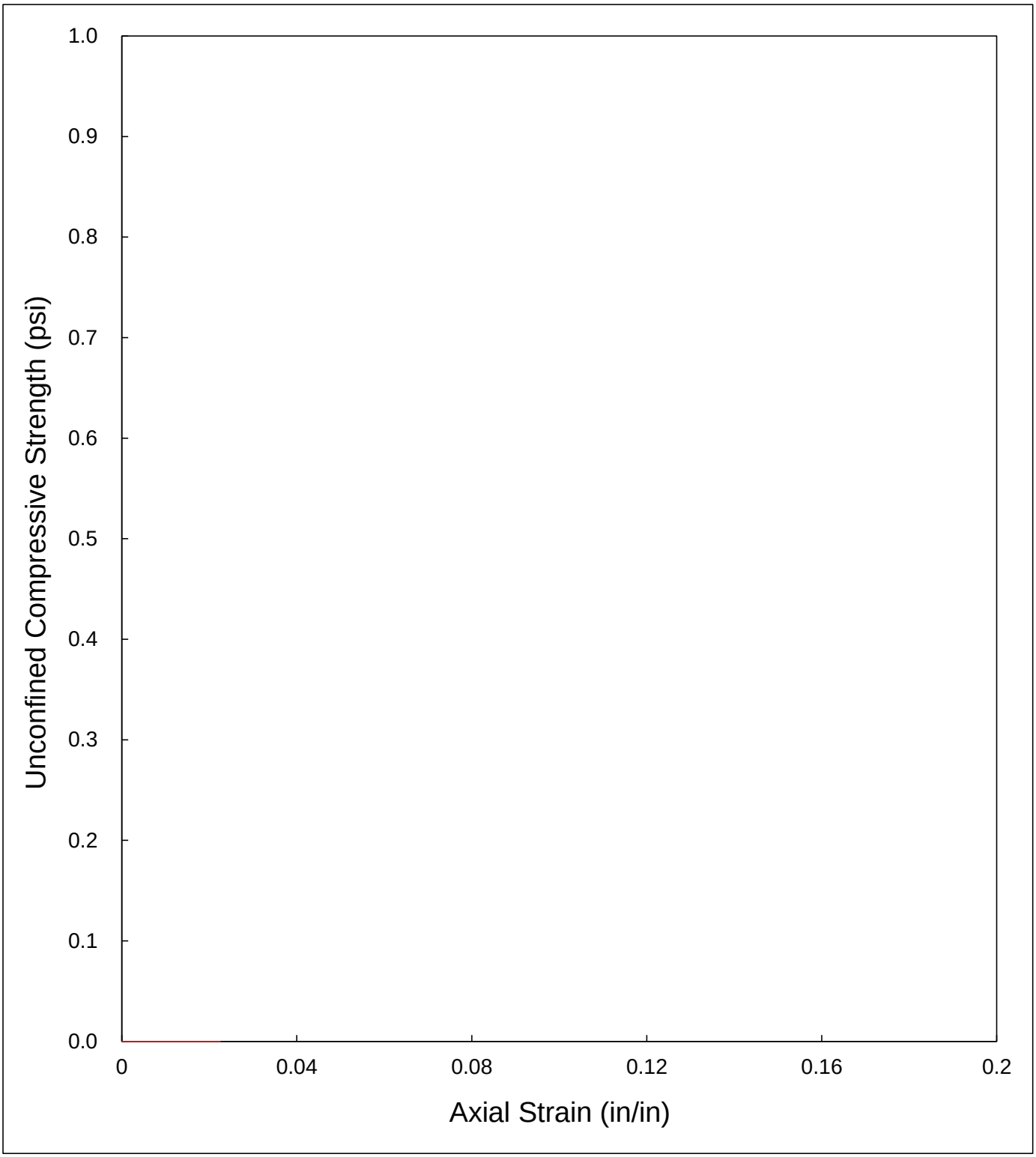
MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.23	g
3. WT WET SOIL + TARE	82.95	g
4. WT DRY SOIL + TARE	67.46	g
5. WT WATER, Ww	15.49	g
6. WT DRY SOIL, Ws	18.23	g
7. MOISTURE CONTENT, W	**84.97**	**%**

SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	2.00	in.	4.00	in.
No. 2	2.00	in.	4.00	in.
No. 3	2.00	in.	4.00	in.
Average	**2.00**	**in.**	**4.00**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***302.15***	***g***
Initial Area, Ao	3.14	in^2
Initial Volume, Vo	12.57	in^3
Initial Bulk Unit Weight,	91.6	lb/ft^3
Initial Dry Unit Weight	49.5	lb/ft^3
15 % Strain (0.15 Lo)	0.60	in.
UCS	0.0	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
	0.000	0.000	3.142	0.0000	0.0
	0.003	0.003	3.144	0.0008	0.0
	0.005	0.005	3.146	0.0013	0.0
	0.007	0.007	3.147	0.0018	0.0
	0.010	0.010	3.149	0.0025	0.0
	0.015	0.015	3.153	0.0038	0.0
	0.020	0.020	3.157	0.0050	0.0
	0.025	0.025	3.161	0.0063	0.0
	0.030	0.030	3.165	0.0075	0.0
	0.035	0.035	3.169	0.0088	0.0
	0.040	0.040	3.173	0.0100	0.0
	0.045	0.045	3.177	0.0113	0.0
	0.050	0.050	3.181	0.0125	0.0
	0.055	0.055	3.185	0.0138	0.0
	0.060	0.060	3.189	0.0150	0.0
	0.065	0.065	3.193	0.0163	0.0
	0.070	0.070	3.198	0.0175	0.0
	0.075	0.075	3.202	0.0188	0.0
	0.080	0.080	3.206	0.0200	0.0
	0.085	0.085	3.210	0.0213	0.0
	0.090	0.090	3.214	0.0225	0.0

UNCONFINED COMPRESSION TESTING
Sample No. 0664-010 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-010 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B933_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	85.0	**%**
BULK UNIT WEIGHT	91.6	lb/ft^3
DRY UNIT WEIGHT	49.5	lb/ft^3
UCS *	0.0	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-011 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B934_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.22	g
3. WT WET SOIL + TARE	84.25	g
4. WT DRY SOIL + TARE	69.21	g
5. WT WATER, Ww	15.04	g
6. WT DRY SOIL, Ws	19.99	g
7. MOISTURE CONTENT, W	**75.24**	**%**

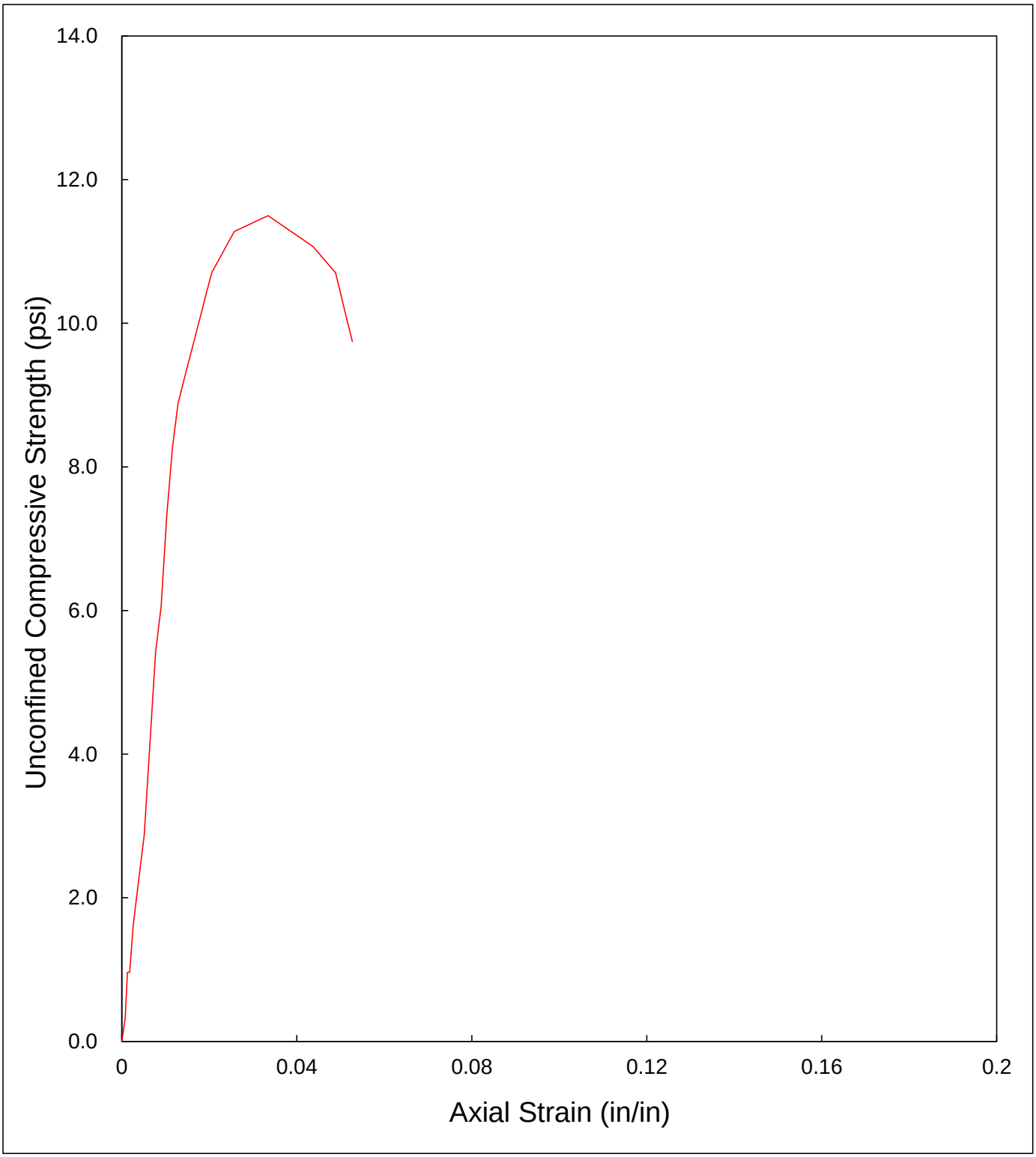
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.89	in.
No. 2	2.00	in.	3.88	in.
No. 3	1.98	in.	3.90	in.
Average	**1.99**	**in.**	**3.89**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***303.77***	***g***
Initial Area, Ao	3.11	in^2
Initial Volume, Vo	12.10	in^3
Initial Bulk Unit Weight,	95.6	lb/ft^3
Initial Dry Unit Weight	54.6	lb/ft^3
15 % Strain (0.15 Lo)	0.58	in.
UCS	11.5	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.110	0.0000	0.0
1	0.003	0.003	3.113	0.0008	0.3
3	0.005	0.005	3.114	0.0013	1.0
3	0.007	0.007	3.116	0.0018	1.0
5	0.010	0.010	3.118	0.0026	1.6
7	0.015	0.015	3.122	0.0039	2.2
9	0.020	0.020	3.126	0.0051	2.9
13	0.025	0.025	3.130	0.0064	4.2
17	0.030	0.030	3.134	0.0077	5.4
19	0.035	0.035	3.138	0.0090	6.1
23	0.040	0.040	3.143	0.0103	7.3
26	0.045	0.045	3.147	0.0116	8.3
28	0.050	0.050	3.151	0.0129	8.9
29	0.055	0.055	3.155	0.0141	9.2
30	0.060	0.060	3.159	0.0154	9.5
31	0.065	0.065	3.163	0.0167	9.8
32	0.070	0.070	3.167	0.0180	10.1
33	0.075	0.075	3.171	0.0193	10.4
34	0.080	0.080	3.176	0.0206	10.7
35	0.090	0.090	3.184	0.0231	11.0
36	0.100	0.100	3.192	0.0257	11.3
37	0.130	0.130	3.218	0.0334	11.5
36	0.170	0.170	3.252	0.0437	11.1
35	0.190	0.190	3.270	0.0488	10.7
34	0.195	0.195	3.274	0.0501	10.4
33	0.200	0.200	3.279	0.0514	10.1
32	0.205	0.205	3.283	0.0527	9.7

UNCONFINED COMPRESSION TESTING

Sample No. 0664-011 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-011 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B934_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	75.2	**%**
BULK UNIT WEIGHT	95.6	lb/ft^3
DRY UNIT WEIGHT	54.6	lb/ft^3
UCS *	11.5	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

UNCONFINED COMPRESSION TEST

ASTM D 2166

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-012 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B935_US

MOISTURE CONTENT (Dry Basis)		
1. MOISTURE TIN NO.		
2. WT MOISTURE TIN (tare weight)	49.55	g
3. WT WET SOIL + TARE	86.98	g
4. WT DRY SOIL + TARE	70.75	g
5. WT WATER, Ww	16.23	g
6. WT DRY SOIL, Ws	21.20	g
7. MOISTURE CONTENT, W	**76.56**	**%**

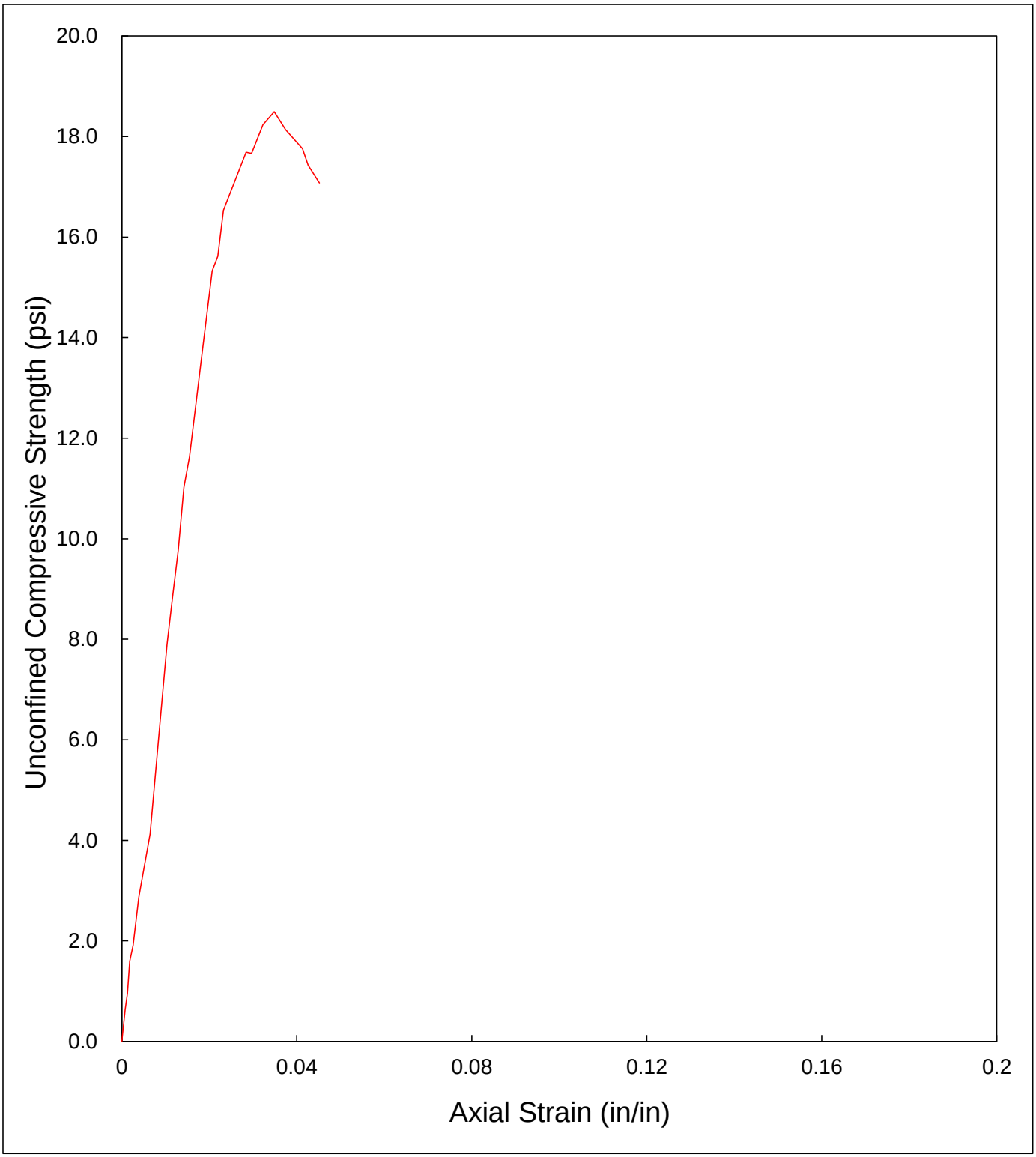
SOIL SPECIMEN DIMENSIONS				
	DIAMETER		***LENGTH***	
No. 1	1.99	in.	3.88	in.
No. 2	2.00	in.	3.86	in.
No. 3	2.00	in.	3.88	in.
Average	**2.00**	**in.**	**3.87**	**in.**

SPECIMEN CONDITIONS		
Initial Specimen WT, Wo	***300.20***	***g***
Initial Area, Ao	3.13	in^2
Initial Volume, Vo	12.13	in^3
Initial Bulk Unit Weight,	94.3	lb/ft^3
Initial Dry Unit Weight	53.4	lb/ft^3
15 % Strain (0.15 Lo)	0.58	in.
UCS	18.5	lb/in^2

COMPRESSIVE LOAD (lbs.)	DIAL GAGE READING (in.)	SPECIMEN DEFORMATION (in.)	CORRECTED AREA (in^2)	AXIAL STRAIN (in/in)	UNCONFINED COMPRESSIVE STRENGTH (lb/in^2)
0	0.000	0.000	3.131	0.0000	0.0
2	0.003	0.003	3.134	0.0008	0.6
3	0.005	0.005	3.135	0.0013	1.0
5	0.007	0.007	3.137	0.0018	1.6
6	0.010	0.010	3.139	0.0026	1.9
9	0.015	0.015	3.143	0.0039	2.9
11	0.020	0.020	3.147	0.0052	3.5
13	0.025	0.025	3.151	0.0065	4.1
17	0.030	0.030	3.156	0.0077	5.4
21	0.035	0.035	3.160	0.0090	6.6
25	0.040	0.040	3.164	0.0103	7.9
28	0.045	0.045	3.168	0.0116	8.8
31	0.050	0.050	3.172	0.0129	9.8
35	0.055	0.055	3.176	0.0142	11.0
37	0.060	0.060	3.180	0.0155	11.6
40	0.065	0.065	3.185	0.0168	12.6
43	0.070	0.070	3.189	0.0181	13.5
46	0.075	0.075	3.193	0.0194	14.4
49	0.080	0.080	3.197	0.0207	15.3
50	0.085	0.085	3.201	0.0219	15.6
53	0.090	0.090	3.206	0.0232	16.5
54	0.095	0.095	3.210	0.0245	16.8
55	0.100	0.100	3.214	0.0258	17.1
56	0.105	0.105	3.218	0.0271	17.4
57	0.110	0.110	3.223	0.0284	17.7
57	0.115	0.115	3.227	0.0297	17.7
58	0.120	0.120	3.231	0.0310	17.9
59	0.125	0.125	3.236	0.0323	18.2
60	0.135	0.135	3.244	0.0349	18.5
59	0.145	0.145	3.253	0.0374	18.1
58	0.160	0.160	3.266	0.0413	17.8
57	0.165	0.165	3.270	0.0426	17.4
56	0.175	0.175	3.279	0.0452	17.1

UNCONFINED COMPRESSION TESTING

Sample No. 0664-012 (28 day)



UNCONFINED COMPRESSION TEST

ASTM D 2166
SUMMARY OF RESULTS

PROJECT:	Stratford Dewatering		
PROJECT No.:	SH0664		
SAMPLE No.:	0664-012 (28 day)		
TESTING DATE:	7-Feb-18	LOADING RATE:	0.0400 in./min
TESTED BY:	TAJ	TRACKING CODE:	B935_US

TESTING PARAMETER AND RESULTS		
MOISTURE CONTENT	76.6	**%**
BULK UNIT WEIGHT	94.3	lb/ft^3
DRY UNIT WEIGHT	53.4	lb/ft^3
UCS *	18.5	lb/in^2

* UCS - UNCONFINED COMPRESSIVE STRENGTH

ATTACHMENT D

Rutgers Center for Advanced Infrastructure and Transportation
Solidification Report

RUTGERS
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AMEC Foster Wheeler Sediment Treatability Report

Robert Miskewitz Ph.D, Masoud Janbaz Ph.D., Lauren Ioccabucci, and Kelly Francisco

September 29, 2017

This report provides a summary of stabilization procedures and Unconfined Compressive Strength results for sediment using Portland cement as a binder.

Experimental Procedure: On September 1, 2017 material received from AMEC Foster Wheeler was homogenized and mixed with various ratios of Type I/II Portland cement (PC) slurry. PC was added at ratios of 6%, 8%, 12% and 14% of the wet weight of sediment. Each slurry consisted of a 1:1 ratio of PC to tap water. Table 1 provides the contents of each mixing ratio studied.

Table 1. PC-sediment Mixing Contents

Mixture ID	Type I/II PC (g)	Tap Water (mL)	Sediment (g)
6% PC	60.0	60	1000.4
8% PC	80.0	80	1000.5
12% PC	120.0	120	1000.8
14% PC	140.0	140	1000.7

Mixing continued until the operator was visually confident in the homogeneity of the mixture (Approximately 10 min). A sample of the material was collected from each mixture to determine its post-mixing moisture content. Samples for strength testing were compacted into cylindrical plastic molds with 2-inch inner diameters and 4-inch heights. The molds were cured inside a Thermocure water bath for 28 days at 20° C.

On September 28, 2017 the samples were removed from the temperature-controlled curing chamber and tested for unconfined compressive strength using an ELE Tritest50 device. The samples' weights, diameters, and heights were measured and material from each broken core was collected to determine the samples' post-curing moisture content.

Results:

Sediment Properties – Organic Content and Bulk Density: The bulk density and organic content of the raw material were determined via ASTM D2216 and ASTM D2974, respectively. The bulk density for the raw material was determined to be 1.54 g/cm^3. The organic content was found to be approximately 3.8%.

Moisture Content: Table 2 provides a summary of the average moisture content of the raw material and the average post-curing moisture content for each mixing ratio.

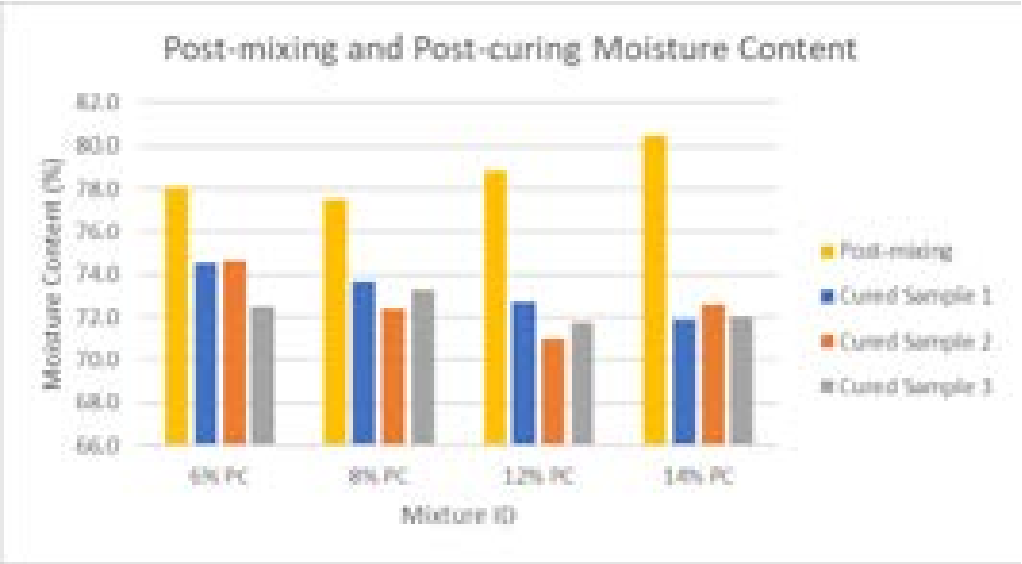
Table 2. Average Raw Sediment and Post-curing Moisture Content

Mixture ID	Average Moisture Content (%)
Raw Sediment	79.1

6% PC	73.9
8% PC	73.1
12% PC	71.8
14% PC	72.2

Figure 1 provides a comparison between the post-mixing moisture content for each mixing ratio and the post-curing moisture content for each sample tested.

Figure 1. Post-mixing and Post-curing Moisture Content



Unconfined Compressive Strength: Table 3 provides a summary of the average unconfined compressive (UC) strength of each mixture studied. Figure 2 provides the UC strength for each sample tested.

Table 3. Average Unconfined Compressive Strength Values

Mixture ID	Average UC Strength		
	(kPa)	(psi)	(tsf)
6% PC	560	81	5.8
8% PC	725	105	7.6
12% PC	1029	149	10.7
14% PC	1174	170	12.3

Figure 2. Unconfined Compressive Strength Results

